

# Mining Truck

# T 282 B

## Job Report

Twenty Three  
Liebherr T 282 B Haul Trucks  
Increase Production at  
Cortez Gold Mines in Nevada



# LIEBHERR

## Situation

The oldest continuously operating gold mining operation in Nevada is the Barrick-Cortez operation. Located 75 miles SW of Elko, in Crescent Valley, Nevada, the Cortez Mine is surrounded by mountain ranges and valleys with elevation ranging from a height of 10,461 ft in the Summit Mountains to about 4,000 ft at the floor of the lower basins. The Cortez Mine is at an elevation of 4,000 ft. Ranching and mining have been primary activities in this location since the 1860's and the general area still has evidence of old abandoned mines and ghost towns. The temperature ranges from 90 degrees Fahrenheit in the summer to an average moderate temperature in January of 27 degrees Fahrenheit. The Sierra Nevada Mountain Range creates an effective moisture barrier so annual rainfall is 8 inches.

The Cortez Mine, a Barrick Gold Corporation property, is located along the Cortez/Battle Mountain Trend and shares many of the geological characteristics of Barrick's Nevada Goldstrike mine. The principal gold deposits and mining operations are found on the south and southwest sides of Crescent Valley. Mineralization is a sedimentary rock hosted with minute free gold particles that are found throughout the rock. Oxide milling and heap leach technologies are utilized for gold recovery.

A large investment has been made for the advancement of the Barrick - Cortez Mine and the development of the adjacent Cortez Hills property which included a substantial dollar investment for open pit mining equipment, i.e. electric shovels/hydraulic shovels and diesel electric haul trucks.



## Assignment Report

The goal was to purchase industry proven, fuel efficient haul trucks with the largest payload capacity available to move the greatest amount of material for the lowest cost per ton. Consistent reliability of performance with low maintenance requirements was stated as a necessity to meet Barrick's increased production goals for the Cortez Mine and the expanded Cortez Hills property. The trucks should be equipped with the highest horsepower engines currently available and long lifetime components to consistently cycle efficiently and haul waste and leach material as required. Service representation, operator training and after sales parts availability with quick turn-around are key elements in the selection of equipment suppliers.





## Solution

In order to increase production at the Cortez properties, Barrick-Cortez purchased eight 400 short ton payload Liebherr T 282 B haul trucks in 2004. As the T 282 B trucks proved their worth with reliable performance and high availability, Barrick - Cortez placed re-orders to ultimately result in a total of twenty three Liebherr T 282 B AC Drive, Diesel Electric, 400 ton payload haul trucks at the Cortez property. The Liebherr T 282 B is powered by the MTU DD 20V4000 - 3650 hp engine and has inherent low maintenance requirements due to the utilization of the proven AC drive system. Liebherr also established a new 20,000 sq. ft. Liebherr parts warehouse and service facility within close proximity to the Cortez properties demonstrating Liebherr's continuous goal to be the most dedicated and responsive mining equipment customer support provider.

## Performance

After the first Cortez T 282 B trucks were delivered in 2004 and reliably went to work, consistent reorders rapidly took the fleet total to twenty three Liebherr T 282 B diesel electric 400 ton haul trucks. Built rugged to take the challenges of open pit mining operations, the T 282 B weighs less than competitors within the Ultra Class truck category allowing a better ratio of payload to empty vehicle weight. The AC drive system has continuous high acceleration and retard performance and together with the T 282 B's high horsepower diesel engine provides the mine operator with the benefits of fuel efficiency and higher productivity. Consistent high availability records for the Liebherr truck fleet enforces the fact that the Liebherr diesel electric trucks were a wise choice for this mining operation.

## Technical Data

### T 282 B

Engine	MTU/DD 20V4000
Engine Output per SAE J 1995	3650 hp / 2722 kW
Drive System	Siemens-Liebherr
Gear Ratio	Gear Ratio, 43.7 to 1
Payload Capacity	400 ton / 363 t
Maximum Operating Weight	652 ton / 592 t
Tires	56/80 R63



# The Liebherr Group of Companies

## Wide product range

The Liebherr Group is one of the largest construction equipment manufacturers in the world. Liebherr's high-value products and services enjoy a high reputation in many other fields, too. The wide range includes domestic appliances, aerospace and transportation systems, machine tools and maritime cranes.

## Exceptional customer benefit

Every product line provides a complete range of models in many different versions. With both its technical excellence and acknowledged quality, Liebherr products offer a maximum of customer benefits in practical application.

## State-of-the-art technology

To provide consistent, top quality products, Liebherr attaches great importance to each product area, its components and core technologies. Important modules and components are developed and manufactured in-house, for instance the entire drive and control technology for construction equipment.

## Worldwide and independent

Hans Liebherr founded the Liebherr family company in 1949. Since that time, the enterprise has steadily grown to a Group of 100 companies with over 30,000 employees located on all continents. The corporate headquarters of the Group is Liebherr-International AG in Bulle, Switzerland. The Liebherr family is the sole owner of the company.

[www.liebherr.us](http://www.liebherr.us)



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