

HAULING OVER 160,000 POUNDS (Net) Northwest Crane Service

Arduous journey

On Christmas Eve last year, Northwest Crane Service LLC of Oklahoma City, OK, pulled into the natural gas processing plant in Ft. Lupton, CO with what very likely was the biggest, most eagerly awaited package ever delivered on that date. The cylindrical load itself weighed 540,000 pounds. It stretched 185 feet 10 inches and had a diameter of 12 feet 11 inches.

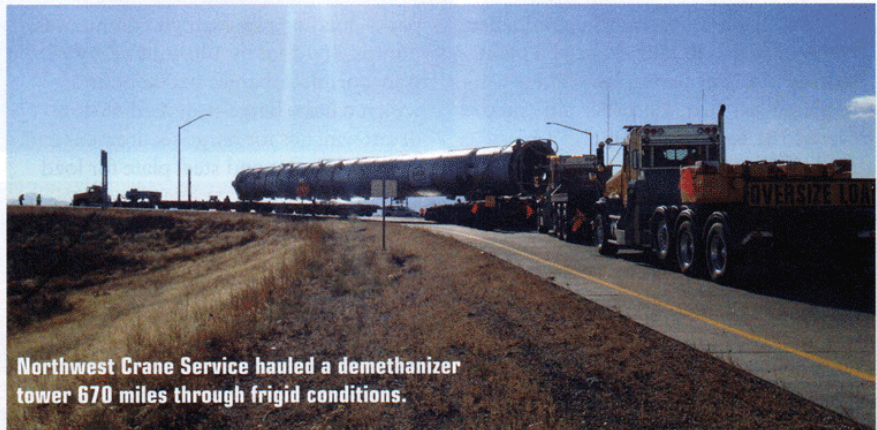
The immensity of the load necessitated hauling by four 600-horsepower trucks – two to push it and two to pull it. The gross weight of the configuration tipped the scales at over 1.19 million pounds. The total length from truck to truck was 427 feet 10 inches with a width and height both hitting 18 feet.

The arduous 670-mile journey of this demethanizer tower began three weeks earlier at the manufacturing plant in Pocatello, ID. But planning had been underway since August.

The routing for this trip took the demethanizer into Southeast Idaho and then up into the mountains of Wyoming before traveling South again into Colorado, where it became the heaviest load ever permitted in the state. Routing complications included minimal road options available in these areas, as well as the limited turning capabilities of a load this length. Northwest crews negotiated seven extremely tight runs during the haul, usually in the dead of night.

Before travel began, route surveyors scouted out the areas while engineers worked back and forth with the state for approximately two months, running bridge analysis and mapping turns to ensure that every road and corner could be successfully maneuvered. The chosen route contained steep slopes of up to 6 percent grade for five miles both up and downhill, as well as narrow roads, where the two lanes together barely exceed the width of the load.

Additionally, a large, humped railroad crossing along the route posed the danger of causing an interference with the trailer into the load. To avoid this collision, engineers went to Colorado and shot the



Northwest Crane Service hauled a demethanizer tower 670 miles through frigid conditions.

elevation changes and grades for this area.

Once all the data was collected, the trailer was digitally plotted onto these grades and the possibility of interference was calculated on a computer. The engineers correctly concluded the trailer could safely and successfully travel across this railroad crossing, leaving a mere four inches of clearance between the trailer and the vessel. Supervisors had been notified well in advance that they had to be aware and closely watch this spot during travel.

Weather worries

Even under the best of conditions, this would be an extremely taxing haul. Temperatures plummeted to as low as -21 degrees Fahrenheit. Power packs on trailers were not designed for such frigid conditions, and drivers braved the weather to wrap motors in tarps and to direct heat lamps at the equipment. Winds gusted to as high as 60 miles per hour.

Weather and safety became even more of a factor when a snow storm came into the area, causing the load to be held up for five days at the Idaho and Wyoming State Line. After the storm passed, the roads remained covered in snow and too treacherous to travel, so the states and counties had to be contacted to provide sanding and snow plows for troubled areas.

Northwest escorts and drivers did not

sit idly by and wait for the storm to blow over. They also participated in helping clear the roads by salting, sanding, and shoveling the roads themselves during the five days downtime.

Once the supervisors on site felt the roads ahead were safe, travel resumed. Due to the extended weather delay, Colorado Highway Patrol escorts and inspection had to be contacted and rescheduled. In all, Northwest coordinated its efforts with 21 agencies from the earliest planning stage until final delivery.

Northwest also worked closely with Goldhofer, makers of the THP/CA Modular Hydraulic Platform Trailer carrying the demethanizer, to come up with equipment modifications that made the trip possible. The new line of trailer developed by Goldhofer for the North American market included 22 axle lines and dual three-zone hydraulic suspension.

In addition to the trailer and the four trucks required to push and pull the configuration, the total convoy traveling with this load at all times included four drivers, three Northwest escorts, three civilian escorts, three trailer operators, one engineer, two highway patrol and a supervisor. The trailer operators were required to manually steer around all corners and level across all steep inclines and descents. Northwest completed this job with no incidents, injuries present or DOT recordable.