**PENENTUAN RUTE DAN PENJADWALAN DISTRIBUSI GAS LPG 3 KG PADA PT. MITA SANI JAYA**

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**ABSTRAK**

PT. Mita Sani Jaya merupakan salah satu agen yang bergerak dibidang distribusi gas LPG 3 kg kepada pangkalan. Proses pengiriman gas LPG 3 kg dilakukan dari hari Senin hingga Sabtu ke 55 pangkalan, berdasarkan studi pendahuluan terhadap proses pengiriman gas LPG 3 kg ditemukan permasalahan yaitu waktu tempuh pengiriman cukup panjang serta sarana pengangkut dan kapasitas yang terbatas. Selama ini agen belum merancang rute dan jadwal pengiriman gas LPG 3 kg dari pangkalan satu ke pangkalan lainnya dengan pemlihan rute dan penjadwalan yang konsisten dan optimal.

Penelitian ini bertujuan untuk menentukan rute dan penjadwalan pengiriman gas LPG 3 kg di PT. Mita Sani Jaya sehingga waktu tempuh yang optimal, algoritma Clarke and Wright Savings digunakan untuk meminimumkan waktu tempuh dengan mempetimbangkan kapasitas kendaraan.

Berdasarkan hasil perhitungan penjadwalan dengan menggunakan software *LINDO 6.1,* Maka diperoleh penghematan waktu tempuh pengiriman tabung gas LPG 3 kg PT.Mita Sani Jaya pada hari pertama sebesar 64 menit, hari kedua 111 menit, hari ketiga 92 menit hari ke empat 80 menit, hari ke lima 57 menit dan hari ke enam sebesar 54 menit. Hal ini menunjukan bahwa algoritma *Clarke and Wright Savings* dengan bantuan *software LINDO 6.1* dapat mengurangi waktu tempuh pengiriman.

Kata kunci : pendistribusian gas LPG 3 kg, waktu tempuh, penentuan rute dan penjadwalan.

**DETERMINING ROUTES AND SCHEDULING OF 3 KG LPG GAS DISTRIBUTION IN PT. MITA SANI JAYA**

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ABSTRACT

*PT. Mita Sani Jaya is one of the agents engaged in the distribution of 3 kg LPG gas to the base. The process of sending 3 kg LPG gas was conducted from Monday to Saturday to 55 bases, based on a preliminary study of the 3 kg LPG gas delivery process, problems were found, namely the delivery time is quite long and the transport facilities and capacity are limited. So far the agent has not designed the 3 kg LPG gas delivery routes and schedules from base one to another with consistent and optimal route selection and scheduling.*

*This study aims to determine the route and scheduling of delivery of 3 kg LPG gas at PT. Mita Sani Jaya so that the optimal travel time, Clarke and Wright Savings algorithm is used to minimize travel time by considering the capacity of the vehicle.*

*Based on the results of scheduling calculations using LINDO 6.1 software, the obtained travel time savings of delivery of LPG gas cylinders 3 kg PT.Mita Sani Jaya on the first day of 64 minutes, the second day 111 minutes, the third day 92 minutes the fourth day 80 minutes, the day to five 57 minutes and sixth day 54 minutes. This shows that the Clarke and Wright Savings algorithm with the help of LINDO 6.1 software can reduce delivery time.*

*Keywords: distribution of 3 kg LPG gas, travel time, determining the route and scheduling*

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