

A large mining truck is shown in a quarry setting. The truck is a heavy-duty vehicle with a large dump body, parked on a gravel surface. In the background, there are mountains and a sky with some clouds. A graphic overlay of blue and yellow hexagons is positioned in the upper left quadrant of the image. A white box with a blue border is overlaid on the lower left portion of the image, containing the text 'CASE STUDY HT-F1'.

CASE STUDY
HT-F1

NORDE® FSR
IMMEDIATELY IMPROVES
DIESEL EMISSIONS

NORDE FSR
FUEL SYSTEM REVITALIZER



CASE STUDY
HT-F1

**NORDE® FSR
IMMEDIATELY IMPROVES
DIESEL EMISSIONS**

INTRODUCTION

A Deutz 1013 FC Turbo-Charged diesel powered CAT Scoop SU488-D was experiencing higher than normal emission levels. Prior to a major overhaul, NORDE® FSR at 0.2% by volume (vol.) was added to its fuel.

MATERIALS AND METHOD

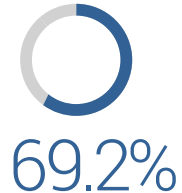
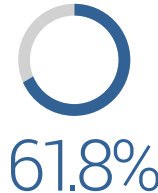
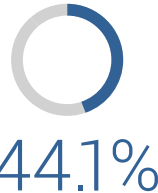
A baseline was established by analyzing seventeen (17) intervals of the exhaust emission while running regular fuel. NORDE® FSR at 0.2% by vol. was added to the

diesel fuel. The engine ran for two hours and fifty-one minutes (2 hours 51 minutes) where thirty-eight (38) intervals of the exhaust emission results were recorded.

RESULTS

Average Results for Emissions Test	NO ppm	NO ₂ ppm	NO _x ppm
Untreated Fuel	428.9	97.7	896.6
Treated Fuel	239.8	37.4	276.2

**REDUCTION
IN EMISSION LEVELS**



CONCLUSION

NORDE® FSR at 0.2% by vol. in diesel fuel can instantaneously impact emission readings. Within the first eighteen (18) minutes, emissions readings of noxious substances began to dramatically drop. Furthermore, subjective accounts of the exhaust were described as cleaner, less dark in appearance.

SUMMARY



CLEANER
EXHAUST



DECREASED
PARTICULATE
FILTER ISSUES

61%

REDUCTION
IN NITROGEN
COMPOUNDS



INSTANT
NEARLY
INSTANTANEOUS
RESULTS



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