بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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MONA MAGHRABY

FLARE GAS RECOVERY AND UTILIZATION AT RAZZAK FIELD, EGYPT

By

Youmna Medhat Youssef Mahmoud Moussa

A Thesis Submitted to the
Faculty of Engineering at Cairo University
In Partial Fulfillment of the
Requirements for the Degree of
Interdisciplinary MASTER
In
Green Processes

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Under the Supervision of

Prof. Dr. Fatma Ashour

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Professor of Chemical Engineering,
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Chairman & CEO of AROGAS Company

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Approved by the
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- Former chairman & CEO of Egyptian Company for Gas Services (ECGS)

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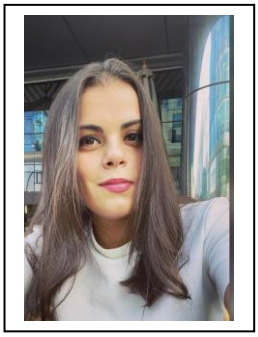

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Title of Thesis:

FLARE GAS RECOVERY AND UTILIZATION AT RAZZAK FIELD, EGYPT

Key Words:
Flaring; Flare Gas Recovery; Environmental impacts; Utilization; Economic growth.

Summary:
The purpose of the study is to recover the valuable gas of the Razzak oil field that would have been normally flared because it can't be processed for sale or use because of technical and economic barriers. Flare Gas Recovery aims to reduce, recover and reuse the gas either by using it as fuel gas or by using it to produce LPG and naphtha. The aim of the study is to promote economic growth, enable conservation of natural resources, such as fossil fuel, natural gas and coal, and reduce the negative environmental impacts caused by flaring. Razzak is an oil well located near the Mediterranean Sea, 130 km from Alexandria. The well daily sends 2 MMSCFD of associated gas to be flared while at the same time they have a shortage in electricity, and they tend to buy diesel from an outsider to run their diesel generators.

Disclaimer

I hereby declare that this thesis is my own original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

Name: Youmna Medhat Youssef Mahmoud Moussa Date: / /2021

Signature:

Dedication

Dedicated to my parents. Thank you for being there whenever I needed it, and even when I thought I didn’t need it. Thanks to my beloved father and my role model; thank you for all the love and support. Thanks to my beautiful mother; the one who waked me up for every exam through almost my entire life. To my parents and lovely sister: thank you for teaching me respect, confidence and persistence. I would not be where I am today without your love, support and guidance.

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