



**Texas Commission on Environmental Quality (TCEQ)
Texas Emissions Reduction Plan (TERP)
New Technology Implementation Grant (NTIG) Program**

Biannual Progress Report

Contract Number: 582-23-45837-NG	Grantee Name: OXY USA, Inc.
Report for Period: H1 2024	Physical Project Address: 6917 TX-349, Midland, TX 79705
Date Submitted: June 30, 2024	Project Representative Name: Ryan Prater
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Project Summary (150 words or less): Jaguar, a gas lift compression facility owned by Oxy USA Inc. (Oxy), was originally installed with 7 rental gas engine driven compressor skids. This project will <i>replace the 7 gas engine driven reciprocating compressors with 6 1,500 horsepower electric motor driven reciprocating compressors</i> . Power for the project will come from an <i>upgraded PME</i> with high voltage power lines running to the site where reclosures and step-down transformers will be installed. In addition, the project will install a <i>new relief header from the compressor skid area</i> that will tie-in to the existing flare system. Finally, the project will also <i>supplement an existing gas fired line heater with a shell and tube heat exchanger</i> . The heat exchanger will <i>capture uncooled 3rd stage compressor discharge gas</i> to heat the oil at Iguana to meet product vapor pressure specifications.	

Section I. Project Progress

- A. Indicate which Tasks, as defined in the Grant Contract Scope of Work, are currently in progress. Describe any challenges encountered during the completion of these Tasks. Discuss plans or actions taken to resolve them.

All substantial construction tasks have been completed in accordance with the original scope. The heat exchanger had two issues. First, the control system, as it was originally set up, was resulting in high pressure at the discharge of the compressors and causing shutdowns on the compressors. Changes were made to two control valves so that together they did not exceed 100 percent open, and the system has operated normally since this change. Second, an upstream upset caused release from the relief valves installed to protect against an exchanger tube rupture. The PSVs were set at 95 psig based on a dynamic study of the tube rupture scenario. The set pressure was chosen to prevent pressure from exceeding hydrotest pressure of the 75 psig rated system (due to downstream VRT pressure rating). During the upstream upset, the upstream production separator dump valve hung open causing gas to blow by and pop the relief valves. Following this incident, the exchanger was shut down and the limiting pressure was considered. Following further analysis, the PSVs were reset to 185 psig. The system was restarted on 4/16/24.

- B. Indicate which Tasks have been completed, and any associated accomplishments during this reporting period. Describe any challenges encountered during the completion of these Tasks. Discuss actions taken to resolve them.

The six electric compressors have been installed and commissioned. They are currently running, and the gas driven compressors have been removed from site. The electric compressors maintain a nominal throughput of 48 MMSCFD when required. To date, the units have provided more mechanical availability time (time when units are capable of running). Data will be included in the final report.

The heat exchanger installed and was re-started as of 4/16/24. This upgrade resolved an operability issue that is documented above.

Section II. Goals for Upcoming Period

A. Provide a brief description of the Tasks and/or other project goals you hope to realize in the coming period and identify any notable challenges that can be foreseen.

The goal for the upcoming period will be to finalize the documentation for the project and complete the final report with the necessary data. The control strategy is also under evaluation to improve operability, but this is not expected to change objective of the project.

Authorized Official/ Project Representative's Printed name

RYAN PRATER

Authorized Official Signature/ Project Representative's name

Date



6/27/24

Note: Please attach any additional information that you feel should be a part of your report.

