

# Gas Capture Plan

## Sammons Ranch Helium Gas Wells



May 2021

## 1.0 Introduction

This Gas Capture Plan (Plan) has been prepared by Vecta Oil & Gas, Ltd. (Vecta) for its Sammons Ranch helium gas well development in Las Animas County, Colorado. The Plan addresses the Colorado Oil & Gas Conservation Commission (COGCC) requirement at Rule 304.c.(12) to prepare a Gas Capture Plan consistent with the requirements in Rule 903.e.

## 2.0 Well Development

Vecta will develop exploratory, wildcat helium gas wells. Proceeding to well production will be determined after analysis of the results from productivity testing.

Helium is an inert, non-toxic, non-reactive, non-combustible, and non-flammable gas. Historical well data in the area indicates that helium is expected to be present primarily with nitrogen, as well as a smaller volume of carbon dioxide. Nitrogen and carbon dioxide are also non-combustible. The historical well data indicates that hydrocarbons and methane are not present. The helium gas wells will be drilled without mud. The gas constituents of helium, nitrogen, and carbon dioxide eliminates potential for venting hydrocarbons and any associated public health and safety concerns. At the same time, the absence of hydrocarbons and methane precludes flaring during well development and productivity testing.

Well drilling and completion are estimated to require 7 to 10 days. A gas sample will be obtained during that time. The sample will be analyzed off site by a commercial lab. Also during that time, a flow test of the well will be performed. Further productivity testing of the well is estimated for 7 to up to 14 days to assist in determining economical volumes of helium gas. After productivity testing, the helium gas well will be shut in until the operation is ready for production.

## 3.0 Production

Vecta commits to connecting to a gas gathering system following productivity testing and prior to commencement of production. The gas gathering system will be a 4" diameter high density polyethylene flowline, which will be buried along the access road alignment. The gas gathering system will flow to an off-location, skid-mounted helium unit located on private property under the Sammons Ranch Surface Use Agreement. Helium will be purified, compressed, and loaded onto a tube trailer for transport. After procurement and installation, the helium unit is expected to be in place within 6 to 9 months after well development. The helium gas wells will remain shut in until the gas gathering system and helium unit are ready for gas capture.