CapturePoint LLC
North Burbank Unit – Subpart RR Annual Report
Reporting Period: 1/1/2023 – 12/31/23

Annual Report: 40 C.F.R. 98.446 (Subpart RR)

Company Name: CapturePoint LLC
Company Address: 1101 Central Expressway South, Suite 150, Allen, Texas 75013
GHGRP: 553337
Facility Name: North Burbank Unit
Facility Address: 373 Phillips Road, Shidler, Oklahoma 74652
Reporting period: January 1,2023 – December 31, 2023
Date of Submittal: March 28, 2024, **Revised July 11. 2024**

Executive Summary:

North Burbank Unit monitoring efforts by CapturePoint LLC (previously Perdure Petroleum, LLC) began January 1, 2020 pursuant to the Monitoring, Reporting and Verification (MRV) plan. The final MRV plan was approved by the EPA effective December 21, 2020. The MRV plan identification number is 1010975-1.

Summary of Monitoring Activities:

CapturePoint LLC's program for monitoring potential leak pathways in the North Burbank Unit including detection methods and locations is summarized below.

Leakage Pathway	Detection Method	Monitoring Location	Period of Operation
Wellbores	SCADA rate and pressure surveillance. Visual inspections. MIT. Personal H_2S Monitors.	Wellhead to formation	Continuous
Faults and fractures	SCADA surveillance of injection pressures below parting pressure.	Wellhead	Continuous
Natural and induced seismic activity	SCADA surveillance of injection pressures below parting pressure.	Wellhead USGS monitoring internet site	Continuous
Prior operations	Visual inspections. Personal H_2S Monitors.	Abandoned well sites	On occurrence
Pipelines and surface equipment	SCADA surveillance. Visual inspection. Fixed H_2S monitors. Personnel H_2S monitors. Vent meter.	Production wellhead thru recycle facility to injection wellhead	Continuous
Lateral migration through Formation	Production well performance.	Producing wells located down structure from CO_2 flood	Weekly
Drilling through CO2 area	EPA UIC regulating new Class II wells. Visual Inspection.	AMA (North Burbank Unit Area)	On occurrence
Diffuse leak through seal	Visual inspection.	AMA (North Burbank Unit Area)	Weekly

1) **A narrative history of the monitoring efforts conducted over the previous calendar year, including a listing of all monitoring equipment that was operated, its period of operation, and any relevant tests or surveys that were conducted.**

CapturePoint LLC collected flow rates, pressure, and gas composition data from the North Burbank Unit as part of ongoing operations. CO_2 injection wells were monitored through continual, automated flow and pressure measurements in the injection zone, monitored annular pressure in wellheads, and daily well inspection and maintenance. A commercial custody transfer meter was used to measure CO_2 volume received. CO_2 recycled volumes were measured at each compressor utilizing V Cone meters. These meters are monitored continuously, and data collection is automated through the local SCADA system. Fluid compositions were measured to determine mass flow rates.

CapturePoint LLC used 40 C.F.R. Part 98 Subpart W and engineering estimates to estimate surface leakage, emissions from equipment leaks, and vented emissions from surface equipment in the North Burbank Unit.

2) **A description of changes to the monitoring program that you concluded were not material changes warranting submission of a revised MRV plan under 98.448(d).**

CapturePoint LLC has reviewed the MRV plan and concluded there are no non-material changes to the EPA approved MRV Plan for the 2023 reporting period.

3) **A narrative history of any monitoring anomalies that were detected in the previous calendar year and how they were investigated and resolved.**

CapturePoint LLC has determined that no anomalies were detected in the previous calendar year.

4) **A description of any surface leakages of CO_2, including a discussion of all methodologies and technologies involved in detecting and quantifying the surface leakages and any assumptions and uncertainties involved in calculating the amount of CO_2 emitted.**

Field personnel routinely visited the surface facilities and conducted visual inspections during the reporting year. In addition, CapturePoint LLC used personal H_2S monitors to detect the potential small leaks that would trigger an immediate response. During the reporting year routine inspection of active and abandoned well locations discovered five minor surface leaks via abandoned wellbores (well surfacings). After regulatory approval was granted workover crews were immediately dispatched to re-plug these wells.

The leaked mass of CO2 from these well surfacings was estimated at 731.89 MT (rounded) by capturing and then metering the leak. The concentration of CO2 in the gas was assumed to be the same as the produced CO2 gas composition applied to total leak duration.

The leaked mass of CO2 from flaring is 47,788.25 MT, (rounded) per our Subpart RR Report. ***Volumes of CO2 flared are determined by metering and/or SCADA monitoring.***

The total leaked mass of CO2 from both well surfacing and flaring is 48,520.14 MT (rounded).

The mass of CO2 emitted from injection system and production system surface equipment losses for 2023 is estimated at 280.5 MT (rounded). ***See the table Summary of Monitoring Activities above for technology and methods used to detect and determine CO2 leakage. Uncertainties include determining the exact time leak started, lack of SCADA tracking of all injection/production pipelines. Quantification of leakage is based on volume differences compared to customary production and injection volumes.***

The total mass of CO2 emitted from all leakage pathways is estimated at 48,800.19 MT (rounded).

Certification by Designated Representative:

The information and statements in this report are true, complete, and accurate to the best of my knowledge.

Designated Representative
Carl Thunem, Director Health, Safety and Environmental