



Water Plan

Archer Field

Oil and Gas Development Plan

This Water Plan has been prepared by Chaco Energy Company (Chaco) for its Archer Field Oil and Gas Development Plan (OGDP) in Cheyenne County, Colorado. The Plan addresses the Energy & Carbon Management Commission (ECMC) requirement at Rule 304.c.(18) to prepare a Water Plan and the water sourcing criteria in the rules. The Plan addresses the following locations:

Table 1. Locations

Location	Location ID	Qtr Qtr T12S R44W	Lat/Lon
Champlin 360 Amoco A #4	380504 (Re-entry)	NWSE Sec. 29	38.977390, -102.359945
Pelton 41-31 #1	380356 (Re-entry)	NENE Sec. 31	38.969823, -102.373764
Champlin Tank Pad	New	NWSW Sec. 29	38.977813, -102.369827
Pelton Tank Pad	New	NENE Sec. 31	38.970818, -102.372405

1.0 Planned Source, Volume, and Coordinates

The re-entry wells will have no hydraulic fracturing, stimulation, or flowback. Wells will use freshwater for re-entry to remove the well plug and recycled produced water for completion to perforate the well.

Water for well re-entry will be municipal groundwater. The estimated volume is 800 bbl per well (1,600 bbl total). The volume includes dust suppression for well pads and associated tank pads. The coordinates for the planned source of freshwater are:

38.821964
-102.369350

Lat 38° 49' 19.1" N / Lon 102° 22' 09.7" W

Water for well completion will be recycled produced water from Chaco's Champlin 360 Amoco #1 producing well. The estimated volume is 50 bbl per well (100 bbl total). The coordinates for the planned source of produced water are:

38.977240
-102.369290

Lat 38° 58' 38.1" N / Lon 102° 22' 09.4" W

2.0 Seller's Name and Address

The anticipated source of freshwater from groundwater will be:

Town of Cheyenne Wells
Water Department
Snyder municipal groundwater well

The planned source of recycled produced water from the producing well will be:

Champlin 360 Amoco A #1
API 05-017-06329
Location ID 321592

3.0 Recycled or Reused Water

Chaco will reuse and recycle produced water from its producing well, Champlin 360 Amoco A #1, for completion. Using produced water for completion ensures a fluid compatible with the well formation. Chaco will load produced water into a truck tank for the anticipated 1 day of completion at each well location. Produced water will not be stored on the well pad.

Chaco collected background concentrations for the A #1 well for cations, anions, and field parameters in July 2023. The analysis did not include constituents in Table 437-1 with the exception of lead, which was non-detect. There will be no hydraulic fracturing for the proposed wells, no fracking fluid, and no chemical additives associated with fracking fluid. Produced water from the A #1 well will remain unaltered from its original state when it is reused in the same formation for completions during well re-entries. Chaco commits to addressing background concentrations of chemicals listed in Table 437-1 via Form 4 Sundry.

4.0 Freshwater

The town of Cheyenne Wells Water Department operates a metered groundwater well where commercial users can source groundwater. The Water Department registers users and bills monthly. Chaco will use a registered commercial water hauler that will transport water by truck from the municipal well to Chaco well locations. The same commercial water hauler, operating a truck and tank, will use municipal water for dust suppression.