

State of Arizona Oil and Gas Conservation Commission

1110 W. Washington Street, Phoenix, AZ 85007 602-771-4501

www.azogcc.az.gov Dennis L. Turner, Oil and Gas Administrator Commissioners: Frank Thorwald, Chair J. Dale Nations, Ph.D., Vice Chair Stephen R. Cooper William C. Feyerabend

MINUTES OF HEARING DESERT MOUNTAIN ENERGY CORP. WELL SPACING EXCEPTIONS MAY 15, 2020

PRESENT

Mr. Frank Thorwald, Chairman, Arizona Oil & Gas Conservation Commission (AOGCC)

Dr. Dale Nations, AOGCC Vice Chairman
Mr. Bill Feyerabend, AOGCC Member
Mr. Stephen Cooper, AOGCC Member

Mr. Jay Skardon, AOGCC Counsel, Office of the Attorney General

Mr. Dennis Turner, AOGCC Program Administrator

Ms. Tawnya Cook, Arizona Department of Environmental Quality (ADEQ)

CALL TO ORDER

Mr. Thorwald called the AOGCC Public Hearing of May 15, 2020 to order at 10:04 a.m. via virtual meeting at the Arizona Department of Environmental Quality (ADEQ), Phoenix, Arizona. No one reported any conflicts of interest and the roll call confirmed a sufficient number were present for a quorum.

DISCUSSION AND VOTE ON DESERT MOUNTAIN ENERGY CORP WELL SPACING EXCEPTIONS

Desert Mountain Energy Corp. (Desert Mountain) requests a well spacing exception for their State 10-1 and State 16-1 exploratory wells located in Sections 10 and 16, T 15N, R 23E, Navajo County. Mr. Robert Rohlfing, Executive Vice President of Desert Mountain, presented the basis for the well spacing exceptions. The Arizona State Land Dept. holds the mineral and surface ownership; surrounding land is owned by HNZ holdings and their ranching entity NZ Langley.

Both well sites are accessed from the south by Woodruff Hay Hollow Road. There are no producing oil & gas wells close to this location. The closest producing gas well is helium, approximately 35 miles northeast in the Pinta Dome field. Most wells previously drilled in the area presented today were for possible potash reserve evaluations. The Arkla NMA #7 well, approx. 2,725 ft. east of the proposed location for State 10-1 found helium, but subsequent exploration efforts have failed to produce helium within this section.

Both the State 10-1 and State 16-1 will investigate any commercially viable deposits. The goal is to discover and cost effectively produce helium. These locations were selected because they will have the least impact upon the surface leaseholder for grazing and wildlife. Owing to the fact that both locations are sparsely vegetated, disturbance of local flora will be minimal. Both locations are flat, which will reduce impacts from stormwater runoff.

Desert Mountain conducted several geological studies across the Holbrook Basin for helium potential over the years. Seismic data identified a narrow north/south trending feature on the State 10-1 and State 16-1 locations and clarified the angle and strike of the previously discovered fault in section 8. The company determined the locations to be best for porosity and permeabilities on the structure, further supporting previous Desert Mountain statements that the company will not frack for helium.

Based on its interpretations, Desert Mountain considers the proposed locations to be optimal. If the State 10-1 well was located eastward, within the 1,660-foot spacing rule requirement, the well would likely intercept at or below the gas/water contact, rendering it non-commercial. Also, moving the well east would not allow adequate setback from the Little Colorado River. If the State 16-1 well was located eastward, within the 1,660-foot spacing rule requirement, the well would likely intercept a fault, and the target formations would not have the desired porosities and permeabilities.

Desert Mountain believes that these proposed wells will add to the geologic knowledge of the trapping structures for helium, and perhaps open a new province in Arizona for helium exploration.

Dr. Nations moved, seconded by Mr. Feyerabend to:

Thomas

APPROVE THE SPACING EXCEPTIONS FOR DESERT MOUNTAIN ENERGY CORP 16-1 AND 10-1

Motion carried unanimously.

The hearing adjourned at 10:25 a.m.

REVIEWED

FRANK THORWALD

CHAIRMAN

July 17, 2020

DATE

GUESTS IN ATTENDANCE

Jim Ballard	Bryan Cook, Navajo County	Shannon Thune
Brian Wood	Barry Albin	Chris McCarthy
Mark Hanson, CIMAREX	Tony Hines, Ranger Development	Dave Cherry
Noa Bruhis, ASU	Robert Rohlfing, Desert Mtn Energy	Pat
Thomas White, Kinder Morgan	Ren Gardner	Scott Bowles
Mike Allison	Wesley Marshall, Pro Helium	Iou Rozs
Kirk Jalbert, ASU	Ned Bliss	David Haag, AZ State Land