Apache produces natural gas and oil across the Permian Basin of West Texas, including in the Alpine High area of southern Reeves County. Nearby, in Fort Davis and located atop Mount Locke and Mount Fowlkes, sits the 500-acre world-renowned University of Texas at Austin's McDonald Observatory. This region is known for some of the darkest night skies in the continental United States. The observatory’s mission is to inform, educate, and inspire through their public programs, and support the teaching of the science and hobby of astronomy. Learn more at www.mcdonaldobservatory.org.

In recent years, the increase in oil and gas activity in the Permian Basin has resulted in an increase in light pollution that threatens the dark skies. Through a campaign of education and awareness, the McDonald Observatory’s Dark Skies Initiative seeks to protect the beautiful, Milky Way-filled night skies of West Texas for ongoing astronomical research and education. The Observatory created Recommended Lighting Practices for oil and gas operations in the following Texas counties that have lighting ordinances: Brewster, Culberson, Hudspeth, Jeff Davis, Pecos, Presidio, and Reeves. Partners such as the Texas Railroad Commission, American Petroleum Institute, Permian Basin Petroleum Association, Texan by Nature, Texas Independent Producers and Royalty Owners Association, Texas Oil and Gas Association, and University Lands have endorsed the practices and support the observatory’s mission to protect the dark skies of West Texas.
Apache has worked proactively with the McDonald Observatory to develop dark skies measures for their facilities and help to promote best practices across the region.

Internally, the company developed a strategic plan to implement dark skies friendly lighting in new installations and existing facilities and has implemented a number of important modifications, including installing shielding on certain lights, experimenting with different fixtures, and adjusting their lighting to point downward rather than up toward the night sky.

There are now more than 2,700 lights in the Alpine High play across Apache’s sites. Company personnel are tasked with checking each one individually every week to ensure Apache stays in compliance with dark skies measures. Apache discusses dark skies compliance at their regular employee and contractor safety meetings to keep this important issue top of mind.

Apache is dedicated to a culture of dark skies compliance throughout Alpine High operations. Apache feels that a properly shielded and aimed light drastically reduces glare and increases nighttime worksite visibility and light fixture efficiency. As a result, worksite hazards are more readily identified and mitigated, all while using lighting more efficiently.

Apache recently donated $250,000 and produced a video to help McDonald Observatory promote good lighting solutions with other companies, developers, and cities. The money is being used for staff, educational materials, outreach events, and a new permanent exhibit on dark sky preservation at the observatory’s Frank N. Bash Visitors Center.

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Learn more about the Dark Skies Initiative and get involved:

- Contact Bill Wren at bwren@utexas.edu or 432-426-4170
- Visit mcdonaldobservatory.org/darkskies

This case study was created by Texan Nature™. The University of Texas McDonald Observatory. 3640 Dark Sky Drive, McDoanld Observatory, TX 79734 | 432-426-3640 | info@mcdonaldobservatory.org