FOR IMMEDIATE RELEASE

Contact: Kerstin Ellis
Marketing & Proposal Specialist
WLC Engineering, Surveying and Planning
(307) 266-2524
kellis@wlcwyo.com

WLC COMPLETES SINCLAIR WYOMING REFINERY FCCU 3D LASER SCANNING & MODELING PROJECT

931 Scans, 41 Billion Points Create Most Precise As-Built Model for Design Engineers

RAWLINS, Wyo., February 15, 2015 – WLC Engineering, Surveying and Planning (WLC), a Casper-based full-service civil and geotechnical engineering, surveying, materials testing, grants writing, and GIS firm, has completed a 3D laser scan and model of the Sinclair Wyoming Refining Company's (Sinclair) FCCU at its Sinclair, Wyo. refinery. This project created the first updated model since the initial design plans in the 1940s that will enable engineers to design accurate piping and structure improvements off-site for easy installation and minimal in-field changes.

WLC's scanner used laser technology to produce incredibly detailed, photorealistic, three-dimensional images of the complex environment in only a few minutes. During this project, WLC performed 931 scans on the 12-story facility to collect 41 billion points in all.

"The amount of data and the accuracy of the model enables engineers to create almost exact designs of improvements to the FCCU," said Don Davis, Corporate President for WLC Engineering, Surveying and Planning. "The complexities of this project were immense and included complying with Sinclair's stringent safety requirements; weather and environment discrepancies on different floors of the open structure; the ability to access all areas needed to create an accurate model of the 12-story facility; and managing the 2.7 terabytes of data that the scans produced. Still, WLC was able to develop a project plan to mitigate each issue and deliver a precise and usable model."

3D laser scanning has become a preferred method of survey data collection for this process and piping facet of the refinery because of the amount of accurate and precise data collected in a short time period. The data supports precise design and installation, requires very little field engineering at delivery, reduces change orders, and provides the owner huge cost savings.

The purpose of the FCCU is to convert low value gas oil feeds into more valuable, lighter hydrocarbon products. The structure has experienced many modifications and additions over more than 65 years. However, no updated as-built models have been created at any point to show the modifications and additions to the facility.

The project began in February 2015 and the final model was delivered to Sinclair in August 2015.

To schedule an interview with a WLC Engineering, Surveying and Planning executive please contact Kerstin Ellis at (307) 266-2524 or kellis@wlcwyo.com or to learn more about the company visit www.wlcwyo.com.

About WLC Engineering, Surveying and Planning
Headquartered in Casper, Wyo., WLC Engineering, Surveying and Planning is a full-service civil and geotechnical engineering, materials testing, land surveying, grants writing, and GIS firm. Founded in 1948, the employee-owned firm provides its services to public and private sector clients across the state and the Rocky Mountain West in order to create better communities and increase the quality of life for residents. WLC employs approximately 35 people in its Casper, Cheyenne, and Rawlins offices. For more information about the firm or its services, visit www.wlcwyo.com or call (307) 266-2524.

###