### UPSTREAM

# Oil and Gas



#### **Optimization/Consulting**

Tulare Plant Capacity Study Water Cooling Study Gas Handling Upgrade Study Brine Skid Consulting **Oil Plant Temperature Inlet Calculator** Wet Steam System Modeling CVR Gas Disposal Modeling **Oil Plant Surging Mitigation Pre-FEED CVR** Debottlenecking Evaluation Water Separation Study Steam Injection Infrastructure Study WESP Consulting CVR System Optimization Scoping Study LCFS Application Documentation Dehy Capacity Study Steam Generator Efficiency Study Steam Generator Piping Study Substation Feasibility Study Power Generation Feasibility Study Electrical Backbone Study

NSF Media Carry-Over Pre-FEED FWKO Desanding Study Steam Generation Technology Alternatives Study Vessel De-Sanding Study **Diatomite Development Pre-FEED** Oxy-Fuel Steam Generation and CCS Study GHG and LCFS Study Scoping Excess Water Plant Scoping Study **Biogas LCFS Study** CO2 Sequestration Study Pre-FEED Solar Power Study Steam Generator CCS Study Vessel De-Sanding Study Solar Tower Force Analysis & Wire Spec. **Diatomite Engineering Support** Well Cellar and Fluids Handling - Scoping Carbon Intensity Reduction Study Wastewater Reduction Study Supercritical CO2 Pipeline Consulting CO2 Emission Reduction Study

#### **On-Plot Plant Design**

- Vessel De-Sanding Study/FEED Diatomite Development Pre-FEED/FEED Vessel Foundation Support Permanent Gas Handling Facility Conversion Dehy Tank FEED Steam Generator Addition Design Filtered Water and Soft Water Tank FEED FWKO and WEMCO Installation Design H2S Removal Vessel Engineering Water Plant Control Philosophy Waterflood Pumps FEED/Detailed Design New Oil Field Facility Detailed Design
- Vertical Vessel Foundation Piperack Structural Evaluation Cogen Ammonia Piping Evaluation Gas Boot FEED/Detailed Design Gas Plant Piping Modifications - Pipe Stress Analysis Production Measurement FEED Production Separation and Metering - Detailed Design Diatomite Gas Handling System - FEED/Detailed Design Experimental Oil Production Pilot Design Heavy Oil Shipping Pump Design Water Plant Expansion FEED/Detailed Design Tank Vapor Recovery Design

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#### **Off-Plot Systems**

Streambed Improvement Pipeline Hydraulics Consulting Hwy 33 Concrete Vault Design Hwy 223 Road Crossing Canal Crossing Consulting Production Trunkline Debottlenecking Gauge Setting Header Modularization Gauge Setting Site Stability Gauge Setting Vessel Foundation Support Gauge Setting SE Containment Certification Wellpad Site Development Steam Distribution Redesign Waterflood Distribution modeling Heavy Oil Pipeline Design

### **MIDSTREAM**

# Oil and Gas

#### **Pipelines**

DOT Gas Pipeline Project - FEED/Detailed Design/Construction Support

Solar Rectifier Structural and Electrical Engineering

CO2 Pipeline Evaluation

Supercritical CO2 Pipeline Consulting

#### **Pumping and Heating Stations**

Tank Stairway Structural Evaluation and Modification

Pipeline Heater Station Upgrade-Site #1 FEED/Detailed Design

Pipeline Heater Station Upgrade-Site #2 FEED/Detailed Design

Shipping Pump Replacement Evaluation