MRO AUTHORIZATIO DETAIL OF ESTIMATED WE	N FOR EXPENDITURE
Well Name: ML100018N06W01H County: KINGFISHER	Date: 10/12/2016 AFE #: DX.15.41883
Formation: MISS LIME	MD: 12,500
ANNUA COCTE TANGEN	Costs
DRILLING COSTS - TANGIBLE Surface Casing	. \$23,300
Intermediate Casing	\$148,800
Production Casing	\$61,040
Wellhead Equip & Csg Access	\$83,000
TOTAL DRILLING COSTS - TANGIBLE	\$316,140
RILLING COSTS - INTANGIBLE	
Location and Access	\$345,500
Rig Move Drilling Rig	\$90,000 \$556,050
Directional Services	\$232,500
Mud Fluids & Services	\$150,000
Solids Control	\$21,245
Bits	\$164,000
Casing Crew and Services	\$17,500
Cementing Service	\$35,000
Rental Equipment	\$195,460
Fuel	\$105,155
Water & Water Services	\$65,000
Logging Services	\$31,600
Inspection Services	\$20,000
Contract Labor	\$30,000
Freight	\$20,000
Misc Materials & Equipment	\$33,700
Telecom Services	\$5,055
Supervision & Overhead	\$176,100
MES Equip & Service	\$28,982
Air Drilling Services Coring & Analysis	\$0 \$0
Contingency	\$100,000
TOTAL DRILLING COSTS - INTANGIBLE	\$2,423,847
TOTAL DRY HOLE COSTS	
TOTAL DRILLING COSTS	\$2,739,987
MPLETION COSTS - TANGIBLE	
Tubing & Accessories	\$53,200
Artificial Lift	\$12,000
Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE	\$27,800
MPLETION COSTS - INTANGIBLE	\$93,000
Location and Access	\$7,500
Completion Rig	\$7,500
Coiled Tubing	\$100,000
Rental Equipment	\$156,700
Rental Equipment	\$156,700
Rental Equipment Snubbing Pulling/Swab Units Fuel	\$156,700 \$0 \$0 \$0
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews	\$156,700 \$0 \$0 \$0 \$0 \$0
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement	\$156,700 \$0 \$0 \$0 \$0 \$0
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$2 \$85,500 \$1,319,500
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$85,500 \$1,319,500 \$20,000
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Perforating and N2 Services Perforating and Wireline Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$1,319,500 \$10,000 \$114,500
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and Wireline Services Cased Hole Logging	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and N2 Services Cased Hole Logging Comp Fluids & Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$1,319,500 \$1,219,500 \$1,210,000 \$1,7,000 \$1,7,000 \$1,30,675
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and N2 Services Cased Hole Logging Comp Fluids & Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$10,000 \$114,500 \$117,000 \$117,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000 \$119,000
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidaing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Freight Inspection Services Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidiaing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HES Equip & Services	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidating and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services Supervision & Overhead	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Svab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Perforating and Wireline Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HIS Sequip & Services HIS Sequip & Services HIS Sequip & Services HIS Sequip & Service HIS Sequip & Service HIS Sequip & Service Supervision & Overhead Tracers	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing Flowback Fracturing Services Acidizing and NZ Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Inspection Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HES Equip & Service Supervision & Overhead Tracers Surface Facilities	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Perforating and Wireline Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services Supervision & Overhead Tracers Surface Facilities Contingency	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
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Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Well Testing /Flowback Fracturing Services Acidizing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HES Equip & Service Supervision & Overhead Tracers Surface Facilities Contingency TOTAL COMPLETION COSTS - INTANGIBLE	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
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Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Caret Holicity of the Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Perforating and Wireline Services Freight Inspection Services Freight Inspection Services Freight Inspection Services Freight Inspection Services Freight Frac Plugs Contract Labor Telecom Services HES Equip & Service Supervision & Overhead Tracers Surface Facilities Contingency TOTAL COMPLETION COSTS - INTANGIBLE	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
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Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and NZ Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Inspection Services Freight Service Supervision & Overhead Tracters Surface Facilities Contingency TOTAL COMPLETION COSTS - INTANGIBLE TOTAL COMPLETION COSTS	\$156,700 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$50 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Coment Well Testing /Flowback Fracturing Services Acidizing and NZ Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HES Equip & Service Supervision & Overhead Tracers Surface Facilities Contingency TOTAL COMPLETION COSTS - INTANGIBLE TOTAL COMPLETION COSTS	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Care Actidating and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HES Equip & Services HES Equip & Services HES Equip & Services Understand Services HES Equip & Services Understand Services HES Countract Labor Total Completion Costs - INTANGIBLE TOTAL COMPLETION COSTS - INTANGIBLE TOTAL COMPLETION COSTS SIGNATURE:	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and Vizeline Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Freight Inspection Services Freight Frac Plugs Contract Labor Telecom Services HES Equip & Service Supervision & Overhead Tracers Surface Facilities Contingency TOTAL COMPLETION COSTS - INTANGIBLE TOTAL COMPLETION COSTS	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Perforating and Wireline Services Acidizing and Wireline Services Perforating and Wireline Services Cased Hole Logging Comp Fluids Services Water & Water Services Freight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HES Equip & Service Supervision & Coverhead Tracers Surface Facilities Contingency TOTAL COMPLETION COSTS - INTANGIBLE TOTAL COMPLETION COSTS SIGNATURE:	\$156,700 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$
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This AFE is only an estimate of the costs to be incurred in conducting the referenced operation. In no event shall this AFE be construed as a respresentation or warrant as to the accuracy of such estimate, or construed in any way to limit a participant's responsibility to pay its proportionate share of all costs and expenses incurred in connection with the referenced operations.