Macathan ()#	201505922	
	ORIZATION FOR EXPENDITURE ESTIMATED WELL CONSTRUCTION COSTS	
	Date: 2/8/2016	
Well Name: Calf Rope 1-1H County: BLAINE	AFE #: 0	
Formation: MISS LIME	MD: 0	
DRILLING COSTS - TANGIBLE		Costs
Surface Casing		\$39,195
Intermediate Casing		\$200,380
Production Casing		\$202,190
Wellhead Equip & Csg Access		\$80,000
TOTAL DRILLING COSTS - TANGIBLE DRILLING COSTS - INTANGIBLE		\$521,765
Location and Access		\$276,000
Rig Move		\$125,000
Drilling Rig		\$547,500
Directional Services		\$115,600
Mud Fluids & Services		\$150,000 \$13,300
Solids Control Bits		\$13,300
Casing Crew and Services		\$35,000
Cementing Service		\$85,000
Rental Equipment		\$45,000
Fuel		\$56,250
Water & Water Services		\$50,000
Logging Services		\$12,000
Inspection Services		\$10,000
Contract Labor		\$20,000 \$15,000
Freight Misc Materials & Equipment		\$15,000
Misc Materials & Equipment Telecom Services		\$7,200
Supervision & Overhead		\$129,000
HES Equip & Service		\$18,000
Air Drilling Services		\$0
Corting & Analysis		\$0 \$76,993
Contingency TOTAL DRILLING COSTS - INTANGIBLE		\$1,882,843
TOTAL DRY	HOLE COCEC	\$2.152.418
	HOLE COSTS LING COSTS	\$2,152,418 \$2,404.608
TOTAL DRIL	HOLE COSTS LING COSTS	\$2,152,418 \$2,404,608
TOTAL DRIL		
TOTAL DRIL		\$2,404,608 \$81,900 \$15,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment		\$2,404,608 \$81,900 \$15,000 \$27,450
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE		\$2,404,608 \$81,900 \$15,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE		\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access		\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig		\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing		\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig		\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment		\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000 \$0
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000 \$0 \$0
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000 \$0 \$0 \$110,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000 \$0 \$0
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000 \$0 \$10,000 \$110,000 \$1370,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 Services	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$0 \$0 \$1,370,000 \$0 \$0 \$1,370,000 \$1,370,000 \$0 \$1,370,000 \$1,370,000 \$8,500
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Actidzing and NZ Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000 \$0 \$1,370,000 \$1,370,000 \$76,000 \$8,500 \$112,650
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidzing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$3135,000 \$292,084 \$0 \$6,000 \$0 \$1370,000 \$1,370,000 \$76,000 \$8,500 \$112,550 \$237,950
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidzing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$29,084 \$0 \$6,000 \$0 \$0 \$1,370,000 \$1,370,000 \$3,370,000 \$3,500 \$112,550 \$237,950 \$18,450
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Actidzing and N2 Services Actidzing and N2 Services Cased Hole Logging Comp Fluids & Services Water & Water Services Treight Inspection Services	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$0 \$0 \$1,370,000 \$1,370,000 \$1,370,000 \$5,000 \$1,370,000 \$23,370,500 \$3112,650 \$237,950 \$18,450 \$2,500
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Actidzing and NZ Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$6,000 \$50 \$10,000 \$1,370,000 \$76,000 \$8,500 \$112,650 \$237,950 \$112,650 \$237,950 \$118,450 \$2,500
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing 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	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$3135,000 \$292,084 \$0 \$6,000 \$0 \$0 \$1,370,000 \$1,370,000 \$3,500 \$1,12,650 \$112,650 \$2,379,500 \$118,450 \$2,500 \$110,000 \$27,550
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Actidzing and NZ Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Freight Inspection Services Misc Materials & Equip	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,084 \$0 \$0 \$0 \$1,370,000 \$1,370,000 \$1,370,000 \$81,500 \$112,650 \$237,950 \$112,650 \$237,950 \$10,000 \$27,550 \$210,000 \$27,550 \$20,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidzing 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 & Service HES Equip & Service	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$3135,000 \$292,084 \$0 \$6,000 \$0 \$1,370,000 \$1,370,000 \$81,500 \$112,650 \$112,650 \$112,650 \$118,450 \$2,500 \$110,000 \$27,550 \$52,500 \$20,000 \$143,500
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 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 Contract Labor Telecom Services HES Equip & Service Supervision & Overhead	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$29,084 \$0 \$0 \$0 \$1,370,000 \$1,370,000 \$8,500 \$112,650
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing 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 Contract Labor Telecom Services HES Equip & Services Supervision & Overhead Tracers	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$292,884 \$0 \$0 \$0 \$0 \$1,370,000 \$1,370,000 \$8,500 \$112,550 \$237,950 \$110,000 \$27,550 \$13,500 \$110,000 \$1,370,000 \$50 \$1,370,000 \$50 \$1,370,000 \$50 \$1,370,000 \$50 \$1,370,000 \$50 \$1,370,000 \$51,370,000 \$51,370,000 \$51,370,000 \$51,370,000 \$51,370,000 \$51,370,000 \$51,370,000 \$51,370,000
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidizing and N2 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 Contract Labor Telecom Services HES Equip & Service Supervision & Overhead	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$29,084 \$0 \$0 \$0 \$1,370,000 \$1,370,000 \$8,500 \$112,650
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidzing 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	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$3135,000 \$292,084 \$0 \$6,000 \$0 \$1,370,000 \$1,370,000 \$8,500 \$112,650 \$237,950 \$118,450 \$237,950 \$110,000 \$27,550 \$27,550 \$27,550 \$20,000 \$143,500 \$143,500 \$137,800 \$3137,800 \$3137,800
TOTAL DRIL COMPLETION COSTS - TANGIBLE Tubing & Accessories Artificial Lift Wellhead Equipment TOTAL COMPLETION COSTS - TANGIBLE COMPLETION COSTS - INTANGIBLE Location and Access Completion Rig Coiled Tubing Rental Equipment Snubbing Pulling/Swab Units Fuel Casing Crews Cement Well Testing /Flowback Fracturing Services Acidzing and N2 Services Acidzing and N2 Services Perforating and Wireline Services Cased Hole Logging Comp Fluids & Services Water & Water Services Treight Inspection Services Misc Materials & Equip Frac Plugs Contract Labor Telecom Services HES Equip & Service Supervision & Overhead Tracers Surface Facilities Contingency TOTAL COMPLETION COSTS - INTANGIBLE	LING COSTS	\$2,404,608 \$81,900 \$15,000 \$27,450 \$124,350 \$7,500 \$22,800 \$135,000 \$29,084 \$0 \$0 \$0 \$1,370,000 \$3,370,000 \$3,370,000 \$3,370,000 \$3,370,000 \$1,370,000 \$237,550 \$10,000 \$27,550 \$20,000 \$21,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000 \$31,370,000

FEB 2 4 2016

SIGNATURE:	
PRINTED NAME:_	 (
TITLE:	 /

TITLE:

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.