

## MRO AUTHORIZATION FOR EXPENDITURE

CD No. 201606069

DETAIL OF ESTIMATED WELL CONSTRUCTION COSTS

Well Name: HEAP OF HAIR BIA 1-14H  
 County: CANADIAN  
 Formation: MISS LIME

Date: 1/20/2017  
 AFE #: DX.16.41449  
 MD: T6,000

Costs

## DRILLING COSTS - TANGIBLE

Surface Casing	\$39,165
Intermediate Casing	\$221,350
Production Casing	\$185,280
Wellhead Equip & Csg Access	\$128,000
<b>TOTAL DRILLING COSTS - TANGIBLE</b>	<b>\$573,795</b>

## DRILLING COSTS - INTANGIBLE

Location and Access	\$350,500
Rig Move	\$130,000
Drilling Rig	\$424,050
Directional Services	\$170,000
Mud Fluids & Services	\$150,000
Solids Control	\$18,445
Bits	\$72,000
Casing Crew and Services	\$28,500
Cementing Service	\$85,000
Rental Equipment	\$149,060
Fuel	\$80,955
Water & Water Services	\$98,000
Logging Services	\$23,600
Inspection Services	\$20,000
Contract Labor	\$60,000
Freight	\$40,000
Misc Materials & Equipment	\$25,700
Telecom Services	\$3,855
Supervision & Overhead	\$152,100
HES Equip & Service	\$22,102
Air Drilling Services	\$0
Coring & Analysis	\$0
Contingency	\$90,000
<b>TOTAL DRILLING COSTS - INTANGIBLE</b>	<b>\$2,193,867</b>

TOTAL DRY HOLE COSTS

\$2,452,840

TOTAL DRILLING COSTS

\$2,767,662

## COMPLETION COSTS - TANGIBLE

Tubing & Accessories	\$75,190
Artificial Lift	\$12,000
Wellhead Equipment	\$27,800
<b>TOTAL COMPLETION COSTS - TANGIBLE</b>	<b>\$114,990</b>

## COMPLETION COSTS - INTANGIBLE

Location and Access	\$7,500
Completion Rig	\$25,000
Coiled Tubing	\$100,000
Rental Equipment	\$156,700
Snubbing	\$0
Pulling/Swab Units	\$0
Fuel	\$0
Casing Crews	\$0
Cement	\$0
Well Testing /Flowback	\$79,500
Fracturing Services	\$1,516,200
Acidizing and N2 Services	\$0
Perforating and Wireline Services	\$107,250
Cased Hole Logging	\$17,000
Comp Fluids & Services	\$147,896
Water & Water Services	\$217,962
Freight	\$22,000
Inspection Services	\$4,000
Misc Materials & Equip	\$5,500
Frac Plugs	\$32,400
Contract Labor	\$49,500
Telecom Services	\$0
HES Equip & Service	\$151,000
Supervision & Overhead	\$159,800
Tracers	\$0
Surface Facilities	\$397,200
Contingency	\$0
<b>TOTAL COMPLETION COSTS - INTANGIBLE</b>	<b>\$3,196,408</b>

TOTAL COMPLETION COSTS

\$3,311,398

TOTAL WELL COSTS

\$6,079,060

JAN 31 2017

SIGNATURE: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

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 representation 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.