

CD: 201602158 Marathon Oil Co.

**MRO AUTHORIZATION FOR EXPENDITURE**  
DETAIL OF ESTIMATED WELL CONSTRUCTION COSTS

Well Name: Alta BIA 1511 1-31-6XH  
County: BLAINE  
Formation: MISS LIME

Date: 10/6/2016  
AFE #: DX.16.40479  
MD: 19,708

Costs

**DRILLING COSTS - TANGIBLE**

Surface Casing	\$52,220
Intermediate Casing	\$231,276
Production Casing	\$300,791
Wellhead Equip & Csg Access	\$72,000
<b>TOTAL DRILLING COSTS - TANGIBLE</b>	<b>\$656,287</b>

**DRILLING COSTS - INTANGIBLE**

Location and Access	\$302,000
Rig Move	\$139,000
Drilling Rig	\$1,210,000
Directional Services	\$280,000
Mud Fluids & Services	\$210,000
Solids Control	\$38,500
Bits	\$110,000
Casing Crew and Services	\$47,500
Cementing Service	\$92,000
Rental Equipment	\$246,400
Fuel	\$220,000
Water & Water Services	\$61,500
Logging Services	\$41,000
Inspection Services	\$14,250
Contract Labor	\$38,000
Freight	\$19,000
Misc Materials & Equipment	\$220,000
Telecom Services	\$19,800
Supervision & Overhead	\$233,400
HES Equip & Service	\$46,200
Air Drilling Services	\$0
Coring & Analysis	\$0
Contingency	\$164,828
<b>TOTAL DRILLING COSTS - INTANGIBLE</b>	<b>\$3,753,378</b>

**TOTAL DRY HOLE COSTS**

**\$3,871,073**

**TOTAL DRILLING COSTS**

**\$4,409,664**

**COMPLETION COSTS - TANGIBLE**

Tubing & Accessories	\$74,690
Artificial Lift	\$15,000
Wellhead Equipment	\$27,450
<b>TOTAL COMPLETION COSTS - TANGIBLE</b>	<b>\$117,140</b>

**COMPLETION COSTS - INTANGIBLE**

Location and Access	\$7,500
Completion Rig	\$22,800
Coiled Tubing	\$150,000
Rental Equipment	\$337,084
Snubbing	\$0
Pulling/Swab Units	\$6,000
Fuel	\$0
Casing Crews	\$0
Cement	\$0
Well Testing /Flowback	\$82,425
Fracturing Services	\$2,751,250
Acidizing and N2 Services	\$0
Perforating and Wireline Services	\$159,800
Cased Hole Logging	\$7,500
Comp Fluids & Services	\$195,807
Water & Water Services	\$309,211
Freight	\$15,000
Inspection Services	\$4,500
Misc Materials & Equip	\$10,000
Frac Plugs	\$47,600
Contract Labor	\$52,500
Telecom Services	\$19,000
HES Equip & Service	\$176,255
Supervision & Overhead	\$156,100
Tracers	\$0
Surface Facilities	\$385,000
Contingency	\$0
<b>TOTAL COMPLETION COSTS - INTANGIBLE</b>	<b>\$4,895,332</b>

**TOTAL COMPLETION COSTS**

**\$5,012,472**

**TOTAL WELL COSTS**

**\$9,422,136**

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.

NOV 07 2016