

**Gastar Exploration LLC.**  
**Authorization For Expenditure - Drilling & Completion**

Operator: Gastar Exploration	Prepared By: JMO	Tax Rate
Well Name: MOTT 20-1H	Field: Sooner Trend	Depth: 11,500'
Legal: 20-18N-8W	Parish/County: KINGFISHER	Days: 18
Contractor:	State: OK	Spud Date:

Type of Operation: New Drill ☒ Other ☐ AFE # \_\_\_\_\_  
 Re-Entry ☐ Re-Comp ☐ Budgeted: Yes ☒ No: ☐

Work Description  
 Drill & complete a horizontal MERAMEC well.

Well Program (New Drills and Re-Entry Wells)					
Casing	Hole Size	Casing Size Weight, & Grade	Depth	Drilling Fluid	Formation Evaluation
Conductor Pipe	26"	20" O.D. H-40	60'	water	
Surface	12 1/4"	9 5/8" 36 #/ft. J-55 STC	1500'	WBM	
Intermediate	8 3/4"	7" 29 #/ft. P-110 LTC	7,500'	WBM	
Prod. Liner	6 1/8"	4.5" 11.6 #/ft P-110 BTC	11,500'	Water	

Costs				
Code	Item	Drilling Cost	Completion Cost	Total Cost
<b>Capitalized Intangible Drilling &amp; Completion Costs</b>		<b>8300/8400</b>	<b>8500/8600</b>	
100	Site Preparation & Maintenance	162,800	125,000	287,800
110	Title Opinion	45,000		45,000
120	Drilling/Completion Rig	537,000		537,000
130	Engineering & Supervision	72,000	37,800	109,800
140	Fuel	40,250		40,250
150	Well Evaluation	117,100	45,500	162,600
160	Casing Services	17,000	12,000	29,000
170	Cementing Services	28,500	25,000	53,500
180	Drilling Tools	47,500	2,200	49,700
190	Fluids, Services, & Rentals	46,800	250,000	296,800
200	Equipment Rentals	22,900	170,350	193,250
210	Drill String	47,625	9,100	56,725
220	Environmental	53,460	62,500	115,960
230	Miscellaneous			
240	Specialty Tools & Services	87,000		87,000
250	Trucking & Transportation	10,000	2,500	12,500
260	Welding	5,000		5,000
270	Production Services		1,537,500	1,537,500
300	Contract Labor	12,000	38,000	50,000
310	Plug and Abandonment	15,000		15,000
400	Insurance	6,900		6,900
500	Overhead Allocation			
<b>Total Intangible Cost</b>		<b>1,373,835</b>	<b>2,317,450</b>	<b>\$3,691,285</b>
100	Casing	133,535	35,000	168,535
110	Tubing		34,250	34,250
120	Subsurface Equipment		69,500	69,500
130	Wellhead Equipment	11,500	5,000	16,500
140	Production Equipment		122,128	122,128
150	Miscellaneous Equipment			
<b>Total Tangible Cost</b>		<b>\$145,035</b>	<b>\$265,878</b>	<b>\$410,913</b>
<b>Total Cost</b>		<b>\$1,518,870</b>	<b>\$2,583,328</b>	<b>\$4,102,198</b>
<b>Contingencies 10%</b>		<b>\$151,887.00</b>	<b>\$258,332.80</b>	<b>\$410,220</b>
<b>AFE Cost</b>		<b>\$1,670,757</b>	<b>\$2,841,661</b>	<b>\$4,512,418</b>
Operator	W.I. Share			
WIP #1	W.I. Share			
WIP #2	W.I. Share			
WIP #3	W.I. Share			
<b>Total</b>				

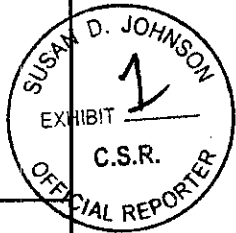
**Approvals**

Company, Name & Title	Signature	Date
Initiator John O'Dowd		10/25/16
1st Level Rick Johnson	_____	_____
2nd Level _____	_____	_____
3rd Level Russ Porter	_____	_____

**Approvals - Working Interest Partners**

Name & Title	Signature	Date
WIP #1 _____	_____	_____
WIP #2 _____	_____	_____
WIP #3 _____	_____	_____

**201604048**



OCT 25 2016