

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

Operator: Gastar Exploration	Prepared By: JMO	Tax Rate
Well Name: TBA 29-1MH	Field: Sooner Trend	Depth: 13,000'
Legal: Sec 29-18N-6W	Parish/County: Oklahoma	Days: 30
Contractor: TBD	State: OK	Spud Date:

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

Work Description  
 Drill a horizontal Mississippian 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	900'	WBM	
Intermediate	8 3/4"	7" 29 #/ft. P-110 LTC	8,000'	WBM	
Prod. Liner	6 1/8"	4.5" 11.6 #/ft. P-110 BTC	13,000'	Water	FMI / Tripple Combo w/ Micro

**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	263,000	164,500	427,500
110	Title Opinion	15,000		15,000
120	Drilling/Completion Rig	753,850		753,850
130	Engineering & Supervision	72,000	37,800	109,800
140	Fuel	56,550		56,550
150	Well Evaluation	124,450	122,500	246,950
160	Casing Services	25,000	35,000	60,000
170	Cementing Services	30,000	20,000	50,000
180	Drilling Tools	53,750		53,750
190	Fluids, Services, & Rentals	74,500		74,500
200	Equipment Rentals	60,065	308,810	368,875
210	Drill String	36,250	42,000	78,250
220	Environmental	62,350	62,500	124,850
230	Miscellaneous			
240	Specialty Tools & Services	191,250		191,250
250	Trucking & Transportation	25,000	10,000	35,000
260	Welding	5,000	1,500	6,500
270	Production Services		2,105,000	2,105,000
300	Contract Labor	23,500	35,000	58,500
310	Plug and Abandonment	15,000		15,000
400	Insurance	7,800		7,800
500	Overhead Allocation			
<b>Total Intangible Cost</b>		<b>1,894,315</b>	<b>2,944,610</b>	<b>\$4,838,925</b>
100	Casing	163,466	103,220	266,686
110	Tubing		44,500	44,500
120	Subsurface Equipment	25,000	140,000	165,000
130	Wellhead Equipment	11,500	5,000	16,500
140	Production Equipment		201,437	201,437
150	Miscellaneous Equipment		185,000	185,000
<b>Total Tangible Cost</b>		<b>\$199,966</b>	<b>\$679,157</b>	<b>\$879,123</b>
<b>Total Cost</b>		<b>\$2,094,281</b>	<b>\$3,623,767</b>	<b>\$5,718,048</b>
<b>Contingencies 10%</b>		<b>\$209,428.10</b>	<b>\$362,376.70</b>	<b>\$571,805</b>
<b>AFE Cost</b>		<b>\$2,303,709</b>	<b>\$3,986,144</b>	<b>\$6,289,853</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		11/16/15
1st Level Rick Johnson	_____	_____
2nd Level Mike McCown	_____	_____
3rd Level Russ Porter	_____	_____

**Approvals - Working Interest Partners**

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



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