

04/29/20

110 Old Market St.  
St Martinville, LA 70582

Report #1

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0° 3,000' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>							Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>04/29/20</b>			24 hr fig. <b>3,000 ft</b>			Drilled Depth <b>3,000 ft</b>																	
Well Name and No. <b>GRAND CANYON A - 1H</b>							Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>04/28/20</b>			Current ROP <b>375 ft/hr</b>			Activity <b>POOH</b>																	
Report for <b>JAMES DYER / BOBBY GWIN</b>							Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>			Fluid Type <b>WBM</b>			Circulating Rate <b>820 gpm</b>			Circulating Pressure <b>1,764 psi</b>																	
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER																				
Weight <b>8.4-9.6</b>		PV <b>0-10</b>		YP <b>0-10</b>		GELS <b>&lt;5 &lt;10</b>		pH <b>8.4-9</b>		API fl <b>&lt;25</b>		% Solids <b>2-10</b>		In Pits 750 bbl		Liner Size 6		Liner Size 6		Liner Size																
														In Hole 573 bbl		Stroke 12		Stroke 12		Stroke																
											4/29/20		Active 1323 bbl		bbl/stk 0.0997		bbl/stk 0.0997		bbl/stk 0.0000																	
Time Sample Taken											2:00		Storage		stk/min 98		stk/min 98		stk/min																	
Sample Location											suction		Tot. on Location 1323 bbl		gal/min 410		gal/min 410		gal/min 0																	
Flowline Temperature °F											90 °F		PHHP = 844 CIRCULATION DATA n = 0.737 K = 15.441																							
Depth (ft)											2,800'		Bit Depth = 3,000 '			Washout = 5%			Pump Efficiency = 95%																	
Mud Weight (ppg)											9.2		Drill String Disp.		Volume to Bit 48.5 bbl		Strokes To Bit 487		Time To Bit 2 min																	
Funnel Vis (sec/qt) @ 80 °F											34				Bottoms Up Vol. 524.9 bbl		BottomsUp Stks 5,266		BottomsUp Time 27 min																	
600 rpm											5		29.0 bbl		Riser Ann. Vol. 35.3 bbl		Riser Strokes 354		Riser Circ. Time 2 min																	
300 rpm											3		DRILLING ASSEMBLY DATA						SOLIDS CONTROL																	
200 rpm											2		Tubulars OD (in.) ID (in.) Length Top					Unit Screens Hours																		
100 rpm											1		Drill Pipe 5.000 4.276 2,479' 0'					Shaker 1 140-80 12.0																		
6 rpm											1		Hevi Wt 5.000 3.000 399' 2,479'					Shaker 2 140-80 12.0																		
3 rpm											1		Dir. BHA 8.000 2.875 122' 2,878'					Shaker 3 140-80 12.0																		
Plastic Viscosity (cp) @ 120 °F											2		3,000'					Centrifuge 1 12.0																		
Yield Point (lb/100 ft²) T0 = 1											1		CASING & HOLE DATA						Dryer Shaker 3 12.0																	
Gel Strength (lb/100 ft²) 10 sec/10 min											1/2		Casing OD (in.) ID (in.) Depth Top					Desilter 12.0																		
Gel Strength (lb/100 ft²) 30 min											4		Riser 20 19.000 108'					VOLUME ACCOUNTING (bbls)																		
API Filtrate / Cake Thickness											25/1		Surface 108'					Prev. Total on Location 0.0																		
HTHP Filtrate / Cake Thickness @ 0 °F													Int. Csg. 108'					Transferred In(+)/Out(-)																		
Retort Solids Content											6.4%		Washout 1					Oil Added (+) 0.0																		
Retort Oil Content													Washout 2					Barite Added (+) 0.0																		
Retort Water Content											93.6%		Open Hole Size 14.175 3,000'					Other Product Usage (+) 3.1																		
Sand Content											1%		ANNULAR GEOMETRY & RHEOLOGY						Water Added (+) 2500.0																	
M.B.T. (Methylene Blue Capacity) (ppb)													annular section		meas. depth		velocity ft/min		flow reg		ECD lb/gal															
pH											8.8							Left on Cuttings (-) -351.3																		
Alkalinity, Mud Pm											0.1		19x5 108' 59.8 lam 10.95					Non-Recoverable Vol. (-)																		
Alkalinities, Filtrate Pf/Mf											0.1/0.2		14.175x5 2,479' 114.3 turb 10.21					Discharged (-) -825.4																		
Chlorides (mg/L)											400		14.175x5 2,878' 114.3 turb 10.99					Est. Total on Location 1326.3																		
Calcium (ppm)											80		14.175x8 3,000' 146.9 turb 11.75					Est. Losses/Gains (-)/(+) -3.0																		
Excess Lime (lb/bbl)																		BIT HYDRAULICS DATA																		
Average Specific Gravity of Solids							2.60		2.60		2.60							Bit H.S.I.		Bit ΔP		Nozzles (32nds)														
Percent Low Gravity Solids											6.4%							1.04		312 psi		14 14 14														
Percent Drill Solids											6.4%							Bit Impact Force		Nozzle Velocity (ft/sec)		14 14 14														
PPA Spurt / Total (ml) @ @ 0 °F													BIT DATA			Manuf./Type Ulterra/SPL616			761 lbs		195															
Estimated Total LCM in System ppb													Size		Depth In		Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure											
Sample Taken By													13 1/2		108 ft		8.0		3,000 ft		375.0		1,330 psi		2,184 psi											
Remarks/Recommendations:  OBM transfer from 3H ----- 1198 bbls --- 9.5ppg  SWEEP: Fresh water 100bbls / 2sxs SAPP / 5gal DD  Pump 20bbls every 300' and 60-80bbls every 500'.  Dump sandtrap every 500', run centrifuge and mud cleaners while drilling /circulating										Rig Activity:  Skid Rig from 3H over to Grand Canyn A 1H. Cementing on the 3H while skid ther rig. Pick up 13.5" Bit and TIH to tag bottom. Spud In 17:00hrs 4/28/20. Drilled Surface hole with fresh water Treated with SAPP and Drilling Detergent. Maintain Mud Cleaning equipment running while drilling and or circulating. Dump Sand Trap every 500' to avoid accumulation of solids. Light Gombo up to surface around 1850', circulate for 15 min and resume drilling. Drilled surface hole to TD 3000' @ 03:00hrs 4/29/20. Circulate 2 Hi-Vis sweeps and start POOH to run Surface casing.																										
Eng. 1: Mike Washburn Phone: 361-945-5777							Eng. 2: Adolfo Roman Phone: 956-821-9994							WH 1: WH #1 Phone: -							WH 2: WH #2 Phone: -							Rig Phone:			Daily Total			Cumulative Cost		
W P Y g G p A S C 0 2 2 1 1 0 1 0 0							Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.														\$3,550.76			\$3,550.76												
										INCLUDING 3RD PARTY CHARGES										\$3,550.76			\$3,550.76													



### THIRD PARTY COST SHEET

[illegible]

04/30/20

110 Old Market St.  
St Martinville, LA 70582

Report #2

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

0' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>								Contractor <b>PATTERSON</b>				County / Parish / Block <b>WASHINGTON</b>				Engineer Start Date <b>04/29/20</b>				24 hr fig. <b>0 ft</b>				Drilled Depth <b>3,000 ft</b>									
Well Name and No. <b>GRAND CANYON A - 1H</b>								Rig Name and No. <b>248</b>				State <b>TEXAS</b>				Spud Date <b>04/28/20</b>				Current ROP <b>0 ft/hr</b>				Activity <b>Nipple Up/Test</b>									
Report for <b>JAMES DYER / BOBBY GWIN</b>								Report for <b>Tool Pusher</b>				Field / OCS-G # <b>GIDDINGS</b>				Fluid Type <b>OBM</b>				Circulating Rate <b>0 gpm</b>				Circulating Pressure <b>psi</b>									
MUD PROPERTY SPECIFICATIONS												MUD VOLUME (BBL)				PUMP #1				PUMP #2				RISER BOOSTER									
Weight <b>9.3-10.2</b>		PV <b>8-20</b>		YP <b>5-12</b>		E.S. <b>&gt;300</b>		CaCl2 <b>±250K</b>		GELS <b>&lt;10 &lt;25</b>		HTHP <b>&lt;10</b>		In Pits  In Hole      278 bbl  Active        0 bbl  Storage <u>959 bbl</u>  Tot. on Location   1237 bbl				Liner Size      6  Stroke          12  bbl/stk        0.0997  stk/min        0  gal/min        0				Liner Size      6  Stroke          12  bbl/stk        0.0997  stk/min        0  gal/min        0				Liner Size  Stroke  bbl/stk        0.0000  stk/min  gal/min        0							
Time Sample Taken								4/30/20																									
Sample Location								No Mud																									
Flowline Temperature °F														PHHP = 0 <b>CIRCULATION DATA</b>																			
Depth (ft)														Bit Depth = '				Washout = 5%				Pump Efficiency = 95%											
Mud Weight (ppg)														Drill String Disp.	Volume to Bit   0.0 bbl		Strokes To Bit				Time To Bit												
Funnel Vis (sec/qt)                      @ 0 °F															Bottoms Up Vol.   0.0 bbl		BottomsUp Stks				BottomsUp Time												
600 rpm															0.0 bbl		Riser Ann. Vol.   0.0 bbl		Riser Strokes				Riser Circ. Time										
300 rpm														DRILLING ASSEMBLY DATA												SOLIDS CONTROL							
200 rpm														Tubulars   OD (in.)   ID (in.)   Length   Top  0'      0'  0'  0'  0'					Unit      Screens      Hours														
100 rpm																			Shaker 1      140-80														
6 rpm																			Shaker 2      140-80														
3 rpm																			Shaker 3      140-80														
Plastic Viscosity (cp)                      @ 150 °F																			Centrifuge 1														
Yield Point (lb/100 ft²)                      T0 =																			Dryer Shaker 3														
Gel Strength (lb/100 ft²)                      10 sec/10 min														CASING & HOLE DATA																			
Gel Strength (lb/100 ft²)                      30 min														Casing   OD (in.)   ID (in.)   Depth   Top								Desilter											
HTHP Filtrate (cm/30 min)                      @ 250 °F														Riser   20                      108'								VOLUME ACCOUNTING (bbls)											
HTHP Cake Thickness (32nds)														Surface   10   3/4      9.950      3,000'      108'								Prev. Total on Location      1323.4											
Retort Solids Content														Int. Csg.                      108'								Transferred In(+)/Out(-)      1237.0											
Corrected Solids (vol%)														Washout 1								Oil Added (+)                      0.0											
Retort Oil Content														Washout 2								Barite Added (+)                      0.0											
Retort Water Content														Open Hole Size      0.000      3,000'								Other Product Usage (+)                      0.0											
ANNULAR GEOMETRY & RHEOLOGY																																	
O/W Ratio														annular section		meas. depth		velocity ft/min		flow reg		ECD lb/gal		Water Added (+)									
Whole Mud Chlorides (mg/L)																																	
Water Phase Salinity (ppm)																																	
Whole Mud Alkalinity, Pom																																	
Excess Lime (lb/bbl)																																	
Electrical Stability (volts)																																	
Average Specific Gravity of Solids																																	
Percent Low Gravity Solids																																	
ppb Low Gravity Solids																																	
Percent Barite																																	
ppb Barite														BIT DATA				Manuf./Type															
Estimated Total LCM in System                      ppb														Size		Depth In		Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure							
Sample Taken By								A. Roman		0		0																					
Remarks/Recommendations:  OBM RECEIVED    -----1237 bbls  OBM ON HAND    ----- 1237 bbls (9.5ppg)  OBM DAILY GAIN / LOSS    ----- (00)												Rig Activity:  POOH to run surface casing. Casing on bottom with no issues. Circulate BU and start Cementing operations. Cement casing with full returns at all times;Displace Cement with OBM 9.5ppg from storage. Cement back up to surface, divert same to open top tank for disposal. Transfer all WBM from active system to storage tanks for disposal. Clean pits from WBM and make preparatios to transfer OBM to active system. At time of report continue with Nipple Up BOP's operation to perform BOP testing...No Mud in the active system at this time.																					
Eng. 1: Mike Washburn Phone: 361-945-5777								Eng. 2: Adolfo Roman Phone: 956-821-9994				WH 1: MIDLAND Phone: 432-686-7361				WH 2: WH #2 Phone: -				Rig Phone:				Daily Total				Cumulative Cost					
W P Y E C g G H O 0 2 2 0 2 1 1 1 1								Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.																\$3,437.83				\$6,988.59					
												INCLUDING 3RD PARTY CHARGES												\$3,437.83				\$6,988.59					



### THIRD PARTY COST SHEET

[illegible]

05/01/20

110 Old Market St.  
St Martinville, LA 70582

Report #3

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0° 3,186' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth				
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/29/20		186 ft		3,186 ft				
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity				
GRAND CANYON A - 1H				248			TEXAS		04/28/20		186 ft/hr		Drilling Inter.				
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure				
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		584 gpm		2,060 psi				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER				
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	655 bbl	Liner Size	5.5	Liner Size	5.5	Liner Size				
9.3-10.2	8-20	5-12	>300	±250K	<10 <25	<10	In Hole	258 bbl	Stroke	12	Stroke	12	Stroke				
				5/1/20		4/30/20	Active	913 bbl	bbl/stk	0.0837	bbl/stk	0.0837	bbl/stk	0.0000			
Time Sample Taken				2:00		14:00	Storage	1259 bbl	stk/min	83	stk/min	83	stk/min				
Sample Location				suction		pit	Tot. on Location	2172 bbl	gal/min	292	gal/min	292	gal/min	0			
Flowline Temperature °F							PHHP = 702 CIRCULATION DATA n = 0.667 K = 135.006										
Depth (ft)				3,000'		3,000'	Bit Depth = 3,186 '			Washout = 5%		Pump Efficiency = 95%					
Mud Weight (ppg)				9.6		9.5	Drill String Disp.	Volume to Bit	51.1 bbl	Strokes To Bit		611	Time To Bit 4 min				
Funnel Vis (sec/qt) @ 90 °F				58		45		Bottoms Up Vol.	206.9 bbl	BottomsUp Stks		2,470	BottomsUp Time 15 min				
600 rpm				27		26		39.5 bbl	Riser Ann. Vol.	-2.6 bbl	Riser Strokes		-31	Riser Circ. Time 0 min			
300 rpm				17		16	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				14		12	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours			
100 rpm				10		9	Drill Pipe	5.000	4.276	2,605'	0'	Shaker 1	140-80	2.0			
6 rpm				5		4	Hevi Wt	6.000	3.000	277'	2,605'	Shaker 2	140-80	2.0			
3 rpm				4		3	Dir. BHA	7.750	2.875	304'	2,882'	Shaker 3	170-80	2.0			
Plastic Viscosity (cp) @ 150 °F				10		10						3,186'	Centrifuge 1				
Yield Point (lb/100 ft²) T0 = 3				7		6	CASING & HOLE DATA					Dryer Shaker 3					
Gel Strength (lb/100 ft²) 10 sec/10 min				4/7		3/5	Casing	OD (in.)	ID (in.)	Depth	Top	Desilter					
Gel Strength (lb/100 ft²) 30 min				10		6	Riser	20		108'	VOLUME ACCOUNTING (bbls)						
HTHP Filtrate (cm/30 min) @ 250 °F				12.0		12.0	Surface	10 3/4	9.950	3,000'	108'	Prev. Total on Location 1237.1					
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.				108'	Transferred In(+)/Out(-) 934.0					
Retort Solids Content				11%		11%	Washout 1					Oil Added (+) 6.5					
Corrected Solids (vol%)				9%		9%	Washout 2					Barite Added (+) 0.0					
Retort Oil Content				65%		66%	Open Hole Size		10.369	3,186'	Other Product Usage (+) 4.8						
Retort Water Content				24%		23%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+) 0.2					
O/W Ratio				73:27		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) -10.7					
Whole Mud Chlorides (mg/L)				50,000		51,000	0x5		108'	-572.4		9.82	Est. Total on Location 2172.0 Est. Losses/Gains (-)/(+) 0.0				
Water Phase Salinity (ppm)				246,241		257,998	9.95x5		2,605'	193.4	lam	9.97					
Whole Mud Alkalinity, Pom				2.0		1.5	9.95x6		2,882'	227.2	turb	10.19					
Excess Lime (lb/bbl)				2.6 ppb		2 ppb	9.95x7.75		3,000'	367.5	turb	10.43					
Electrical Stability (volts)				420 v		450 v	10.369x7.75		3,186'	301.6	turb	10.64	BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				3.19		3.06	BIT DATA		Manuf./Type		Ulterra/SPL613		Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
Percent Low Gravity Solids				4.7%		5.3%							0.73	165 psi	14	14	14
ppb Low Gravity Solids				39 ppb		44 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
Percent Barite				4.3%		3.7%									14	14	14
ppb Barite				62 ppb		53 ppb							402 lbs	138			
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure				
Sample Taken By				A. Roman	0	M Washburn	9 7/8	3,000 ft	1.0	186 ft	186.0	1,330 psi	2,045 psi				
Remarks/Recommendations:							Rig Activity:										
OBM RECEIVED -----2172 bbls							Transfer OBM from storage to active system. Receive OBM from Newpark plant in Madisonville, 934bbl 9.5#. Completed testing on BOP's, Pick up new BHA for intermediate drilling 9 7/8" hole. Wait on repairs (Pason / Hydrulics). TIH and tag top of float collar. Install Rotating head and start drilling shoe track + 10' of new formation. Perform FIT test to 11.6EMW 307psi. Increase pump rate to 730gpm and Resume drilling operations on Intermediate section.										
OBM ON HAND ----- 2172 bbls (9.5ppg)																	
OBM DAILY GAIN / LOSS ----- (00)																	
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost					
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -				\$5,839.90		\$12,828.49					
W 1	P 1	Y 1	E 1	C 1	G 1	H 2	O 1	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.					\$5,839.90		\$12,828.49		
								INCLUDING 3RD PARTY CHARGES				\$5,839.90		\$12,828.49			





### THIRD PARTY COST SHEET

[illegible]

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID  
VOLUME  
ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

	Date	WEEK 1							WEEK 2							WEEK 3						
		5/1/20	5/2/20	5/3/20	5/4/20	5/5/20	5/6/20	5/7/20	5/8/20	5/9/20	5/10/20	5/11/20	5/12/20	5/13/20	5/14/20	5/15/20	5/16/20	5/17/20	5/18/20	5/19/20	5/20/20	5/21/20
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
Grand Totals	Bit Size	9 7/8																				
	Starting Depth	3,000	3,186																			
	Ending Depth	3,186																				
186	Footage Drilled	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	New Hole Vol.	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starting System Volume	2,171	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172
5	Chemical Additions	5																				
7	Base Fluid Added	7																				
-	Barite Increase	-																				
-	Weighted Mud Added	-																				
-	Slurry Added	-																				
-	Water Added	-																				
-	Added for Washout	-																				
11	Total Additions	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	Surface Losses	-																				
-	Formation Loss	-																				
11	Mud Loss to Cuttings	11																				
-	Unrecoverable Volume	-																				
-	Centrifuge Losses	-																				
11	Total Losses	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	Mud Transferred Out	-																				
2,172	Ending System Volume	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172
-	Mud Recovered	-																				
2,171	Comments:								Comments:							Comments:						
	5/1/20	TIH and drill out shoe track. FIT 11.6EMW. Resume drilling on intermediate section. MW 9.7ppg							5/8/20							5/15/20						
	5/2/20								5/9/20							5/16/20						
	5/3/20								5/10/20							5/17/20						
	5/4/20								5/11/20							5/18/20						
	5/5/20								5/12/20							5/19/20						
	5/6/20								5/13/20							5/20/20						
	5/7/20								5/14/20							5/21/20						

05/02/20

110 Old Market St.  
St Martinville, LA 70582

Report #4

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

4.8° 8,478' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>04/29/20</b>		24 hr fig. <b>5,414 ft</b>		Drilled Depth <b>8,600 ft</b>						
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>04/28/20</b>		Current ROP <b>246 ft/hr</b>		Activity <b>DRILLING</b>						
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>			Fluid Type <b>OBM</b>		Circulating Rate <b>753 gpm</b>		Circulating Pressure <b>3,327 psi</b>						
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER						
Weight <b>9.3-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±264K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 844 bbl	In Hole 734 bbl	Liner Size 5.5	Stroke 12	Liner Size 5.5	Stroke 12	Liner Size							
				5/2/20		5/1/20	Active 1578 bbl		bbl/stk 0.0837		bbl/stk 0.0837		bbl/stk 0.0000							
Time Sample Taken				2:00		11:30	Storage <u>734 bbl</u>		stk/min 107		stk/min 107		stk/min							
Sample Location				suction		pit	Tot. on Location 2312 bbl		gal/min 376		gal/min 376		gal/min 0							
Flowline Temperature °F				155 °F		138 °F	PHHP = 1461 CIRCULATION DATA n = 0.642 K = 233.310													
Depth (ft)				8,100'		5,942'	Bit Depth = 8,600 '			Washout = 0%		Pump Efficiency = 95%								
Mud Weight (ppg)				9.7		9.6	Drill String Disp.  74.9 bbl	Volume to Bit 147.3 bbl	Strokes To Bit 1,759	Time To Bit 8 min										
Funnel Vis (sec/qt) @ 130 °F				50		52		Bottoms Up Vol. 586.5 bbl	BottomsUp Stks 7,003	BottomsUp Time 33 min										
600 rpm				39		38		Riser Ann. Vol. -2.6 bbl	Riser Strokes -31	Riser Circ. Time 0 min										
300 rpm				25		24	DRILLING ASSEMBLY DATA					SOLIDS CONTROL								
200 rpm				20		16	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours						
100 rpm				15		13	Drill Pipe	5.000	4.276	8,019'	0'	Shaker 1	140-80	24.0						
6 rpm				7		7	Hevi Wt	6.000	3.000	277'	8,019'	Shaker 2	140-80	24.0						
3 rpm				6		6	Dir. BHA	7.750	2.875	304'	8,296'	Shaker 3	140-80	24.0						
Plastic Viscosity (cp) @ 150 °F				14		14						8,600'	Centrifuge 1	6.0						
Yield Point (lb/100 ft²) T0 = 5				11		10	CASING & HOLE DATA					VOLUME ACCOUNTING (bbls)								
Gel Strength (lb/100 ft²) 10 sec/10 min				6/10		5/7	Casing	OD (in.)	ID (in.)	Depth	Top									
Gel Strength (lb/100 ft²) 30 min				14		9	Riser	20		108'										
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		8.0	Surface	10 3/4	9.950	3,000'	108'	Prev. Total on Location	2172.0							
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.			108'		Transferred In(+)/Out(-)								
Retort Solids Content				11%		11%	Washout 1					Oil Added (+)	199.5							
Corrected Solids (vol%)				8.7%		8.8%	Washout 2					Barite Added (+)	0.0							
Retort Oil Content				64%		63%	Open Hole Size		9.875	8,600'		Other Product Usage (+)	17.8							
Retort Water Content				25%		26%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+)	111.3							
O/W Ratio				72:28		71:29	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)	-153.9							
Whole Mud Chlorides (mg/L)				58,000		56,000	0x5	108'	-738.0		9.91	Evaporation	-15.0							
Water Phase Salinity (ppm)				266,752		252,471	9.95x5	3,000'	249.3	lam	10.13	Centrifuge Discharge	-20.0							
Whole Mud Alkalinity, Pom				1.8		2.0	9.875x5	8,019'	254.4	lam	10.22	Est. Total on Location	2311.7							
Excess Lime (lb/bbl)				2.3 ppb		2.6 ppb	9.875x6	8,296'	299.9	turb	10.42	Est. Losses/Gains (-)/(+)	0.0							
Electrical Stability (volts)				457 v		410 v	9.875x7.75	8,600'	492.6	turb	10.67	BIT HYDRAULICS DATA								
Average Specific Gravity of Solids				3.29		3.12	BIT DATA		Manuf./Type		Ulterra/SPL613	Bit H.S.I.	Bit ΔP	Nozzles (32nds)						
Percent Low Gravity Solids				4%		4.9%						1.59	276 psi	14	14	14				
ppb Low Gravity Solids				33 ppb		41 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14				
Percent Barite				4.7%		3.9%								14	14	14				
ppb Barite				67 ppb		56 ppb						675 lbs	178							
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure							
Sample Taken By				A. Roman	0	M Washburn	9 7/8	3,000 ft	22.0	5,414 ft	246.1	1,330 psi	3,360 psi							
Remarks/Recommendations:  OBM RECEIVED -----2172 bbls  OBM ON HAND ----- 2312 bbls (9.5ppg)  OBM DAILY GAIN / LOSS ----- (+140bbls) SWEEP: OBM/Magmafiber 5ppb / CalCarb200 10ppb / NewPhalt 10ppb Pump 10bbls every 300' drilled after survey or slide.							Rig Activity:  Drilling (Rotating / Sliding) ahead on intermediate 9 7/8" hole. Maintain MW 9.6 to 9.7ppg, Constant additions of Diesel and Water for dilution and to offset Evaporation. Additions of Lime for Alkalinity, CaCl2 for WPS. Fluid loss at specs with introduction of Opti G and New Phalt. Transfer OBM from storage to maintain Volume as require to replace new hole volume. No Losses at this time, Shaker Screens monitor for wear and tear, replace as needed with higher API # to assist on solids removal.													
Eng. 1: Mike Washburn			Eng. 2: Adolfo Roman			WH 1: MIDLAND			WH 2: WH #2			Rig Phone:		Daily Total		Cumulative Cost				
Phone: 361-945-5777			Phone: 956-821-9994			Phone: 432-686-7361			Phone: -					\$11,452.33		\$24,280.82				
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.								\$18,798.85		\$31,627.34	
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES											



### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

# FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

		WEEK 1							WEEK 2							WEEK 3							
		Date	5/1/20	5/2/20	5/3/20	5/4/20	5/5/20	5/6/20	5/7/20	5/8/20	5/9/20	5/10/20	5/11/20	5/12/20	5/13/20	5/14/20	5/15/20	5/16/20	5/17/20	5/18/20	5/19/20	5/20/20	5/21/20
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	
Grand Totals	Starting Depth	3,000	3,186	8,600																			
	Ending Depth	3,186	8,600																				
5,600	Footage Drilled	186	5,414	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
530	New Hole Vol.	18	513	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	2,171	2,172	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	
23	Chemical Additions	5	18																				
206	Base Fluid Added	7	199																				
-	Barite Increase	-	-																				
-	Weighted Mud Added	-	-																				
-	Slurry Added	-	-																				
111	Water Added	-	111																				
-	Added for Washout	-	-																				
339	Total Additions	11	328	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Surface Losses	-	-																				
-	Formation Loss	-	-																				
164	Mud Loss to Cuttings	11	153																				
15	Unrecoverable Volume	-	15																				
20	Centrifuge Losses	-	20																				
199	Total Losses	11	188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	Mud Transferred Out	-																					
2,312	Ending System Volume	2,172	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	2,312	
-	Mud Recovered	-																					
2,171	Comments:								Comments:							Comments:							
	5/1/20	TIH and drill out shoe track. FIT 11.6EMW. Resume drilling on intermediate section. MW 9.7ppg							5/8/20							5/15/20							
	5/2/20	Drilling intermediate section, Constant additions of Diesel and fresh water. Run Centrifuge for solids control, change wore out screens with Higher API # .							5/9/20							5/16/20							
	5/3/20								5/10/20							5/17/20							
	5/4/20								5/11/20							5/18/20							
	5/5/20								5/12/20							5/19/20							
	5/6/20								5/13/20							5/20/20							
	5/7/20								5/14/20							5/21/20							

05/03/20

110 Old Market St.  
St Martinville, LA 70582

Report #5

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

18.6° 10,188' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth												
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			04/29/20			1,721 ft		10,330 ft									
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity									
GRAND CANYON A - 1H							248			TEXAS			04/28/20			82 ft/hr		DRILLING									
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure									
JAMES DYER / BOBBY GWIN							Tool Pusher			GIDDINGS			OBM			753 gpm		3,706 psi									
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER											
Weight		PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits		799 bbl		Liner Size		5.5		Liner Size		5.5		Liner Size							
9.3-10.2		8-20	5-12	>300	±264K	<10 <25	<10	In Hole		968 bbl		Stroke		12		Stroke		12		Stroke							
					5/3/20			5/2/20	Active		1767 bbl		bbl/stk		0.0837		bbl/stk		0.0837		bbl/stk		0.0000				
Time Sample Taken					2:00			12:00	Storage		545 bbl		stk/min		107		stk/min		107		stk/min						
Sample Location					suction			shaker	Tot. on Location		2312 bbl		gal/min		376		gal/min		376		gal/min		0				
Flowline Temperature °F					165 °F			158 °F	PHHP = 1628 CIRCULATION DATA n = 0.692 K = 177.275																		
Depth (ft)					10,300'			9,432'	Bit Depth = 10,330 '				Washout = 5%				Pump Efficiency = 95%										
Mud Weight (ppg)					9.8			9.7	Drill String Disp.	Volume to Bit		178.0 bbl		Strokes To Bit		2,126		Time To Bit				10 min					
Funnel Vis (sec/qt)					@ 140 °F		48				53		Bottoms Up Vol.		789.9 bbl		BottomsUp Stks		9,432		BottomsUp Time		44 min				
600 rpm					42			43		86.1 bbl	TotalCirc.Vol.		1767.0 bbl		TotalCirc.Stks		21,098		Total Circ. Time				99 min				
300 rpm					26			27	DRILLING ASSEMBLY DATA								SOLIDS CONTROL										
200 rpm					21			22	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit				Screens		Hours						
100 rpm					16			18	Drill Pipe	5.000	4.276	9,749'	0'		Shaker 1				140-80		24.0						
6 rpm					7			7	Hevi Wt	6.000	3.000	277'	9,749'		Shaker 2				140-80		24.0						
3 rpm					6			6	Dir. BHA	7.750	2.875	304'	10,026'		Shaker 3				140-80		24.0						
Plastic Viscosity (cp)					@ 150 °F		16			16	10,330'													Centrifuge 1		12.0	
Yield Point (lb/100 ft²)					T0 = 5		10			11	CASING & HOLE DATA																
Gel Strength (lb/100 ft²)					10 sec/10 min		7/10			6/9	Casing	OD (in.)	ID (in.)	Depth	Top												
Gel Strength (lb/100 ft²)					30 min		16			12	Riser						VOLUME ACCOUNTING (bbIs)										
HTHP Filtrate (cm/30 min)					@ 250 °F		6.0			5.4	Surface	10 3/4	9.950	3,000'	0'		Prev. Total on Location						2311.8				
HTHP Cake Thickness (32nds)							2.0			2.0	Int. Csg.						0'		Transferred In(+)/Out(-)								
Retort Solids Content							12%			11%	Washout 1					Oil Added (+)						100.5					
Corrected Solids (vol%)							9.8%			8.8%	Washout 2					Barite Added (+)						21.6					
Retort Oil Content							65%			65%	Open Hole Size					10.369		10,330'		Other Product Usage (+)						5.1	
Retort Water Content							23%			24%	ANNULAR GEOMETRY & RHEOLOGY								Water Added (+)						46.0		
O/W Ratio							74:26			73:27	annular section		meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)						-107.8				
Whole Mud Chlorides (mg/L)							55,000			56,000						Evaporation & Centrifuge						-65.1					
Water Phase Salinity (ppm)							272,715			267,875									Est. Total on Location						2311.9		
Whole Mud Alkalinity, Pom							2.0			1.6	9.95x5		3,000'		249.3	turb	10.13	Est. Losses/Gains (-)/(+)						0.0			
Excess Lime (lb/bbl)							2.6 ppb			2.1 ppb	10.369x5		9,749'		223.6	lam	10.14	BIT HYDRAULICS DATA									
Electrical Stability (volts)							466 v			455 v	10.369x6		10,026'		258.0	turb	10.21	Bit H.S.I.		Bit ΔP		Nozzles (32nds)					
Average Specific Gravity of Solids							3.26			3.30	10.369x7.75		10,330'		388.8	turb	10.31	1.61		280 psi		14		14	14		
Percent Low Gravity Solids							4.7%			4%									Bit Impact Force		Nozzle Velocity (ft/sec)		14		14	14	
ppb Low Gravity Solids							39 ppb			33 ppb													14		14	14	
Percent Barite							5.1%			4.8%																	
ppb Barite							73 ppb			69 ppb	BIT DATA			Manuf./Type		Ulterra/SPL613		685 lbs		178							
Estimated Total LCM in System					ppb						Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure									
Sample Taken By					A. Roman		0	M Washburn	9 7/8	3,000 ft	43.0	7,135 ft	165.9	1,330 psi		3,669 psi											
Remarks/Recommendations:									Rig Activity:																		
OBM RECEIVED -----2172 bbls									Drilling (Rotating / Sliding) ahead on intermediate 9 7/8" hole. Increase MW 9.8ppg, with additions of Barite. Constant additions of Diesel and Water for dilution and to offset Evaporation. Additions of Lime for Alkalinity, CaCl2 for WPS. Maintain Fluid loss with additions of Opti G and New Phalt. Transfer OBM from storage to maintain Volume and for sweeps build as require. No Losses at this time, Upon sweeps returns shakers load increase 50-60% more on cuttings, running trash pump for Jet lines on flow line, for conveyance of cuttings. Centrifuge running from the active system 1hr on 1hr off for solids control on active system.																		
OBM ON HAND ----- 2312 bbls (9.5ppg)																											
OBM DAILY GAIN/LOSS----(0) / Total--(+140bbls)																											
SWEEP: OBM/Magmafiber 5ppb / CalCarb200 10ppb / NewPhalt 10ppb																											
Pump 10bbls every 300' drilled after survey or slide.																											
Eng. 1: Mike Washburn				Eng. 2: Adolfo Roman			WH 1: MIDLAND			WH 2: WH #2			Rig Phone:			Daily Total			Cumulative Cost								
Phone: 361-945-5777				Phone: 956-821-9994			Phone: 432-686-7361			Phone: -						\$6,288.66			\$30,569.48								
W P Y E C g G H O				Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.																							
1 1 1 1 1 1 1 1 1				INCLUDING 3RD PARTY CHARGES													\$9,960.06			\$41,587.40							





### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

2,171

05/04/20

110 Old Market St.  
St Martinville, LA 70582

Report #6

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

21.1° 10,188' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr fig. <b>5 ft</b>		Drilled Depth <b>10,335 ft</b>			
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP <b>0 ft/hr</b>		Activity <b>RUN 7 5/8 INT CSG</b>			
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>281 gpm</b>		Circulating Pressure <b>psi</b>			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER			
Weight <b>9.3-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±264K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 790 bbl In Hole 945 bbl Active 1735 bbl Storage <u>545 bbl</u> Tot. on Location 2280 bbl		Liner Size 5.5 Stroke 12 bbl/stk 0.0837 stk/min 80 gal/min 281		Liner Size 5.5 Stroke 12 bbl/stk 0.0837 stk/min 0		Liner Size Stroke bbl/stk 0.0000 stk/min 0		
				5/4/20		5/3/20										
Time Sample Taken				2:00		13:00										
Sample Location				suction		suction										
Flowline Temperature °F							PHHP = 0 CIRCULATION DATA n = 0.716 K = 164.036									
Depth (ft)				10,335'		10,335'	Bit Depth = 10,330 '			Washout = 5%		Pump Efficiency = 95%				
Mud Weight (ppg)				10.1		9.8	Drill String Disp.  109.1 bbl	Volume to Bit 474.3 bbl Bottoms Up Vol. 470.7 bbl TotalCirc.Vol. 1735.0 bbl		Strokes To Bit 5,663 BottomsUp Stks 5,620 TotalCirc.Stks 20,716		Time To Bit 71 min BottomsUp Time 70 min Total Circ. Time 259 min				
Funnel Vis (sec/qt) @ 90 °F				58		49										
600 rpm				46		44										
300 rpm				28		28	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				24		22	Tubulars OD (in.) ID (in.) Length Top Casing 7.625 6.875 10,330' 0' Hevi Wt Dir. BHA 10,330' 10,330'					Unit Screens Hours Shaker 1 140-80 18.0 Shaker 2 140-80 18.0 Shaker 3 140-80 18.0 Centrifuge 1				
100 rpm				19		17										
6 rpm				8		7										
3 rpm				6		6										
Plastic Viscosity (cp) @ 150 °F				18		16										
Yield Point (lb/100 ft²) T0 = 4				10		12	CASING & HOLE DATA									
Gel Strength (lb/100 ft²) 10 sec/10 min				7/11		7/9	Casing OD (in.) ID (in.) Depth Top Riser Surface 10 3/4 9.950 3,000' 0' Int. Csg. 0'									
Gel Strength (lb/100 ft²) 30 min				16		14						VOLUME ACCOUNTING (bbls)				
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0						Prev. Total on Location 2312.0				
HTHP Cake Thickness (32nds)				2.0		2.0						Transferred In(+)/Out(-)				
Retort Solids Content				13%		12%	Washout 1					Oil Added (+) 11.9				
Corrected Solids (vol%)				10.8%		9.8%	Washout 2					Barite Added (+) 0.0				
Retort Oil Content				64%		65%	Open Hole Size 10.369 10,335'					Other Product Usage (+) 0.0				
Retort Water Content				23%		23%	ANNULAR GEOMETRY & RHEOLOGY					Water Added (+) 10.0				
O/W Ratio				74:26		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) -0.5				
Whole Mud Chlorides (mg/L)				54,000		55,500						Evaporation & Centrifuge -22.8				
Water Phase Salinity (ppm)				269,091		274,514	9.95x7.625 3,000' 168.8 lam 10.59					Non-Recoverable Vol. (-) -30.0				
Whole Mud Alkalinity, Pom				1.8		1.9	10.369x7.625 10,330' 139.7 lam 10.52					Est. Total on Location 2280.5				
Excess Lime (lb/bbl)				2.3 ppb		2.5 ppb						Est. Losses/Gains (-)/(+) 0.0				
Electrical Stability (volts)				465 v		480 v						BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				3.32		3.20						Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
Percent Low Gravity Solids				4.8%		5.1%										
ppb Low Gravity Solids				40 ppb		42 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)			
Percent Barite				6%		4.7%										
ppb Barite				86 ppb		68 ppb	BIT DATA Manuf./Type									
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure			
Sample Taken By				A. Roman	0	M Washburn	9 7/8									
Remarks/Recommendations:  OBM RECEIVED -----2172 bbls  OBM ON HAND ----- 2280 bbls (9.5ppg)  OBM DAILY GAIN/LOSS----(-32) / Total--(+108bbls)							Rig Activity:  Rig up casing running tools, start running 7 5/8" / 29.7# / P110 Intermediate casing in the hole. Brake circulation every 2000'. Casing on bottom with no issues, MW in the active system increase due to Temperature change and Hevy slug been displace from well bore. Additions of Diesel to Active system to Decrease and maintain MW @9.8ppg for cementing. Once cementing is completed, will reduce MW to 9.5ppg for next Intermediate section on Levi Goodrich U2-3H. Cement will be displace with OBM from active system, leaving behind 471bbl of OBM. Rigging up Cementing equipment at the time of report									
Eng. 1: Mike Washburn Phone: 361-945-5777				Eng. 2: Adolfo Roman Phone: 956-821-9994		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total		Cumulative Cost		
W P Y E C g G H O 1 1 1 1 1 1 1 1 1				Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.									\$1,910.00		\$32,479.48	
							INCLUDING 3RD PARTY CHARGES					\$2,345.00		\$43,932.40		



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

2,171

05/05/20

110 Old Market St.  
St Martinville, LA 70582

Report #7

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

0' TVD

Operator				Contractor			County / Parish / Block			Engineer Start Date			24 hr fig.		Drilled Depth																	
MAGNOLIA OIL & GAS							PATTERSON			WASHINGTON			04/29/20			10,335 ft																
Well Name and No.							Rig Name and No.			State			Spud Date			Current ROP		Activity														
GRAND CANYON A - 1H							248			TEXAS			04/28/20																			
Report for							Report for			Field / OCS-G #			Fluid Type			Circulating Rate		Circulating Pressure														
JAMES DYER / BOBBY GWIN							Tool Pusher			GIDDINGS			OBM			0 gpm																
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1			PUMP #2			RISER BOOSTER																
Weight		PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits		0 bbl		Liner Size		5.75		Liner Size		5.75		Liner Size												
9.3-10.2		8-20	5-12	>300	±264K	<10 <25	<10	In Hole		470 bbl		Stroke		12		Stroke		12		Stroke												
					5/4/20			5/4/20	Active		0 bbl		bbl/stk		0.0915		bbl/stk		0.0915		bbl/stk		0.0000									
Time Sample Taken					2:00			13:00	Storage		0 bbl		stk/min		0		stk/min				stk/min											
Sample Location					suction			suction	Tot. on Location		470 bbl		gal/min		0		gal/min		0		gal/min		0									
Flowline Temperature °F									PHHP = 0 CIRCULATION DATA n = 0.716 K = 164.036																							
Depth (ft)					10,335'			10,335'	Bit Depth = '				Washout = 0%				Pump Efficiency = 95%															
Mud Weight (ppg)					10.1			10.1	Drill String Disp.	Volume to Bit		0.0 bbl		Strokes To Bit				Time To Bit														
Funnel Vis (sec/qt)					@ 110 °F		58				56	Bottoms Up Vol.		0.0 bbl		BottomsUp Stks				BottomsUp Time												
600 rpm					46			45		0.0 bbl		TotalCirc.Vol.		0.0 bbl		TotalCirc.Stks				Total Circ. Time												
300 rpm					28			27	DRILLING ASSEMBLY DATA										SOLIDS CONTROL													
200 rpm					24			22	Tubulars	OD (in.)	ID (in.)	Length		Top		Unit				Screens		Hours										
100 rpm					19			16	Drill Pipe	0'				0'		Shaker 1				140-80												
6 rpm					8			7	Hevi Wt					0'		Shaker 2				140-80												
3 rpm					6			6	Dir. BHA					0'		Shaker 3				140-80												
Plastic Viscosity (cp)					@ 150 °F		18			18					0'		Centrifuge 1															
Yield Point (lb/100 ft²)					T0 = 4		10			9	CASING & HOLE DATA																					
Gel Strength (lb/100 ft²)					10 sec/10 min		7/11			6/10	Casing	OD (in.)	ID (in.)	Depth		Top																
Gel Strength (lb/100 ft²)					30 min		16			14	Riser							VOLUME ACCOUNTING (bbbls)														
HTHP Filtrate (cm/30 min)					@ 250 °F		6.0			6.0	Surface	10 3/4	3,000'		0'		Prev. Total on Location 470.4															
HTHP Cake Thickness (32nds)							2.0			2.0	Int. Csg.	7 5/8	6.875		10,245'		0'		Transferred In(+)/Out(-)													
Retort Solids Content							13%			13%	Washout 1							Oil Added (+) 0.0														
Corrected Solids (vol%)							10.8%			10.8%	Washout 2							Barite Added (+) 0.0														
Retort Oil Content							64%			64%	Open Hole Size				0.000		10,335'		Other Product Usage (+) 0.0													
Retort Water Content							23%			23%	ANNULAR GEOMETRY & RHEOLOGY										Water Added (+)											
O/W Ratio							74:26			74:26	annular section		meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) 0.0															
Whole Mud Chlorides (mg/L)							54,000			54,500											Non-Recoverable Vol. (-)											
Water Phase Salinity (ppm)							269,091			270,907																	Spacer Interface					
Whole Mud Alkalinity, Pom							1.8			1.7																	Est. Total on Location 470.4					
Excess Lime (lb/bbl)							2.3 ppb			2.2 ppb																	Est. Losses/Gains (-)/(+) 0.0					
Electrical Stability (volts)							465 v			445 v																	BIT HYDRAULICS DATA					
Average Specific Gravity of Solids							3.32			3.31																	Bit H.S.I.		Bit ΔP		Nozzles (32nds)	
Percent Low Gravity Solids							4.8%			4.9%																						
ppb Low Gravity Solids							40 ppb			40 ppb																	Bit Impact Force		Nozzle Velocity (ft/sec)			
Percent Barite							6%			6%																						
ppb Barite							86 ppb			86 ppb											BIT DATA			Manuf./Type								
Estimated Total LCM in System					ppb						Size	Depth In	Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure											
Sample Taken By					A. Roman		0		M Washburn																							
Remarks/Recommendations:									Rig Activity:																							
OBM Transfer out to next well-----1730 bbls																																
OBM ON HAND ----- 470 bbls (9.5ppg)																																
470 bbls OBM left in Intermediate Casing.									Cement job completed. Secure Well and start on Skid rig operations. Transfer all sack and Liquid material to next well Levi Goodrich U2-3H. 470bbls of OBM left inside Intermediate Casing. Transfer 1730bbls to next well to resume drilling on Intermediate section. Mud in the active system cut back to 9.5ppg. No cost on this report, as it is only for the transferring of material and Liquid Mud.																							
Eng. 1: Mike Washburn			Eng. 2: Adolfo Roman			WH 1: MIDLAND			WH 2: WH #2			Rig Phone:			Daily Total			Cumulative Cost														
Phone: 361-945-5777			Phone: 956-821-9994			Phone: 432-686-7361			Phone: -						\$0.00			\$32,479.48														
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.										\$0.00			\$32,479.48										
1	1	1	1	1	1	1	1	1											INCLUDING 3RD PARTY CHARGES			\$0.00			\$43,932.40							







## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

		WEEK 1							WEEK 2							WEEK 3							
		Date	5/1/20	5/2/20	5/3/20	5/4/20	5/5/20	5/6/20	5/7/20	5/8/20	5/9/20	5/10/20	5/11/20	5/12/20	5/13/20	5/14/20	5/15/20	5/16/20	5/17/20	5/18/20	5/19/20	5/20/20	5/21/20
			Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
Grand Totals	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8																	
	Starting Depth	3,000	3,186	8,600	10,330	10,335	10,335																
	Ending Depth	3,186	8,600	10,330	10,335	10,335																	
7,335	Footage Drilled	186	5,414	1,730	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
695	New Hole Vol.	18	513	164	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starting System Volume	2,171	2,172	2,312	2,312	2,280	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470
28	Chemical Additions	5	18	5	-	-																	
318	Base Fluid Added	7	199	101	12	-																	
22	Barite Increase	-	-	22	-	-																	
-	Weighted Mud Added	-	-	-	-	-																	
-	Slurry Added	-	-	-	-	-																	
167	Water Added	-	111	46	10	-																	
-	Added for Washout	-	-		-	-																	
535	Total Additions	11	328	174	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
71	Surface Losses	-	-	-	31	40																	
-	Formation Loss	-	-	-	-	-																	
272	Mud Loss to Cuttings	11	153	108	-	-																	
87	Unrecoverable Volume	-	15	41	11	20																	
76	Centrifuge Losses	-	20	24	12	20																	
506	Total Losses	11	188	173	54	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,730	Mud Transferred Out	-	-	-	-	1,730																	
470	Ending System Volume	2,172	2,312	2,312	2,280	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470	470
-	Mud Recovered	-																					
441	Comments:									Comments:							Comments:						
	5/1/20	TIH and drill out shoe track. FIT 11.6EMW. Resume drilling on intermediate section. MW 9.7ppg								5/8/20							5/15/20						
	5/2/20	Drilling intermediate section, Constant additions of Diesel and fresh water. Run Centrifuge for solids control, change wore out screens with Higher API # .								5/9/20							5/16/20						
	5/3/20	Drilling ahead on intermediate setion. Maintain dilution rates and chemical addition for properties.								5/10/20							5/17/20						
	5/4/20	POOH lay down BHA, Pick up Intermediate casing and run in the hole to bottom. Circulate BU prior to cementing. Will Displace cement with OBM from Active system. 31bbbs losst on trip and Casing run.								5/11/20							5/18/20						
	5/5/20	Transfer OBM to next well, Levi Goodrich U2-3H. 470bbbs left inside Intermediate Casing. All sack material transfer as well.								5/12/20							5/19/20						
	5/6/20									5/13/20							5/20/20						
5/7/20									5/14/20							5/21/20							

06/23/20

110 Old Market St.  
St Martinville, LA 70582

Report #9

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

12.1° 5,238' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth							
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/29/20		0 ft		10,335 ft							
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity							
GRAND CANYON A - 1H				248			TEXAS		04/28/20		0 ft/hr		TIH / FIT							
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure							
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		0 gpm		psi							
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER							
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	943 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size							
8.9-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	443 bbl	Stroke	12	Stroke	12	Stroke							
				6/23/20		6/22/20	Active	1154 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000						
Time Sample Taken				2:00		13:00	Storage	1898 bbl	stk/min	0	stk/min	0	stk/min							
Sample Location				suction		In Csg.	Tot. on Location	3284 bbl	gal/min	0	gal/min	0	gal/min 0							
Flowline Temperature °F							PHHP = 0 CIRCULATION DATA n = 0.737 K = 77.206													
Depth (ft)				10,335'		10,335'	Bit Depth = 5,300 '			Washout = 1%		Pump Efficiency = 95%								
Mud Weight (ppg)				9.3		10.1	Drill String Disp.	Volume to Bit	73.6 bbl	Strokes To Bit		Time To Bit								
Funnel Vis (sec/qt) @ 90 °F				43		56		Bottoms Up Vol.	137.8 bbl	BottomsUp Stks		BottomsUp Time								
600 rpm				25		45		31.9 bbl	TotalCirc.Vol.	1154.4 bbl	TotalCirc.Stks		Total Circ. Time							
300 rpm				15		27	DRILLING ASSEMBLY DATA					SOLIDS CONTROL								
200 rpm				10		22	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours						
100 rpm				7		16	Drill Pipe	4.500	3.826	2,513'	0'	Shaker 1	170	12.0						
6 rpm				5		7	Agitator	5.250	2.500	32'	2,513'	Shaker 2	170	12.0						
3 rpm				4		6	Drill Pipe	4.500	3.826	2,609'	2,546'	Shaker 3	170	12.0						
Plastic Viscosity (cp) @ 150 °F				10		18	Dir. BHA	5.250	2.000	146'	5,154'	Centrifuge 1								
Yield Point (lb/100 ft²) T0 = 3				5		9	CASING & HOLE DATA					VOLUME ACCOUNTING (bbls)  Prev. Total on Location 3310.4  Transferred In(+)/Out(-) -26.9  Oil Added (+) 0.0  Barite Added (+) 0.0  Other Product Usage (+) 0.0  Water Added (+)  Left on Cuttings (-) 0.0    Est. Total on Location 3283.5  Est. Losses/Gains (-)/(+) 0.0								
Gel Strength (lb/100 ft²) 10 sec/10 min				5/9		6/10	Casing	OD (in.)	ID (in.)	Depth	Top									
Gel Strength (lb/100 ft²) 30 min				12		14	Riser													
HTHP Filtrate (cm/30 min) @ 250 °F				8.0		6.0	Surface	10 3/4		3,000'	0'									
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,245'	0'									
Retort Solids Content				10%		13%	Washout 1													
Corrected Solids (vol%)				8.3%		10.8%	Washout 2													
Retort Oil Content				70%		64%	Open Hole Size		6.818	10,335'										
Retort Water Content				20%		23%	ANNULAR GEOMETRY & RHEOLOGY													
O/W Ratio				78:22		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal									
Whole Mud Chlorides (mg/L)				43,000		54,500	6.875x4.5 2,513' 0.0 lam 9.30  6.875x5.25 2,546' 0.0 lam 9.30  6.875x4.5 5,154' 0.0 lam 9.30  6.875x5.25 5,300' 0.0 lam 9.30													
Water Phase Salinity (ppm)				252,134		270,907														
Whole Mud Alkalinity, Pom				1.0		1.7														
Excess Lime (lb/bbl)				1.3 ppb		2.2 ppb														
Electrical Stability (volts)				420 v		445 v														
Average Specific Gravity of Solids				3.14		3.31														
Percent Low Gravity Solids				4.5%		4.9%														
ppb Low Gravity Solids				37 ppb		40 ppb														
Percent Barite				3.7%		6%	BIT DATA													
ppb Barite				54 ppb		86 ppb														
Estimated Total LCM in System ppb															Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD
Sample Taken By				A. Roman	0	M Washburn	6 3/4	10,245 ft				2,240 psi								
Remarks/Recommendations:							Rig Activity:  Completed testing on BOP's and surface equipment, and perform repairs to same. Pick up and make up Directional tools, Set MWD and pump on surface for testing. (good). Continue to TIH, pick up agitator and continue TIH to reach top of float collar. Circulating active system to blend 9# with 10.1# been displaced from well. At this time bit passing 5500'.													
OBM Received:-----2,840 bbls; + 470bbls left inside Casing																				
OBM On Surface ----2,840 bbls (Storage + Active Pits)																				
OBM Daily Gan/Loss--- (___0___); Total Gain/Loss---(___0___)																				
14.5# Kill OBM (408bbl)----9# OBM (1230bbls)---- \$65.00/bbl																				
Discounted OBM (260bbls--11#) -----\$15.00/bbl																				
Eng. 1: Mike Washburn Phone: 361-945-5777				Eng. 2: Adolfo Roman Phone: 956-821-9994		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total		Cumulative Cost						
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.						\$1,910.00		\$34,389.48			
1	1	1	1	1	1	1	1	1							INCLUDING 3RD PARTY CHARGES		\$1,910.00		\$45,842.40	



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Grand Totals		WEEK 1							WEEK 2							WEEK 3						
	Date	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20	6/28/20	6/29/20	6/30/20	7/1/20	7/2/20	7/3/20	7/4/20	7/5/20	7/6/20	7/7/20	7/8/20	7/9/20	7/10/20	7/11/20	7/12/20
	Bit Size	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
	Starting Depth	10,335	10,335	10,335																		
	Ending Depth	10,335	10,335																			
-	Footage Drilled	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	New Hole Vol.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Starting System Volume	470	3,310	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284
-	Chemical Additions	-	-																			
-	Base Fluid Added	-	-																			
-	Barite Increase	-	-																			
2,840	Weighted Mud Added	2,840	-																			
-	Slurry Added	-	-																			
-	Water Added	-	-																			
-	Added for Washout	-	-																			
2,840	Total Additions	2,840	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	Surface Losses	-																				
-	Formation Loss	-	-																			
-	Mud Loss to Cuttings	-	-																			
-	Unrecoverable Volume	-	-																			
-	Centrifuge Losses	-	-																			
-	Total Losses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	Mud Transferred Out	-	26																			
3,284	Ending System Volume	3,310	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284	3,284
-	Mud Recovered	-																				
3,284	Comments:								Comments:							Comments:						
	6/22/20	Transfer sack material and OBM from Levi Goodrich U2-3H. Skid Rig / Nipple Up, Test BOP's							6/29/20							7/6/20						
	6/23/20	Test BOP's, Pick up and Make up new BHA, TIH 26bbbls lost to gas separator.							6/30/20							7/7/20						
	6/24/20								7/1/20							7/8/20						
	6/25/20								7/2/20							7/9/20						
	6/26/20								7/3/20							7/10/20						
	6/27/20								7/4/20							7/11/20						
6/28/20								7/5/20							7/12/20							

6/23/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 9 pm

TEL: (337) 394-1078

21.4° 10,239' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg. <b>49 ft</b>		Drilled Depth <b>10,384 ft</b>								
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP <b>21 ft/hr</b>		Activity <b>DRLG CURVE</b>								
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>340 gpm</b>		Circulating Pressure <b>2,620 psi</b>								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 943 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size							
								In Hole 417 bbl		Stroke 12		Stroke 12		Stroke							
MUD PROPERTIES							Active 1360 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk								
							Storage 1898 bbl		stk/min 53		stk/min 53		stk/min								
Time Sample Taken				2:00				13:00		Tot. on Location 3258 bbl		gal/min 170		gal/min							
Sample Location				suction				shaker													
Flowline Temperature °F						121 °F		Mud Wt. = 9.3 PV=10 YP=5		CIRCULATION DATA		n = 0.737 K = 77.2									
Depth (ft)				10,335'		10,384'		Bit Depth = 10,384 '		Washout = 1%		Pump Efficiency = 95%									
Mud Weight (ppg)				9.3		8.9		Drill String Disp.	Volume to Bit 145.9 bbl		Strokes To Bit 1,912		Time To Bit 18 min								
Funnel Vis (sec/qt) @ 110 °F				43		45			Bottoms Up Vol. 271.1 bbl		BottomsUp Stks 3,553		BottomsUp Time 34 min								
600 rpm				25		28			59.6 bbl TotalCirc.Vol. 1360.0 bbl		TotalCirc.Stks 17,823		Total Circ. Time 168 min								
300 rpm				15		18		DRILLING ASSEMBLY DATA				SOLIDS CONTROL									
200 rpm				10		15		Tubulars OD (in.) ID (in.) Length Top				Unit Screens Hours									
100 rpm				7		10		Drill Pipe 4.500 3.826 7,597'				Shaker 1 170									
6 rpm				5		6		Agitator 5.250 2.500 32' 7,597'				Shaker 2 170									
3 rpm				4		5		Drill Pipe 4.500 3.826 2,609' 7,630'				Shaker 3 170									
Plastic Viscosity (cp) @ 150 °F				10		10		Dir. BHA 5.250 2.000 146' 10,238'				Centrifuge 1									
Yield Point (lb/100 ft²) T0 = 3				5		8		CASING & HOLE DATA													
Gel Strength (lb/100 ft²) 10 sec / 10 min				5/9		5/8		Casing OD (in.) ID (in.) Depth Top				VOLUME ACCOUNTING (bbbls)  Prev. Total on Location 3283.5  Transferred In(+)/Out(-)  Oil Added (+)  Barite Added (+)  Other Product Usage (+)  Water Added (+)  Left on Cuttings (-) -2.2    Est. Total on Location 3281.3 Est. Losses/Gains (-)/(+) -23.3  BIT HYDRAULICS DATA  Bit H.S.I. Bit ΔP Nozzles (32nds) 0.39 71 psi 16 16 16  Bit Impact Force Nozzle Velocity (ft/sec) 151 lbs 93  16 16 16									
Gel Strength (lb/100 ft2) 30 min				12		9		Riser													
HTHP Filtrate (cm/30 min) @ 250 °F				8.0		8.0		Surface 10 3/4 3,000'													
HTHP Cake Thickness (32nds)				2.0		2.0		Int. Csg. 7 5/8 6.875 10,245'													
Retort Solids Content				10%		9%		Washout 1													
Corrected Solids (vol%)				8.3%		7%		Washout 2													
Retort Oil Content				70%		68%		Open Hole Size 6.818 10,384'													
Retort Water Content				20%		23%		ANNULAR GEOMETRY & RHEOLOGY													
O/W Ratio				78:22		75:25		annular section depth velocity ft/min flow reg ECD lb/gal													
Whole Mud Chlorides (mg/L)				43,000		52,000															
Water Phase Salinity (ppm)				252,134		261,733															
Whole Mud Alkalinity, Pom				1.0		1.2		6.875x4.5 7,597' 308.2 turb 9.97													
Excess Lime (lb/bbl)				1.3 ppb		1.6 ppb		6.875x5.25 7,630' 422.6 turb 10.00													
Electrical Stability (volts)				420 v		495 v		6.875x4.5 10,238' 308.2 turb 10.00													
Average Specific Gravity of Solids				3.14		2.67		6.875x5.25 10,245' 422.6 turb 10.02													
Percent Low Gravity Solids				4.5%		5.7%		6.818x5.25 10,384' 440.0 turb 10.06													
ppb Low Gravity Solids				37 ppb		47 ppb															
Percent Barite				3.7%		1.3%															
ppb Barite				54 ppb		18 ppb		BIT DATA		Manuf./Type Ulterra/U611S		151 lbs 93									
Estimated Total LCM in System								Size		Depth In		Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure	
Sample Taken By				A. Roman		M Washburn		6 3/4		10,245 ft								2,240 psi		3,445 psi	
Afternoon Remarks/Recommendations:							Afternoon Rig Activity:  Trip in hole with directional BHA to 10192, circulate and blend surface volume with cased hole volume for 9.3 mud wt, drill cement and float equipment from 10192 to 10335 and 10' of new formation to 10345, circulate hole clean and perform F.I.T. to 13.0 E.M.W. Start drilling curve reduce mud wt from 9.3 to 8.9 with centrifuge and diesel additions. Discontinue LCM sweep program while drilling curve.														

06/24/20

110 Old Market St.  
St Martinville, LA 70582

Report #10

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

11.1° 2,991' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth			
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/29/20		667 ft		10,862 ft			
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity			
GRAND CANYON A - 1H				248			TEXAS		04/28/20		56 ft/hr		POOH			
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure			
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		0 gpm		psi			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER			
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	826 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size			
8.8-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	479 bbl	Stroke	12	Stroke	12	Stroke			
				6/24/20		6/23/20	Active	944 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk 0.0000			
Time Sample Taken				2:00		13:00	Storage	2005 bbl	stk/min	0	stk/min	0	stk/min			
Sample Location				suction		shaker	Tot. on Location	3310 bbl	gal/min	0	gal/min	0	gal/min 0			
Flowline Temperature °F						121 °F	PHHP = 0		CIRCULATION DATA n = 0.610 K = 215.795							
Depth (ft)				10,860'		10,384'	Bit Depth = 3,000 '			Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				8.9		8.9	Drill String Disp.	Volume to Bit	40.9 bbl	Strokes To Bit		Time To Bit				
Funnel Vis (sec/qt)				@ 110 °F	44	45		Bottoms Up Vol.	77.5 bbl	BottomsUp Stks		BottomsUp Time				
600 rpm				29		28		19.4 bbl	TotalCirc.Vol.	944.4 bbl	TotalCirc.Stks		Total Circ. Time			
300 rpm				19		18	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				15		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				10		10	Drill Pipe	4.500	3.826	213'	0'	Shaker 1	170	18.0		
6 rpm				6		6	Agitator	5.250	2.500	32'	213'	Shaker 2	170	18.0		
3 rpm				4		5	Drill Pipe	4.500	3.826	2,609'	246'	Shaker 3	170	18.0		
Plastic Viscosity (cp)				@ 150 °F	10	10	Dir. BHA	5.250	2.000	146'	2,854'	Centrifuge 1	4.0			
Yield Point (lb/100 ft²)				T0 = 2	9	8	CASING & HOLE DATA					VOLUME ACCOUNTING (bbls)				
Gel Strength (lb/100 ft²)				10 sec/10 min	6/10	5/8	Casing	OD (in.)	ID (in.)	Depth	Top					
Gel Strength (lb/100 ft²)				30 min	12	9	Riser									
HTHP Filtrate (cm/30 min)				@ 250 °F	7.0	8.0	Surface	10 3/4		3,000'	0'					
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,245'	0'					
Retort Solids Content					9%	9%	Washout 1									
Corrected Solids (vol%)					7.2%	7%	Washout 2									
Retort Oil Content					70%	68%	Open Hole Size 6.818 10,862'									
Retort Water Content					21%	23%	ANNULAR GEOMETRY & RHEOLOGY					BIT HYDRAULICS DATA				
O/W Ratio					77:23	75:25	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal					
Whole Mud Chlorides (mg/L)					46,000	52,000										
Water Phase Salinity (ppm)					255,667	261,733										
Whole Mud Alkalinity, Pom					2.0	1.2										
Excess Lime (lb/bbl)					2.6 ppb	1.6 ppb										
Electrical Stability (volts)					470 v	495 v										
Average Specific Gravity of Solids					2.76	2.67										
Percent Low Gravity Solids					5.5%	5.7%										
ppb Low Gravity Solids					45 ppb	47 ppb										
Percent Barite					1.7%	1.3%										
ppb Barite					24 ppb	18 ppb										
Estimated Total LCM in System					ppb											
Sample Taken By				A. Roman	0	M Washburn										
Remarks/Recommendations:							Rig Activity:									
OBM Received:-----2,840 bbls; + 470bbls left inside Casing							Drilled ahead on curve section to 10860' / 69.67deg / 10575TVD. Directional Motor not getting build reates needed. Circulated BU and POOH up to casing shoe. Monitor well for 10min. Well in static condition. Pump slug and continue POOH to change out Directional Motor. During drilling period Mud maintain at 8.9ppg in the active system, Treatre with Lime for alkalinity and Opti G and NewPhalt for reducing Fluid Loss. Additions of Bentone 38 and 990 for increase on Rheology. Diesel and Water additions for dilution and volume. Bit passing 2500' at time of report.									
OBM On Surface ----2,840 bbls (Storage + Active Pits)																
OBM Daily Gan/Loss--- (___0___); Total Gain/Loss---(___0___)																
14.5# Kill OBM (408bbl)----9# OBM (1230bbls)---- \$65.00/bbl																
Discounted OBM (260bbls--11#) -----\$15.00/bbl																
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost				
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -				\$6,186.44		\$40,575.92				
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.							
1	1	1	1	1	1	1	1	1								
								INCLUDING 3RD PARTY CHARGES				\$11,966.64		\$57,809.04		





### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

# FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1

		WEEK 1							WEEK 2							WEEK 3							
		Date	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20	6/28/20	6/29/20	6/30/20	7/1/20	7/2/20	7/3/20	7/4/20	7/5/20	7/6/20	7/7/20	7/8/20	7/9/20	7/10/20	7/11/20	7/12/20
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Grand Totals	Starting Depth	10,335	10,335	10,335	10,862																		
	Ending Depth	10,335	10,335	10,862																			
527	Footage Drilled	-	-	527	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
23	New Hole Vol.	-	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	470	3,310	3,284	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	
7	Chemical Additions	-	-	7																			
92	Base Fluid Added	-	-	92																			
7	Barite Increase	-	-	7																			
2,840	Weighted Mud Added	2,840	-	-																			
-	Slurry Added	-	-	-																			
60	Water Added	-	-	60																			
-	Added for Washout	-	-	-																			
3,006	Total Additions	2,840	-	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
30	Surface Losses	-		30																			
-	Formation Loss	-	-	-																			
30	Mud Loss to Cuttings	-	-	30																			
60	Unrecoverable Volume	-	-	60																			
20	Centrifuge Losses	-	-	20																			
140	Total Losses	-	-	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	Mud Transferred Out	-	26																				
3,310	Ending System Volume	3,310	3,284	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	3,310	
-	Mud Recovered	-																					
3,284	Comments:							Comments:							Comments:								
	6/22/20	Transfer sack material and OBM from Levi Goodrich U2-3H. Skid Rig / Nipple Up, Test BOP's							6/29/20							7/6/20							
	6/23/20	Test BOP's, Pick up and Make up new BHA, TIH 26bbbls lost to gas separator.							6/30/20							7/7/20							
	6/24/20	Drilled on curve section to 10862'. Mud Motor not giving build rates. POOH to change mud motor.							7/1/20							7/8/20							
	6/25/20								7/2/20							7/9/20							
	6/26/20								7/3/20							7/10/20							
	6/27/20								7/4/20							7/11/20							
	6/28/20								7/5/20							7/12/20							

6/24/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 10 pm

TEL: (337) 394-1078

13.7°

6,640' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg.		Drilled Depth <b>10,862 ft</b>											
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP		Activity <b>TIH</b>											
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure											
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER											
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 826 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size										
								In Hole 459 bbl		Stroke 12		Stroke 12		Stroke										
MUD PROPERTIES							Active 1095 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk											
							Storage 2005 bbl		stk/min		stk/min		stk/min											
Time Sample Taken				2:00				13:00		Tot. on Location 3290 bbl		gal/min		gal/min										
Sample Location				suction				pit																
Flowline Temperature °F										Mud Wt. = 8.9 PV=10 YP=9		CIRCULATION DATA		n = 0.610 K = 215.8										
Depth (ft)				10,860'				10,860'		Bit Depth = 6,734 '		Washout = 1%		Pump Efficiency = 95%										
Mud Weight (ppg)				8.9				8.9		Drill String Disp.		Volume to Bit 94.0 bbl		Strokes To Bit										
Funnel Vis (sec/qt)				@ 101 °F 44				46		Bottoms Up Vol. 175.5 bbl		BottomsUp Stks		BottomsUp Time										
600 rpm				29				30		39.7 bbl		TotalCirc.Vol. 1095.4 bbl		TotalCirc.Stks										
300 rpm				19				20		DRILLING ASSEMBLY DATA				SOLIDS CONTROL										
200 rpm				15				15		Tubulars OD (in.) ID (in.) Length Top				Unit Screens Hours										
100 rpm				10				11		Drill Pipe 4.500 3.826 3,947'				Shaker 1 170										
6 rpm				6				6		Agitator 5.250 2.500 32' 3,947'				Shaker 2 170										
3 rpm				4				5		Drill Pipe 4.500 3.826 2,609' 3,980'				Shaker 3 170										
Plastic Viscosity (cp)				@ 150 °F 10				10		Dir. BHA 5.250 2.000 146' 6,588'				Centrifuge 1										
Yield Point (lb/100 ft²)				T0 = 2 9				10		CASING & HOLE DATA														
Gel Strength (lb/100 ft²)				10 sec / 10 min 6/10				5/8		Casing OD (in.) ID (in.) Depth Top				VOLUME ACCOUNTING (bbbls)										
Gel Strength (lb/100 ft2)				30 min 12				9		Riser														
HTHP Filtrate (cm/30 min)				@ 250 °F 7.0				7.0		Surface 10 3/4 3,000'				Prev. Total on Location 3309.9										
HTHP Cake Thickness (32nds)				2.0				2.0		Int. Csg. 7 5/8 6.875 10,245'				Transferred In(+)/Out(-)										
Retort Solids Content				9%				9%		Washout 1				Oil Added (+)										
Corrected Solids (vol%)				7.2%				7.1%		Washout 2				Barite Added (+)										
Retort Oil Content				70%				69%		Open Hole Size 6.818 10,862'				Other Product Usage (+)										
Retort Water Content				21%				22%		ANNULAR GEOMETRY & RHEOLOGY								Water Added (+)						
O/W Ratio				77:23				76:24		annular section		depth		velocity ft/min		flow reg		ECD lb/gal		Left on Cuttings (-)				
Whole Mud Chlorides (mg/L)				46,000				48,000												Non-Recoverable Vol. (-)				
Water Phase Salinity (ppm)				255,667				254,914												Gas Separator				
Whole Mud Alkalinity, Pom				2.0				1.2		6.875x4.5		3,947'		lam		8.90				Est. Total on Location 3309.9				
Excess Lime (lb/bbl)				2.6 ppb				1.6 ppb		6.875x5.25		3,980'		lam		8.90				Est. Losses/Gains -)/(+) -20.4				
Electrical Stability (volts)				470 v				485 v		6.875x4.5		6,588'		lam		8.90				BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				2.76				2.71		6.875x5.25		6,734'		lam		8.90		Bit H.S.I.		Bit ΔP		Nozzles (32nds)		
Percent Low Gravity Solids				5.5%				5.7%														16 16 16		
ppb Low Gravity Solids				45 ppb				46 ppb										Bit Impact Force		Nozzle Velocity (ft/sec)		16 18 12		
Percent Barite				1.7%				1.5%																
ppb Barite				24 ppb				21 ppb		BIT DATA		Manuf./Type		Ulterra/U611S										
Estimated Total LCM in System										Size		Depth In		Hours		Footage		ROP ft/hr		Motor/MWD		Calc. Circ. Pressure		
Sample Taken By				A. Roman				M Washburn		6 3/4		10,826 ft						#DIV/0!				129 psi		
Afternoon Remarks/Recommendations:								Afternoon Rig Activity:																
								Pull out of hole, lay down bit and 2 deg bend motor, make up new bit and motor with 2.5 deg bend. Trip in hole, depth at time of report is 6780. Forward plans are to maintain 8.9 mud wt. and recommended properties. Will continue with sweep program once curve is landed.																

06/25/20

110 Old Market St.  
St Martinville, LA 70582

Report #11

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.5°

146' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth											
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/29/20		92 ft		10,954 ft											
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity											
GRAND CANYON A - 1H				248			TEXAS		04/28/20		12 ft/hr		POOH											
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure											
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		250 gpm		2,125 psi											
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER											
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	799 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size											
8.8-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	499 bbl	Stroke	12	Stroke	12	Stroke											
				6/25/20		6/24/20	Active	802 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000										
Time Sample Taken				2:00		13:00	Storage	2005 bbl	stk/min	78	stk/min	0	stk/min											
Sample Location				suction		pit	Tot. on Location	3303 bbl	gal/min	250	gal/min	0	gal/min 0											
Flowline Temperature °F							PHHP = 310 CIRCULATION DATA n = 0.637 K = 172.351																	
Depth (ft)				10,954'		10,860'	Bit Depth = 146 '			Washout = 1%		Pump Efficiency = 95%												
Mud Weight (ppg)				8.9		8.9	Drill String Disp.	Volume to Bit	0.6 bbl	Strokes To Bit		7	Time To Bit 0 min											
Funnel Vis (sec/qt)				@ 101 °F	42	46		Bottoms Up Vol.	2.8 bbl	BottomsUp Stks		37	BottomsUp Time 0 min											
600 rpm				28		30		3.3 bbl	TotalCirc.Vol.	802.4 bbl	TotalCirc.Stks		10,515	Total Circ. Time 135 min										
300 rpm				18		20	DRILLING ASSEMBLY DATA					SOLIDS CONTROL												
200 rpm				15		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours									
100 rpm				10		11	Drill Pipe	4.500	3.826	0'	0'	Shaker 1		170	18.0									
6 rpm				6		6	Agitator	5.250	2.500	0'		Shaker 2		170	18.0									
3 rpm				5		5	Drill Pipe	4.500	3.826	0'		Shaker 3		170	18.0									
Plastic Viscosity (cp)				@ 150 °F	10	10	Dir. BHA	5.250	2.000	146'	0'	Centrifuge 1		6.0										
Yield Point (lb/100 ft²)				T0 = 4	8	10	CASING & HOLE DATA					VOLUME ACCOUNTING (bbls)  Prev. Total on Location 3309.9  Transferred In(+)/Out(-)  Oil Added (+) 54.7  Barite Added (+) 0.0  Other Product Usage (+) 0.3  Water Added (+)  Left on Cuttings (-) -4.2  Non-Recoverable Vol. (-) -15.0  Cent/Evap/Trip -42.6  Est. Total on Location 3303.1  Est. Losses/Gains (-)/(+) 0.0												
Gel Strength (lb/100 ft²)				10 sec/10 min	6/9	5/8	Casing	OD (in.)	ID (in.)	Depth	Top													
Gel Strength (lb/100 ft²)				30 min	12	9	Riser																	
HTHP Filtrate (cm/30 min)				@ 250 °F	7.0	7.0	Surface	10 3/4		3,000'	0'													
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,245'	0'													
Retort Solids Content					9%	9%	Washout 1																	
Corrected Solids (vol%)					7%	7.1%	Washout 2																	
Retort Oil Content					69%	69%	Open Hole Size		6.818	10,954'														
Retort Water Content					22%	22%	ANNULAR GEOMETRY & RHEOLOGY																	
O/W Ratio					76:24	76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal													
Whole Mud Chlorides (mg/L)					50,000	48,000						BIT HYDRAULICS DATA  Bit H.S.I. Bit ΔP Nozzles (32nds)  0.16 39 psi 16 16 16  Bit Impact Force Nozzle Velocity (ft/sec)  81 lbs 70												
Water Phase Salinity (ppm)					262,745	254,914																		
Whole Mud Alkalinity, Pom					2.0	1.2																		
Excess Lime (lb/bbl)					2.6 ppb	1.6 ppb																		
Electrical Stability (volts)					465 v	485 v																		
Average Specific Gravity of Solids					2.71	2.71																		
Percent Low Gravity Solids					5.5%	5.7%																		
ppb Low Gravity Solids					46 ppb	46 ppb																		
Percent Barite					1.4%	1.5%																		
ppb Barite					21 ppb	21 ppb	BIT DATA		Manuf./Type		Ultrerra/U611S													
Estimated Total LCM in System				ppb			Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure										
Sample Taken By				A. Roman	0	M Washburn	6 3/4	10,826 ft	8.0	92 ft	11.5	4,450 psi		4,596 psi										
Remarks/Recommendations:							Rig Activity:																	
OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)							TIH back to bottom and resume drilling; attaining needed build rate from bailout motor. Drilled to 10954' (10,582'TVD / 89.69deg) on curve section. Circulate BU and Monitor well for 10min prior to pumping slug and POOH. Well in static condition. Pump slug and continue POOH to change out Directional Mud Motor. During drilling period Mud maintain at 8.9ppg in the active system, Utilize Centrifuge and Diesel to control MW increase from previous slug in the hole. Additions of Bentone 38 and 990 for increase on Rheology. Diesel and Water additions for dilution and volume. Lay down directional BHA at time of report.																	
OBM On Surface ----2,840 bbls (Storage + Active Pits)																								
OBM Daily Gan/Loss--- ( _-7 _); Total Gain/Loss---( _-7 _)																								
14.5# Kill OBM (408bbl)----9# OBM (1337bbls)---- \$65.00/bbl																								
Discounted OBM (260bbls--11#) -----\$15.00/bbl																								
Eng. 1:		Mike Washburn		Eng. 2:		Adolfo Roman		WH 1:		MIDLAND		WH 2:		WH #2		Rig Phone:		Daily Total		Cumulative Cost				
Phone:		361-945-5777		Phone:		956-821-9994		Phone:		432-686-7361		Phone:		-				\$2,860.06		\$43,435.98				
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.															
1	1	1	1	1	1	1	1	1													\$5,846.16		\$63,655.20	



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

		WEEK 1							WEEK 2							WEEK 3							
		Date	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20	6/28/20	6/29/20	6/30/20	7/1/20	7/2/20	7/3/20	7/4/20	7/5/20	7/6/20	7/7/20	7/8/20	7/9/20	7/10/20	7/11/20	7/12/20
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Grand Totals	Bit Size	6 3/4	6 3/4	6 3/4	6 3/4																		
	Starting Depth	10,335	10,335	10,335	10,862	10,954																	
	Ending Depth	10,335	10,335	10,862	10,954																		
619	Footage Drilled	-	-	527	92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
27	New Hole Vol.	-	-	23	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	470	3,310	3,284	3,310	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	
7	Chemical Additions	-	-	7	0																		
147	Base Fluid Added	-	-	92	55																		
7	Barite Increase	-	-	7	-																		
2,840	Weighted Mud Added	2,840	-	-	-																		
-	Slurry Added	-	-	-	-																		
60	Water Added	-	-	60	-																		
-	Added for Washout	-	-	-	-																		
3,061	Total Additions	2,840	-	166	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	Surface Losses	-		30	15																		
-	Formation Loss	-	-	-	-																		
34	Mud Loss to Cuttings	-	-	30	4																		
75	Unrecoverable Volume	-	-	60	15																		
48	Centrifuge Losses	-	-	20	28																		
202	Total Losses	-	-	140	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	Mud Transferred Out	-	26																				
3,303	Ending System Volume	3,310	3,284	3,310	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	3,303	
-	Mud Recovered	-																					
3,284	Comments:							Comments:							Comments:								
	6/22/20	Transfer sack material and OBM from Levi Goodrich U2-3H. Skid Rig / Nipple Up, Test BOP's							6/29/20							7/6/20							
	6/23/20	Test BOP's, Pick up and Make up new BHA, TIH 26bbbs lost to gas separator.							6/30/20							7/7/20							
	6/24/20	Drilled on curve section to 10862'. Mud Motor not giving build rates. POOH to change mud motor.							7/1/20							7/8/20							
	6/25/20	TIH and drill to 10954'. Circulate BU and monitor well. Pump slug and POOH to change out Mud Motor.							7/2/20							7/9/20							
	6/26/20								7/3/20							7/10/20							
	6/27/20								7/4/20							7/11/20							
	6/28/20								7/5/20							7/12/20							



6/25/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 11 pm

TEL: (337) 394-1078

11.7°

5,652' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg.		Drilled Depth <b>10,954 ft</b>						
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP		Activity <b>TIH w/ BHA #5</b>						
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure						
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER						
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 799 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size					
								In Hole 469 bbl		Stroke 12		Stroke 12		Stroke					
								Active 1028 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk					
								Storage 2005 bbl		stk/min		stk/min		stk/min					
								Tot. on Location 3273 bbl		gal/min		gal/min		gal/min					
Flowline Temperature °F								Mud Wt. = 8.9 PV=10 YP=8		CIRCULATION DATA		n = 0.637 K = 172.4							
Depth (ft)				10,954'				10,954'		Bit Depth = 5,723 '		Washout = 1%		Pump Efficiency = 95%					
Mud Weight (ppg)				8.9				8.9		Drill String Disp.	Volume to Bit 79.9 bbl		Strokes To Bit		Time To Bit				
Funnel Vis (sec/qt)				@ 105 °F 42				43			Bottoms Up Vol. 149.2 bbl		BottomsUp Stks		BottomsUp Time				
600 rpm				28				29			33.7 bbl		TotalCirc.Vol. 1028.0 bbl		TotalCirc.Stks		Total Circ. Time		
300 rpm				18				19		DRILLING ASSEMBLY DATA						SOLIDS CONTROL			
200 rpm				15				15		Tubulars		OD (in.)	ID (in.)	Length	Top	Unit		Screens	Hours
100 rpm				10				11		Drill Pipe		4.500	3.826	5,577'		Shaker 1		170	
6 rpm				6				6		Agitator		5.250	2.500	5,577'		Shaker 2		170	
3 rpm				5				5		Drill Pipe		4.500	3.826	5,577'		Shaker 3		170	
Plastic Viscosity (cp)				@ 150 °F 10				10		Dir. BHA		5.250	2.000	146'	5,577'	Centrifuge 1			
Yield Point (lb/100 ft²)				T0 = 4		8		9		CASING & HOLE DATA									
Gel Strength (lb/100 ft²)				10 sec / 10 min		6/9		5/8		Casing		OD (in.)	ID (in.)	Depth	Top				
Gel Strength (lb/100 ft2)				30 min		12		10		Riser									
HTHP Filtrate (cm/30 min)				@ 250 °F 7.0				7.0		Surface		10 3/4	3,000'						
HTHP Cake Thickness (32nds)				2.0				2.0		Int. Csg.		7 5/8	6.875	10,245'					
Retort Solids Content				9%				9%		Washout 1									
Corrected Solids (vol%)				7%				7%		Washout 2									
Retort Oil Content				69%				69%		Open Hole Size		6.818	10,954'						
Retort Water Content				22%				22%		ANNULAR GEOMETRY & RHEOLOGY									
O/W Ratio				76:24				76:24		annular section		depth	velocity ft/min	flow reg	ECD lb/gal				
Whole Mud Chlorides (mg/L)				50,000				50,000											
Water Phase Salinity (ppm)				262,745				262,745											
Whole Mud Alkalinity, Pom				2.0				1.9		6.875x4.5		5,577'		lam	8.90				
Excess Lime (lb/bbl)				2.6 ppb				2.5 ppb		6.875x5.25		5,723'		lam	8.90				
Electrical Stability (volts)				465 v				475 v											
Average Specific Gravity of Solids				2.71				2.70											
Percent Low Gravity Solids				5.5%				5.6%											
ppb Low Gravity Solids				46 ppb				46 ppb											
Percent Barite				1.4%				1.4%											
ppb Barite				21 ppb				20 ppb		BIT DATA		Manuf./Type		Ulterra/U611S					
Estimated Total LCM in System										Size		Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure	
Sample Taken By				A. Roman				M Washburn		6 3/4		10,954 ft			#DIV/0!	4,450 psi		4,548 psi	
Afternoon Remarks/Recommendations:								Afternoon Rig Activity:											
								Lay down directional BHA and make up BHA #5 with 2 degree motor for drilling lateral hole section. Trip in hole to 181' and test MWD tool (good), Trip in hole with 4-1/2" DP to 2790 and make up agitator trip in hole to 5723 fill pipe and secure well. Perform welding repairs on floor plate. When drilling resumes will start pumping LCM sweeps in lateral hole section.Receive one load of bulk barite.											

06/26/20

110 Old Market St.  
St Martinville, LA 70582

Report #12

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

95.5° 10,555' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr fig. <b>946 ft</b>		Drilled Depth <b>11,900 ft</b>				
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP <b>95 ft/hr</b>		Activity <b>Drilling Lateral</b>				
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>353 gpm</b>		Circulating Pressure <b>4,520 psi</b>				
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER				
Weight <b>8.8-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 825 bbl	Liner Size 5.25	Liner Size 5.25	Liner Size							
							In Hole 477 bbl	Stroke 12	Stroke 12	Stroke							
				6/26/20		6/25/20	Active 1302 bbl	bbl/stk 0.0763	bbl/stk 0.0763	bbl/stk 0.0000							
Time Sample Taken				2:00		13:00	Storage <u>2005 bbl</u>	stk/min 55	stk/min 55	stk/min							
Sample Location				suction		pit	Tot. on Location 3307 bbl	gal/min 176	gal/min 176	gal/min 0							
Flowline Temperature °F				130 °F			PHHP = 930 CIRCULATION DATA n = 0.585 K = 239.066										
Depth (ft)				11,686'		10,954'	Bit Depth = 11,900 '		Washout = 1%		Pump Efficiency = 95%						
Mud Weight (ppg)				8.9		8.9	Drill String Disp.  67.9 bbl	Volume to Bit 167.4 bbl	Strokes To Bit 2,194	Time To Bit 20 min							
Funnel Vis (sec/qt) @ 110 °F				45		43		Bottoms Up Vol. 309.8 bbl	BottomsUp Stks 4,060	BottomsUp Time 37 min							
600 rpm				27		29		TotalCirc.Vol. 1302.2 bbl	TotalCirc.Stks 17,065	Total Circ. Time 155 min							
300 rpm				18		19	DRILLING ASSEMBLY DATA					SOLIDS CONTROL					
200 rpm				14		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours			
100 rpm				10		11	Drill Pipe	4.500	3.826	9,113'	0'	Shaker 1	170	18.0			
6 rpm				6		6	Agitator	5.250	2.500	32'	9,113'	Shaker 2	170	18.0			
3 rpm				5		5	Drill Pipe	4.500	3.826	2,609'	9,146'	Shaker 3	170	18.0			
Plastic Viscosity (cp) @ 150 °F				9		10	Dir. BHA	5.250	2.000	146'	11,754'	Centrifuge 1	4.0				
Yield Point (lb/100 ft²) T0 = 4				9		9	CASING & HOLE DATA										
Gel Strength (lb/100 ft²) 10 sec/10 min				6/9		5/8	Casing	OD (in.)	ID (in.)	Depth	Top						
Gel Strength (lb/100 ft²) 30 min				11		10	Riser							VOLUME ACCOUNTING (bbls)			
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		7.0	Surface	10 3/4		3,000'	0'	Prev. Total on Location		3303.1			
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,245'	0'	Transferred In(+)/Out(-)					
Retort Solids Content				9%		9%	Washout 1					Oil Added (+)	31.6				
Corrected Solids (vol%)				7.1%		7%	Washout 2					Barite Added (+)	0.0				
Retort Oil Content				70%		69%	Open Hole Size					6.818	11,900'	Other Product Usage (+)	4.5		
Retort Water Content				21%		22%	ANNULAR GEOMETRY & RHEOLOGY								Water Added (+)	10.8	
O/W Ratio				77:23		76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		-42.7			
Whole Mud Chlorides (mg/L)				48,000		50,000									Non-Recoverable Vol. (-)		
Water Phase Salinity (ppm)				263,850		262,745									Cent/Evap/Trip		
Whole Mud Alkalinity, Pom				2.0		1.9	6.875x4.5	9,113'	319.8	turb	9.69	Est. Total on Location		3307.3			
Excess Lime (lb/bbl)				2.6 ppb		2.5 ppb	6.875x5.25	9,146'	438.6	turb	9.78	Est. Losses/Gains (-)/(+)		0.0			
Electrical Stability (volts)				455 v		475 v	6.875x4.5	10,245'	319.8	turb	9.85	BIT HYDRAULICS DATA					
Average Specific Gravity of Solids				2.82		2.70	6.818x4.5	11,754'	329.4	turb	10.00	Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
Percent Low Gravity Solids				5.2%		5.6%	6.818x5.25	11,900'	456.6	turb	10.12	0.45	78 psi	16	16	16	
ppb Low Gravity Solids				43 ppb		46 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	16	18	12	
Percent Barite				1.9%		1.4%											
ppb Barite				27 ppb		20 ppb	BIT DATA		Manuf./Type		Ulterra/U611S		161 lbs	99			
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure				
Sample Taken By				A. Roman	0	M Washburn	6 3/4	10,954 ft	10.0	946 ft	94.6	2,240 psi	3,606 psi				
Remarks/Recommendations:  OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)  OBM On Surface ----2,830 bbls (Storage + Active Pits)  OBM Daily Gan/Loss--- ( _+4 _); Total Gain/Loss---( _-3 _)  14.5# Kill OBM (408bbl)----9# OBM (1337bbls)---- \$65.00/bbl  Discounted OBM (260bbls--11#) -----\$15.00/bbl							Rig Activity:  TIH back to bottom and resume drilling operations on lateral section; While drilling/Sliding on lateral section, 10bbls (LCM Sweep) are pumped every connection. Mud maintain at 8.9ppg in the active system with additions of Diesel. Using Centrifuge for proccesing mud recover from cuttings, use same for 2hrs from active system at the start of drilling ops. Chemical additions of Bentone 38 and 990 for increase on Rheology; Lime to maintain alkalinity; NewPhalt and Opti G to maintain Fluid loss. Diesel and Water additions for dilution and volume. Drilling ahead passing 11922' at time of report.										
Eng. 1: Mike Washburn Phone: 361-945-5777				Eng. 2: Adolfo Roman Phone: 956-821-9994		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total		Cumulative Cost			
W P Y E C g G H O 1 1 1 1 1 1 1 1 1				Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.									\$5,830.10		\$49,266.08		
							INCLUDING 3RD PARTY CHARGES					\$7,876.50		\$71,531.70			



### THIRD PARTY COST SHEET

[illegible]

**OUTSOURCE FLUID SOLUTIONS LLC.**

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

		WEEK 1							WEEK 2							WEEK 3							
		Date	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20	6/28/20	6/29/20	6/30/20	7/1/20	7/2/20	7/3/20	7/4/20	7/5/20	7/6/20	7/7/20	7/8/20	7/9/20	7/10/20	7/11/20	7/12/20
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Grand Totals	Bit Size	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4																	
	Starting Depth	10,335	10,335	10,335	10,862	10,954	11,900																
	Ending Depth	10,335	10,335	10,862	10,954	11,900																	
1,565	Footage Drilled	-	-	527	92	946	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
69	New Hole Vol.	-	-	23	4	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	470	3,310	3,284	3,310	3,303	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	
12	Chemical Additions	-	-	7	0	5																	
178	Base Fluid Added	-	-	92	55	32																	
7	Barite Increase	-	-	7	-	-																	
2,840	Weighted Mud Added	2,840	-	-	-	-																	
-	Slurry Added	-	-	-	-	-																	
71	Water Added	-	-	60	-	11																	
-	Added for Washout	-	-	-	-	-																	
3,108	Total Additions	2,840	-	166	55	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	Surface Losses	-	-	30	15	-																	
-	Formation Loss	-	-	-	-	-																	
77	Mud Loss to Cuttings	-	-	30	4	43																	
75	Unrecoverable Volume	-	-	60	15	-																	
48	Centrifuge Losses	-	-	20	28	-																	
245	Total Losses	-	-	140	62	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	Mud Transferred Out	-	26	-	-	-																	
3,307	Ending System Volume	3,310	3,284	3,310	3,303	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	3,307	
-	Mud Recovered	-																					
3,284	Comments:							Comments:							Comments:								
	6/22/20	Transfer sack material and OBM from Levi Goodrich U2-3H. Skid Rig / Nipple Up, Test BOP's							6/29/20							7/6/20							
	6/23/20	Test BOP's, Pick up and Make up new BHA, TIH 26bbbs lost to gas separator.							6/30/20							7/7/20							
	6/24/20	Drilled on curve section to 10862'. Mud Motor not giving build rates. POOH to change mud motor.							7/1/20							7/8/20							
	6/25/20	TIH and drill to 10954'. Circulate BU and monitor well. Pump slug and POOH to change out Mud Motor.							7/2/20							7/9/20							
	6/26/20	TIH resume drilling, MW 8.9ppg. (+4bbbs OBM)							7/3/20							7/10/20							
	6/27/20								7/4/20							7/11/20							
	6/28/20								7/5/20							7/12/20							

6/26/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 12 pm

TEL: (337) 394-1078

92.4° 10,500' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg. <b>1,870 ft</b>		Drilled Depth <b>12,815 ft</b>								
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP <b>324 ft/hr</b>		Activity <b>DRLG LATERAL</b>								
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>372 gpm</b>		Circulating Pressure <b>4,160 psi</b>								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 810 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size							
								In Hole 514 bbl		Stroke 12		Stroke 12		Stroke							
								Active 1324 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk							
								Storage <u>2005 bbl</u>		stk/min 58		stk/min 58		stk/min							
								Tot. on Location 3329 bbl		gal/min 186		gal/min 186		gal/min							
Flowline Temperature °F				130 °F		138 °F		Mud Wt. = 8.9 PV=9 YP=9		CIRCULATION DATA		n = 0.585 K = 239.1									
Depth (ft)				11,686'		12,824'		Bit Depth = 12,815 '			Washout = 1%		Pump Efficiency = 95%								
Mud Weight (ppg)				8.9		8.9		Drill String Disp.	Volume to Bit 180.5 bbl		Strokes To Bit 2,365		Time To Bit 20 min								
Funnel Vis (sec/qt) @ 125 °F				45		44			Bottoms Up Vol. 333.1 bbl		BottomsUp Stks 4,365		BottomsUp Time 38 min								
600 rpm				27		30			72.9 bbl TotalCirc.Vol. 1323.6 bbl		TotalCirc.Stks 17,345		Total Circ. Time 150 min								
300 rpm				18		21		DRILLING ASSEMBLY DATA					SOLIDS CONTROL								
200 rpm				14		16		Tubulars OD (in.) ID (in.) Length Top					Unit Screens Hours								
100 rpm				10		12		Drill Pipe 4.500 3.826 10,028'					Shaker 1 170 20.0								
6 rpm				6		6		Agitator 5.250 2.500 32' 10,028'					Shaker 2 170 20.0								
3 rpm				5		5		Drill Pipe 4.500 3.826 2,609' 10,061'					Shaker 3 170 20.0								
Plastic Viscosity (cp) @ 150 °F				9		9		Dir. BHA 5.250 2.000 146' 12,669'					Centrifuge 1 4.0								
Yield Point (lb/100 ft²) T0 = 4				9		12		CASING & HOLE DATA													
Gel Strength (lb/100 ft²) 10 sec / 10 min				6/9		6/9		Casing OD (in.) ID (in.) Depth Top													
Gel Strength (lb/100 ft2) 30 min				11		10		Riser					VOLUME ACCOUNTING (bbls)								
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0		Surface 10 3/4 3,000'					Prev. Total on Location 3307.2								
HTHP Cake Thickness (32nds)				2.0		2.0		Int. Csg. 7 5/8 6.875 10,245'					Transferred In(+)/Out(-)								
Retort Solids Content				9%		9%		Washout 1					Oil Added (+)								
Corrected Solids (vol%)				7.1%		7.1%		Washout 2					Barite Added (+)								
Retort Oil Content				70%		70%		Open Hole Size 6.818 12,815'					Other Product Usage (+)								
Retort Water Content				21%		21%		ANNULAR GEOMETRY & RHEOLOGY								Water Added (+)					
O/W Ratio				77:23		77:23		annular section		depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) -84.4							
Whole Mud Chlorides (mg/L)				48,000		47,500										Non-Recoverable Vol. (-)					
Water Phase Salinity (ppm)				263,850		261,821										Cent/Evap/Trip					
Whole Mud Alkalinity, Pom				2.0		1.4		6.875x4.5		10,028'	337.3	turb	9.95	Est. Total on Location 3222.8							
Excess Lime (lb/bbl)				2.6 ppb		1.8 ppb		6.875x5.25		10,061'	462.5	turb	10.24	Est. Losses/Gains (-)/(+) 105.8							
Electrical Stability (volts)				455 v		495 v		6.875x4.5		10,245'	337.3	turb	10.51	BIT HYDRAULICS DATA							
Average Specific Gravity of Solids				2.82		2.74		6.818x4.5		12,669'	347.3	turb	10.91	Bit H.S.I.		Bit ΔP	Nozzles (32nds)				
Percent Low Gravity Solids				5.2%		5.5%		6.818x5.25		12,815'	481.5	turb	11.23	0.53		87 psi	16	16	16		
ppb Low Gravity Solids				43 ppb		45 ppb										Bit Impact Force		Nozzle Velocity (ft/sec)	16	18	12
Percent Barite				1.9%		1.6%															
ppb Barite				27 ppb		23 ppb		BIT DATA			Manuf./Type		Ulterra/U611S		179 lbs		104				
Estimated Total LCM in System								Size		Depth In	Hours		Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure				
Sample Taken By				A. Roman		M Washburn		6 3/4		10,954 ft	22.0		1,870 ft	85.0	2,240 psi		3,835 psi				
Afternoon Remarks/Recommendations:  LCM sweep contains:  15 ppb First Response  10 ppb Newcarb Med  10 ppb Cyberseal							Afternoon Rig Activity:    Drilling 6-3/4" lateral hole section, samples are 100% Austin Chalk. Maintain mud wt. at 8.9 with additions of diesel and periodic use of centrifuge, pump 10 bbls LCM sweep every connection. Adding Optimul HP and Lime for ES and alkalinity, Bentone clays to maintain rheology, OPTIG - gilsonite, and Newphalt - sulfonated asphalt for HTHP fluid loss and wellbore stability. No downhole mud losses detected.														

06/27/20

110 Old Market St.  
St Martinville, LA 70582

Report #13

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

97.8° 10,400' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth						
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/29/20		2,260 ft		14,160 ft						
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity						
GRAND CANYON A - 1H				248			TEXAS		04/28/20		103 ft/hr		DRLG LATERAL						
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure						
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		391 gpm		3,897 psi						
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	785 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size						
8.8-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	567 bbl	Stroke	12	Stroke	12	Stroke						
				6/27/20		6/26/20	Active	1352 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000					
Time Sample Taken				2:00		13:00	Storage	2005 bbl	stk/min	61	stk/min	61	stk/min						
Sample Location				suction		shaker	Tot. on Location	3357 bbl	gal/min	196	gal/min	196	gal/min	0					
Flowline Temperature °F				155 °F		138 °F	PHHP = 889		CIRCULATION DATA						n = 0.559 K = 295.909				
Depth (ft)				14,038'		12,824'	Bit Depth = 14,160 '			Washout = 1%		Pump Efficiency = 95%							
Mud Weight (ppg)				8.9		8.9	Drill String Disp.	Volume to Bit	199.6 bbl	Strokes To Bit		2,616	Time To Bit		21 min				
Funnel Vis (sec/qt)				@ 125 °F	44	44		Bottoms Up Vol.	367.4 bbl	BottomsUp Stks		4,814	BottomsUp Time		39 min				
600 rpm				28		30		80.2 bbl	TotalCirc.Vol.	1352.0 bbl	TotalCirc.Stks		17,717	Total Circ. Time		145 min			
300 rpm				19		21	DRILLING ASSEMBLY DATA					SOLIDS CONTROL							
200 rpm				14		16	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours					
100 rpm				10		12	Drill Pipe	4.500	3.826	11,373'	0'	Shaker 1	170	20.0					
6 rpm				6		6	Agitator	5.250	2.500	32'	11,373'	Shaker 2	170	20.0					
3 rpm				5		5	Drill Pipe	4.500	3.826	2,609'	11,406'	Shaker 3	170	20.0					
Plastic Viscosity (cp)				@ 150 °F	9	9	Dir. BHA	5.250	2.000	146'	14,014'	Centrifuge 1	6.0						
Yield Point (lb/100 ft²)				T0 = 4	10	12	CASING & HOLE DATA					VOLUME ACCOUNTING (bbIs)  Prev. Total on Location 3307.2  Transferred In(+)/Out(-)  Oil Added (+) 88.7  Barite Added (+) 0.0  Other Product Usage (+) 16.9  Water Added (+) 60.0  Left on Cuttings (-) -102.0  Non-Recoverable Vol. (-)  Cent/Evap/Trip -13.9  Est. Total on Location 3357.0  Est. Losses/Gains (-)/(+) 0.0							
Gel Strength (lb/100 ft²)				10 sec/10 min	5/9	6/9	Casing	OD (in.)	ID (in.)	Depth	Top								
Gel Strength (lb/100 ft²)				30 min	12	10	Riser												
HTHP Filtrate (cm/30 min)				@ 250 °F	6.0	6.0	Surface	10 3/4		3,000'	0'								
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,245'	0'								
Retort Solids Content					9%	9%	Washout 1												
Corrected Solids (vol%)					7.1%	7.1%	Washout 2												
Retort Oil Content					71%	70%	Open Hole Size 6.818 14,160'												
Retort Water Content					20%	21%	ANNULAR GEOMETRY & RHEOLOGY												
O/W Ratio					78:22	77:23	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal								
Whole Mud Chlorides (mg/L)					47,000	47,500						BIT HYDRAULICS DATA  Bit H.S.I. Bit ΔP Nozzles (32nds)  0.57 90 psi 16 16 16  Bit Impact Force Nozzle Velocity (ft/sec)  191 lbs 106  16 16 16							
Water Phase Salinity (ppm)					269,273	261,821													
Whole Mud Alkalinity, Pom					2.4	1.4	6.875x4.5	10,245'	354.7	turb	9.72								
Excess Lime (lb/bbl)					3.1 ppb	1.8 ppb	6.818x4.5	11,373'	365.3	turb	9.86								
Electrical Stability (volts)					500 v	495 v	6.818x5.25	11,406'	506.5	turb	9.96								
Average Specific Gravity of Solids					2.70	2.74	6.818x4.5	14,014'	365.3	turb	10.26								
Percent Low Gravity Solids					5.7%	5.5%	6.818x5.25	14,160'	506.5	turb	10.39								
ppb Low Gravity Solids					47 ppb	45 ppb													
Percent Barite					1.4%	1.6%													
ppb Barite					20 ppb	23 ppb	BIT DATA		Manuf./Type		Hal./GTD64c					191 lbs	106		
Estimated Total LCM in System				ppb			Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure						
Sample Taken By				A. Roman	0	M Washburn	6 3/4	10,954 ft	44.0	4,130 ft	93.9	2,240 psi	4,118 psi						
Remarks/Recommendations:							Rig Activity:												
OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)							Drilling-Sliding ahead on lateral section; Continue pumping 10bbls (LCM Sweep) every connection. Mud maintain at 8.9ppg in the active system with additions of Diesel. Using Centrifuge for processing mud recover from cuttings, use same for 6hrs from active system at alternated intervals to remove solids. Chemical additions of Bentone 38 and 990 for Rheology maintenance; Lime to maintain alkalinity; NewPhalt and Opti G to maintain Fluid loss. Diesel and Water additions for dilution and to offset evaporation.												
OBM On Surface ----2,790 bbls (Storage + Active Pits)																			
OBM Daily Gan/Loss--- (+50); Total Gain/Loss---(_+47_)																			
14.5# Kill OBM (408bbl)----9# OBM (1337bbls)---- \$65.00/bbl																			
Discounted OBM (260bbls--11#) -----\$15.00/bbl																			
Eng. 1: Mike Washburn				Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost					
Phone: 361-945-5777				Phone: 956-821-9994		Phone: 432-686-7361		Phone: -				\$9,880.77		\$59,146.85					
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.										
1	1	1	1	1	1	1	1	1	INCLUDING 3RD PARTY CHARGES							\$15,456.72		\$86,988.42	





### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

3,284

6/27/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 13 pm

TEL: (337) 394-1078

94.3° 10,383' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg.		Drilled Depth <b>14,948 ft</b>					
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP <b>300 ft/hr</b>		Activity <b>DRLG LATERAL</b>					
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>397 gpm</b>		Circulating Pressure <b>4,734 psi</b>					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER					
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 720 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size				
								In Hole 598 bbl		Stroke 12		Stroke 12		Stroke				
								Active 1318 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk				
								Storage 2005 bbl		stk/min 62		stk/min 62		stk/min				
								Tot. on Location 3323 bbl		gal/min 199		gal/min 199		gal/min				
Flowline Temperature °F				155 °F		151 °F		Mud Wt. = 8.9 PV=9 YP=10		CIRCULATION DATA		n = 0.559 K = 295.9						
Depth (ft)				14,038'		14,950'		Bit Depth = 14,948 '			Washout = 1%		Pump Efficiency = 95%					
Mud Weight (ppg)				8.9		8.9		Drill String Disp.	Volume to Bit 210.8 bbl		Strokes To Bit 2,762		Time To Bit 22 min					
Funnel Vis (sec/qt) @ 136 °F				44		44			Bottoms Up Vol. 387.5 bbl		BottomsUp Stks 5,078		BottomsUp Time 41 min					
600 rpm				28		27			84.5 bbl TotalCirc.Vol. 1318.3 bbl		TotalCirc.Stks 17,275		Total Circ. Time 139 min					
300 rpm				19		19		DRILLING ASSEMBLY DATA						SOLIDS CONTROL				
200 rpm				14		16		Tubulars OD (in.) ID (in.) Length Top						Unit Screens Hours				
100 rpm				10		12		Drill Pipe 4.500 3.826 12,161'						Shaker 1 170				
6 rpm				6		6		Agitator 5.250 2.500 32' 12,161'						Shaker 2 170				
3 rpm				5		5		Drill Pipe 4.500 3.826 2,609' 12,194'						Shaker 3 170				
Plastic Viscosity (cp) @ 150 °F				9		8		Dir. BHA 5.250 2.000 146' 14,802'						Centrifuge 1				
Yield Point (lb/100 ft²) T0 = 4				10		11		CASING & HOLE DATA										
Gel Strength (lb/100 ft²) 10 sec / 10 min				5/9		5/9		Casing OD (in.) ID (in.) Depth Top										
Gel Strength (lb/100 ft2) 30 min				12		11		Riser						VOLUME ACCOUNTING (bbls)				
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0		Surface 10 3/4 3,000'						Prev. Total on Location 3357.0				
HTHP Cake Thickness (32nds)				2.0		2.0		Int. Csg. 7 5/8 6.875 10,245'						Transferred In(+)/Out(-)				
Retort Solids Content				9%		9%		Washout 1						Oil Added (+)				
Corrected Solids (vol%)				7.1%		7.2%		Washout 2						Barite Added (+)				
Retort Oil Content				71%		71%		Open Hole Size 6.818 14,948'						Other Product Usage (+)				
Retort Water Content				20%		20%		ANNULAR GEOMETRY & RHEOLOGY						Water Added (+)				
O/W Ratio				78:22		78:22		annular section		depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)				
Whole Mud Chlorides (mg/L)				47,000		46,500								Non-Recoverable Vol. (-)				
Water Phase Salinity (ppm)				269,273		267,174								Cent/Evap/Trip				
Whole Mud Alkalinity, Pom				2.4		1.8		6.875x4.5 10,245' 360.6 turb 9.90						Est. Total on Location 3357.0				
Excess Lime (lb/bbl)				3.1 ppb		2.3 ppb		6.818x4.5 12,161' 371.3 turb 10.27						Est. Losses/Gains (-)/(+) -33.7				
Electrical Stability (volts)				500 v		535 v		6.818x5.25 12,194' 514.8 turb 10.53						BIT HYDRAULICS DATA				
Average Specific Gravity of Solids				2.70		2.78		6.818x4.5 14,802' 371.3 turb 11.02						Bit H.S.I. 0.60	Bit ΔP 93 psi	Nozzles (32nds)		
Percent Low Gravity Solids				5.7%		5.4%		6.818x5.25 14,948' 514.8 turb 11.30								16	16	16
ppb Low Gravity Solids				47 ppb		45 ppb								Bit Impact Force 197 lbs	Nozzle Velocity (ft/sec) 108	16	16	16
Percent Barite				1.4%		1.7%												
ppb Barite				20 ppb		25 ppb		BIT DATA		Manuf./Type		Hal./GTD64c		197 lbs	108			
Estimated Total LCM in System								Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure			
Sample Taken By				A. Roman		M Washburn		6 3/4	10,954 ft	56.0	3,994 ft	71.3	2,240 psi		4,264 psi			
Afternoon Remarks/Recommendations:  LCM sweep contains:  15 ppb First Response  10 ppb Newcarb Med  10 ppb Cyberseal  5 ppb VARISEAL							Afternoon Rig Activity:    Drilling 6-3/4" lateral hole section, samples are 100% AC with up to 2% calcite from fractures that were crossed at 14350 - 14400 and from 14550 - 14600, slight seepage losses were detected @ 4 - 5 bbls/hr after drilling fractures then stabalized. Maintain mud wt. at 8.9, continue pumping 10 bbls LCM sweeps every stand, will increase frequency if losses continue.											

06/28/20

110 Old Market St.  
St Martinville, LA 70582

Report #14

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

90.6° 10,322' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>04/29/20</b>		24 hr fig. <b>2,060 ft</b>		Drilled Depth <b>16,220 ft</b>		
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>04/28/20</b>		Current ROP <b>94 ft/hr</b>		Activity <b>DRLG LATERAL</b>		
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>			Fluid Type <b>OBM</b>		Circulating Rate <b>397 gpm</b>		Circulating Pressure <b>4,956 psi</b>		
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER		
Weight <b>8.8-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 796 bbl	In Hole 649 bbl	Liner Size 5.25	Stroke 12	Liner Size 5.25	Stroke 12	Liner Size			
				6/28/20		6/27/20	Active 1445 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk 0.0000			
Time Sample Taken				2:00		13:00	Storage <u>1923 bbl</u>		stk/min 62		stk/min 62		stk/min			
Sample Location				suction		shaker	Tot. on Location 3368 bbl		gal/min 199		gal/min 199		gal/min 0			
Flowline Temperature °F				160 °F		151 °F	PHHP = 1149 CIRCULATION DATA n = 0.559 K = 295.909									
Depth (ft)				16,087'		14,950'	Bit Depth = 16,220 '			Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				8.9		8.9	Drill String Disp. 91.5 bbl	Volume to Bit 228.9 bbl	Strokes To Bit 2,999	Time To Bit 24 min						
Funnel Vis (sec/qt) @ 136 °F				41		44		Bottoms Up Vol. 419.9 bbl	BottomsUp Stks 5,502	BottomsUp Time 44 min						
600 rpm				28		27		TotalCirc.Vol. 1444.8 bbl	TotalCirc.Stks 18,933	Total Circ. Time 153 min						
300 rpm				19		19	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				15		16	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				11		12	Drill Pipe	4.500	3.826	13,433'	0'	Shaker 1	170	24.0		
6 rpm				7		6	Agitator	5.250	2.500	32'	13,433'	Shaker 2	170	24.0		
3 rpm				6		5	Drill Pipe	4.500	3.826	2,609'	13,466'	Shaker 3	170	24.0		
Plastic Viscosity (cp) @ 150 °F				9		8	Dir. BHA	5.250	2.000	146'	16,074'	Centrifuge 1		8.0		
Yield Point (lb/100 ft²) T0 = 5				10		11	CASING & HOLE DATA					VOLUME ACCOUNTING (bbIs)  Prev. Total on Location 3357.0  Transferred In(+)/Out(-)  Oil Added (+) 108.4  Barite Added (+) 0.0  Other Product Usage (+) 12.6  Water Added (+) 80.0  Left on Cuttings (-) -93.0  Non-Recoverable Vol. (-) -52.2  Cent/Evap/Trip -45.0  Est. Total on Location 3367.7  Est. Losses/Gains (-)/(+) 0.0  BIT HYDRAULICS DATA  Bit H.S.I. Bit ΔP Nozzles (32nds) 0.61 94 psi 16 16 16  Bit Impact Force Nozzle Velocity (ft/sec) 199 lbs 108				
Gel Strength (lb/100 ft²) 10 sec/10 min				6/10		5/9	Casing	OD (in.)	ID (in.)	Depth	Top					
Gel Strength (lb/100 ft²) 30 min				14		11	Riser									
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0	Surface	10 3/4		3,000'	0'					
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,245'	0'					
Retort Solids Content				10%		9%	Washout 1									
Corrected Solids (vol%)				8.2%		7.2%	Washout 2									
Retort Oil Content				71%		71%	Open Hole Size 6.818 16,220'									
Retort Water Content				19%		20%	ANNULAR GEOMETRY & RHEOLOGY									
O/W Ratio				79:21		78:22	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal					
Whole Mud Chlorides (mg/L)				44,000		46,500										
Water Phase Salinity (ppm)				266,397		267,174										
Whole Mud Alkalinity, Pom				2.0		1.8	6.875x4.5	10,245'	360.6	turb	9.83					
Excess Lime (lb/bbl)				2.6 ppb		2.3 ppb	6.818x4.5	13,433'	371.3	turb	10.14					
Electrical Stability (volts)				525 v		535 v	6.818x5.25	13,466'	514.8	turb	10.23					
Average Specific Gravity of Solids				2.64		2.78	6.818x4.5	16,074'	371.3	turb	10.54					
Percent Low Gravity Solids				6.9%		5.4%	6.818x5.25	16,220'	514.8	turb	10.65					
ppb Low Gravity Solids				56 ppb		45 ppb										
Percent Barite				1.4%		1.7%										
ppb Barite				19 ppb		25 ppb	BIT DATA		Manuf./Type Hal./GTD64c		199 lbs	108				
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure			
Sample Taken By				A. Roman	0	M Washburn	6 3/4	10,954 ft	66.0	6,190 ft	93.8	2,240 psi	4,429 psi			
Remarks/Recommendations:  OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)  OBM On Surface ----2,689 bbls (Storage + Active Pits)  OBM Daily Gan/Loss--- (+11); Total Gain/Loss---(_+58_)  14.5# Kill OBM (408bbl)----9# OBM (1255bbls)---- \$65.00/bbl  Discounted OBM (260bbls--11#) -----\$15.00/bbl							Rig Activity:  Drilling-Sliding ahead on lateral section; Continue pumping 10bbls (LCM Sweep) every connection. @14350'--14550' cross fracture on formation, lost 50bbls (+-) down hole. Well steady and not taking any mud after 14600'. Mud Weight maintain at 8.9ppg in the active system with additions of Diesel and water, also for dilution and to offset evaporation. Run Centrifuge for processing mud recover from cuttings, use same for 6hrs from active system at alternated intervals for LGS control. Chemical additions of Bentone 38 and 990 for Rheology maintenance; Lime to maintain alkalinity; NewPhalt and Opti G to maintain Fluid loss. At this time we continue drilling/Sliding passing 16275'. No seepage or losses at this time.									
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:				Daily Total		Cumulative Cost		
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -						\$7,933.83		\$67,080.68		
W	P	Y	E	C	g	G	H	O				\$7,933.83		\$67,080.68		
1	1	1	1	1	1	1	1	1								
									INCLUDING 3RD PARTY CHARGES			\$13,842.78		\$100,831.20		



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

3,284

6/28/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 14 pm

TEL: (337) 394-1078

95.0° 10,296' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg.		Drilled Depth <b>16,642 ft</b>								
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP <b>25 ft/hr</b>		Activity <b>DRLG LATERAL</b>								
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>397 gpm</b>		Circulating Pressure <b>4,079 psi</b>								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 720 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size							
								In Hole 666 bbl		Stroke 12		Stroke 12		Stroke							
MUD PROPERTIES							Active 1386 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk								
							Storage 1923 bbl		stk/min 62		stk/min 62		stk/min								
Time Sample Taken				2:00				13:00		Tot. on Location 3309 bbl		gal/min 199		gal/min 199							
Sample Location				suction				shaker													
Flowline Temperature °F				160 °F		155 °F		Mud Wt. = 8.9 PV=9 YP=10		CIRCULATION DATA		n = 0.559 K = 295.9									
Depth (ft)				16,087'		16,571'		Bit Depth = 16,642 '		Washout = 1%		Pump Efficiency = 95%									
Mud Weight (ppg)				8.9		8.9		Drill String Disp.		Volume to Bit 234.9 bbl		Strokes To Bit 3,078		Time To Bit 25 min							
Funnel Vis (sec/qt) @ 136 °F				41		42				Bottoms Up Vol. 430.6 bbl		BottomsUp Stks 5,643		BottomsUp Time 46 min							
600 rpm				28		35				93.8 bbl		TotalCirc.Vol. 1385.5 bbl		TotalCirc.Stks 18,157		Total Circ. Time 146 min					
300 rpm				19		23		DRILLING ASSEMBLY DATA						SOLIDS CONTROL							
200 rpm				15		18		Tubulars		OD (in.)	ID (in.)	Length	Top	Unit Screens Hours							
100 rpm				11		13		Drill Pipe		4.500	3.826	13,855'		Shaker 1 170							
6 rpm				7		7		Agitator		5.250	2.500	32'	13,855'	Shaker 2 170							
3 rpm				6		6		Drill Pipe		4.500	3.826	2,609'	13,888'	Shaker 3 170							
Plastic Viscosity (cp) @ 150 °F				9		12		Dir. BHA		5.250	2.000	146'	16,496'	Centrifuge 1							
Yield Point (lb/100 ft²) T0 = 5				10		11		CASING & HOLE DATA								VOLUME ACCOUNTING (bbls)  Prev. Total on Location 3367.8  Transferred In(+)/Out(-)  Oil Added (+)  Barite Added (+)  Other Product Usage (+)  Water Added (+)  Left on Cuttings (-)  Non-Recoverable Vol. (-)  Cent/Evap/Trip  Est. Total on Location 3367.8  Est. Losses/Gains (-)/(+) -59.2  BIT HYDRAULICS DATA  Bit H.S.I. Bit ΔP Nozzles (32nds)  0.61 94 psi 16 16 16  Bit Impact Force Nozzle Velocity (ft/sec)  199 lbs 108  16 16 16					
Gel Strength (lb/100 ft²) 10 sec / 10 min				6/10		6/9		Casing		OD (in.)	ID (in.)	Depth	Top								
Gel Strength (lb/100 ft2) 30 min				14		12		Riser													
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0		Surface		10 3/4		3,000'									
HTHP Cake Thickness (32nds)				2.0		2.0		Int. Csg.		7 5/8	6.875	10,245'									
Retort Solids Content				10%		9%		Washout 1													
Corrected Solids (vol%)				8.2%		7.2%		Washout 2													
Retort Oil Content				71%		70%		Open Hole Size		6.818	16,642'										
Retort Water Content				19%		21%		ANNULAR GEOMETRY & RHEOLOGY													
O/W Ratio				79:21		77:23		annular section		depth	velocity ft/min	flow reg	ECD lb/gal								
Whole Mud Chlorides (mg/L)				44,000		46,500															
Water Phase Salinity (ppm)				266,397		257,730															
Whole Mud Alkalinity, Pom				2.0		2.4		6.875x4.5		10,245'	360.6	turb	9.77								
Excess Lime (lb/bbl)				2.6 ppb		3.1 ppb		6.818x4.5		13,855'	371.3	turb	10.07								
Electrical Stability (volts)				525 v		595 v		6.818x5.25		13,888'	514.8	turb	10.09								
Average Specific Gravity of Solids				2.64		2.75		6.818x4.5		16,496'	371.3	turb	10.34								
Percent Low Gravity Solids				6.9%		5.6%		6.818x5.25		16,642'	514.8	turb	10.40								
ppb Low Gravity Solids				56 ppb		46 ppb															
Percent Barite				1.4%		1.6%															
ppb Barite				19 ppb		23 ppb		BIT DATA		Manuf./Type		Hal./GTD64c		199 lbs 108							
Estimated Total LCM in System								Size		Depth In	Hours	Footage	ROP ft/hr	Motor/MWD							
Sample Taken By				A. Roman		M Washburn		6 3/4		10,954 ft	66.0	6,190 ft	93.8	2,240 psi							
Afternoon Remarks/Recommendations:  LCM sweep contains:  15 ppb First Response  10 ppb Newcarb Med  10 ppb Cyberseal  5 ppb VARISEAL							Afternoon Rig Activity:  Drilling 6-3/4" lateral hole section, samples are 100% AC. Maintain 8.9 mud wt. and continue pumping 10 bbls LCM sweep every stand. Adding diesel for oil wetting of solids, volume maintenance and dilution, water for evaporation replacement, Lime and OPTIMUL HP added for ES and alkalinity requirements. Adding OPTIG - gilsonite and NEWPHALT - blown asphalt for HTHP fluid loss control and wellbore stability. No downhole mud losses detected, operate centrifuge as needed for density control.														



06/29/20

110 Old Market St.  
St Martinville, LA 70582

Report #15

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

95.1° 10,252' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth			
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/29/20		1,207 ft		17,427 ft			
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity			
GRAND CANYON A - 1H				248			TEXAS		04/28/20		55 ft/hr		DRLG LATERAL			
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure			
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		397 gpm		4,154 psi			
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER			
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	900 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size			
8.8-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	697 bbl	Stroke	12	Stroke	12	Stroke			
				6/29/20		6/28/20	Active	1597 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000		
Time Sample Taken				2:00		13:00	Storage	1811 bbl	stk/min	62	stk/min	62	stk/min			
Sample Location				suction		shaker	Tot. on Location	3408 bbl	gal/min	199	gal/min	199	gal/min	0		
Flowline Temperature °F				160 °F		155 °F	PHHP = 963 CIRCULATION DATA n = 0.632 K = 197.766									
Depth (ft)				17,292'		16,571'	Bit Depth = 17,427 '			Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				8.9		8.9	Drill String Disp.	Volume to Bit	246.0 bbl	Strokes To Bit		3,224	Time To Bit		26 min	
Funnel Vis (sec/qt)				@ 136 °F	43	42		Bottoms Up Vol.	450.6 bbl	BottomsUp Stks		5,905	BottomsUp Time		48 min	
600 rpm				31		35		98.0 bbl	TotalCirc.Vol.	1596.7 bbl	TotalCirc.Stks		20,924	Total Circ. Time		169 min
300 rpm				20		23	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				15		18	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				11		13	Drill Pipe	4.500	3.826	14,640'	0'	Shaker 1	170	24.0		
6 rpm				6		7	Agitator	5.250	2.500	32'	14,640'	Shaker 2	170	24.0		
3 rpm				5		6	Drill Pipe	4.500	3.826	2,609'	14,673'	Shaker 3	170	24.0		
Plastic Viscosity (cp)				@ 150 °F	11	12	Dir. BHA	5.250	2.000	146'	17,281'	Centrifuge 1	6.0			
Yield Point (lb/100 ft²)				T0 = 4	9	11	CASING & HOLE DATA					VOLUME ACCOUNTING (bbls)				
Gel Strength (lb/100 ft²)				10 sec/10 min	6/11	6/9	Casing	OD (in.)	ID (in.)	Depth	Top					
Gel Strength (lb/100 ft²)				30 min	14	12	Riser									
HTHP Filtrate (cm/30 min)				@ 250 °F	6.0	6.0	Surface	10 3/4		3,000'	0'					
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,245'	0'					
Retort Solids Content					9%	9%	Washout 1									
Corrected Solids (vol%)					7.2%	7.2%	Washout 2									
Retort Oil Content					71%	70%	Open Hole Size									6.818
Retort Water Content					20%	21%	ANNULAR GEOMETRY & RHEOLOGY					BIT HYDRAULICS DATA				
O/W Ratio					78:22	77:23	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal					
Whole Mud Chlorides (mg/L)					44,000	46,500										
Water Phase Salinity (ppm)					256,494	257,730										
Whole Mud Alkalinity, Pom					2.0	2.4	6.875x4.5	10,245'	360.6	turb	9.84					
Excess Lime (lb/bbl)					2.6 ppb	3.1 ppb	6.818x4.5	14,640'	371.3	turb	10.24					
Electrical Stability (volts)					540 v	595 v	6.818x5.25	14,673'	514.8	turb	10.30					
Average Specific Gravity of Solids					2.86	2.75	6.818x4.5	17,281'	371.3	turb	10.59					
Percent Low Gravity Solids					5.1%	5.6%	6.818x5.25	17,427'	514.8	turb	10.67	BIT DATA				
ppb Low Gravity Solids					42 ppb	46 ppb										
Percent Barite					2.1%	1.6%										
ppb Barite					30 ppb	23 ppb	BIT DATA		Manuf./Type		Hal./GTD64c		199 lbs	108		
Estimated Total LCM in System				ppb			Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure		
Sample Taken By				A. Roman	0	M Washburn	6 3/4	10,954 ft	88.0	7,397 ft	84.1	2,240 psi		4,685 psi		
Remarks/Recommendations:							Rig Activity:									
OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)							Drilling-Sliding ahead on lateral section; Continue pumping 10bbls (LCM Sweep) every connection. Well steady and not taking any mud after Mud Weight maintain at 8.9ppg in the active system with additions of Diesel and water, Run Centrifuge for processing mud recover from cuttings, use same for 6hrs from active system at alternated intervals for LGS control. Chemical additions of Bentone 38 and 990 for Rheology maintenance; Lime to maintain alkalinity; NewPhalt and Opti G to maintain Fluid loss. At this time we continue drilling/Sliding passing 16275'. No seepeage or losses at this time.									
OBM On Surface ----2,701 bbls (Storage + Active Pits)																
OBM Daily Gan/Loss--- (+40); Total Gain/Loss---(_+98_)																
14.5# Kill OBM (408bbl)----9# OBM (1143bbls)---- \$65.00/bbl																
Discounted OBM (260bbls--11#) -----\$15.00/bbl																
Eng. 1: Mike Washburn				Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost		
Phone: 361-945-5777				Phone: 956-821-9994		Phone: 432-686-7361		Phone: -				\$8,074.62		\$75,155.30		
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.							
1	1	1	1	1	1	1	1	1								
									INCLUDING 3RD PARTY CHARGES			\$14,898.76		\$115,729.96		



### THIRD PARTY COST SHEET

[illegible]

## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

		WEEK 1							WEEK 2							WEEK 3							
		Date	6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20	6/28/20	6/29/20	6/30/20	7/1/20	7/2/20	7/3/20	7/4/20	7/5/20	7/6/20	7/7/20	7/8/20	7/9/20	7/10/20	7/11/20	7/12/20
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Grand Totals	Bit Size	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4														
	Starting Depth	10,335	10,335	10,335	10,862	10,954	11,900	14,160	16,220	17,427													
	Ending Depth	10,335	10,335	10,862	10,954	11,900	14,160	16,220	17,427														
7,092	Footage Drilled	-	-	527	92	946	2,260	2,060	1,207	-	-	-	-	-	-	-	-	-	-	-	-	-	
314	New Hole Vol.	-	-	23	4	42	100	91	53	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	470	3,310	3,284	3,310	3,303	3,307	3,357	3,368	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	
58	Chemical Additions	-	-	7	0	5	17	13	17														
488	Base Fluid Added	-	-	92	55	32	89	108	113														
7	Barite Increase	-	-	7	-	-	-	-	-														
2,840	Weighted Mud Added	2,840	-	-	-	-	-	-	-														
-	Slurry Added	-	-	-	-	-	-	-	-														
291	Water Added	-	-	60	-	11	60	80	80														
-	Added for Washout	-	-	-	-	-	-	-	-														
3,684	Total Additions	2,840	-	166	55	47	166	201	210	-	-	-	-	-	-	-	-	-	-	-	-	-	
105	Surface Losses	-		30	15	-	-	30	30														
52	Formation Loss	-	-	-	-	-	-	52	-														
326	Mud Loss to Cuttings	-	-	30	4	43	102	93	55														
145	Unrecoverable Volume	-	-	60	15	-	-	-	70														
92	Centrifuge Losses	-	-	20	28	-	14	15	15														
720	Total Losses	-	-	140	62	43	116	190	170	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	Mud Transferred Out	-	26	-	-	-																	
3,408	Ending System Volume	3,310	3,284	3,310	3,303	3,307	3,357	3,368	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	
-	Mud Recovered	-																					
3,284	Comments:								Comments:							Comments:							
	6/22/20	Transfer sack material and OBM from Levi Goodrich U2-3H. Skid Rig / Nipple Up, Test BOP's							6/29/20	Drilling ahead on lateral. Constant addition of diesel and water. Volume build 40bbls. No Losses or Seepage at this time.						7/6/20							
	6/23/20	Test BOP's, Pick up and Make up new BHA, TIH 26bbls lost to gas separator.							6/30/20							7/7/20							
	6/24/20	Drilled on curve section to 10862'. Mud Motor not giving build rates. POOH to change mud motor.							7/1/20							7/8/20							
	6/25/20	TIH and drill to 10954'. Circulate BU and monitor well. Pump slug and POOH to change out Mud Motor.							7/2/20							7/9/20							
	6/26/20	TIH resume drilling, MW 8.9ppg. (+4bbls OBM)							7/3/20							7/10/20							
	6/27/20	Drilling ahead, gain 50bbls. Total gain 47bbls on the well . No losses noted at this time.							7/4/20							7/11/20							
	6/28/20	Drilling ahead, gain 11bbls. Total gain 58bbls on the well .Lost 52bbls to formation at 14500', fracture. No seepeage or losses pass that point.							7/5/20							7/12/20							



06/30/20

110 Old Market St.  
St Martinville, LA 70582

Report #16

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

6.2° 8,080' TVD

Operator				Contractor			County / Parish / Block		Engineer Start Date		24 hr fig.		Drilled Depth		
MAGNOLIA OIL & GAS				PATTERSON			WASHINGTON		04/29/20		459 ft		17,886 ft		
Well Name and No.				Rig Name and No.			State		Spud Date		Current ROP		Activity		
GRAND CANYON A - 1H				248			TEXAS		04/28/20		92 ft/hr		POOH		
Report for				Report for			Field / OCS-G #		Fluid Type		Circulating Rate		Circulating Pressure		
JAMES DYER / BOBBY GWIN				Tool Pusher			GIDDINGS		OBM		0 gpm		psi		
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER		
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	968 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size		
8.8-10.2	8-20	5-12	>300	±260K	<10 <25	<10	In Hole	768 bbl	Stroke	12	Stroke	12	Stroke		
				6/30/20		6/29/20	Active	1297 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0000	
Time Sample Taken				2:00		11:30	Storage	1688 bbl	stk/min	0	stk/min	0	stk/min		
Sample Location				suction		suction	Tot. on Location	3424 bbl	gal/min	0	gal/min	0	gal/min 0		
Flowline Temperature °F				150 °F			PHHP = 0 CIRCULATION DATA n = 0.562 K = 322.096								
Depth (ft)				17,886'		16,571'	Bit Depth = 8,200 '			Washout = 1%		Pump Efficiency = 95%			
Mud Weight (ppg)				8.9		8.9	Drill String Disp.	Volume to Bit	114.8 bbl	Strokes To Bit		Time To Bit			
Funnel Vis (sec/qt)				@ 120 °F	44	43		Bottoms Up Vol.	213.9 bbl	BottomsUp Stks		BottomsUp Time			
600 rpm				31		30		47.7 bbl	TotalCirc.Vol.	1296.8 bbl	TotalCirc.Stks		Total Circ. Time		
300 rpm				21		20	DRILLING ASSEMBLY DATA					SOLIDS CONTROL			
200 rpm				15		16	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours	
100 rpm				11		10	Drill Pipe	4.500	3.826	5,413'	0'	Shaker 1	170	24.0	
6 rpm				6		7	Agitator	5.250	2.500	32'	5,413'	Shaker 2	170	24.0	
3 rpm				5		6	Drill Pipe	4.500	3.826	2,609'	5,446'	Shaker 3	170	24.0	
Plastic Viscosity (cp)				@ 150 °F	10	10	Dir. BHA	5.250	2.000	146'	8,054'	Centrifuge 1		4.0	
Yield Point (lb/100 ft²)				T0 = 4	11	10	CASING & HOLE DATA					VOLUME ACCOUNTING (bbIs)  Prev. Total on Location 3407.7  Transferred In(+)/Out(-)  Oil Added (+) 53.3  Barite Added (+) 0.0  Other Product Usage (+) 3.1  Water Added (+) 30.0  Left on Cuttings (-) -20.7  Non-Recoverable Vol. (-) -30.0  Cent/Evap/Trip -19.6  Est. Total on Location 3423.7  Est. Losses/Gains (-)/(+) 0.0			
Gel Strength (lb/100 ft²)				10 sec/10 min	6/10	6/10	Casing	OD (in.)	ID (in.)	Depth	Top				
Gel Strength (lb/100 ft²)				30 min	13	12	Riser								
HTHP Filtrate (cm/30 min)				@ 250 °F	6.0	6.0	Surface	10 3/4		3,000'	0'				
HTHP Cake Thickness (32nds)					2.0	2.0	Int. Csg.	7 5/8	6.875	10,245'	0'				
Retort Solids Content					10%	9%	Washout 1								
Corrected Solids (vol%)					8.3%	7.3%	Washout 2								
Retort Oil Content					71%	71%	Open Hole Size		6.818	17,886'					
Retort Water Content					19%	20%	ANNULAR GEOMETRY & RHEOLOGY					BIT HYDRAULICS DATA  Bit H.S.I. Bit ΔP Nozzles (32nds)  0.00 psi 16 16 16  Bit Impact Force Nozzle Velocity (ft/sec)  0 lbs 0			
O/W Ratio					79:21	78:22	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal				
Whole Mud Chlorides (mg/L)					43,000	43,000	6.875x4.5 5,413' 0.0 lam 8.94 6.875x5.25 5,446' 0.0 lam 8.94 6.875x4.5 8,054' 0.0 lam 8.94 6.875x5.25 8,200' 0.0 lam 8.94								
Water Phase Salinity (ppm)					261,928	252,134									
Whole Mud Alkalinity, Pom					2.0	2.2									
Excess Lime (lb/bbl)					2.6 ppb	2.9 ppb									
Electrical Stability (volts)					555 v	567 v	BIT DATA					Manuf./Type			
Average Specific Gravity of Solids					2.64	2.79						Hal./GTD64c			
Percent Low Gravity Solids					6.9%	5.5%									
ppb Low Gravity Solids					57 ppb	45 ppb									
Percent Barite					1.4%	1.8%									
ppb Barite					20 ppb	26 ppb	BIT DATA		Manuf./Type		Hal./GTD64c				
Estimated Total LCM in System				ppb			Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure		
Sample Taken By				A. Roman	0	M Washburn	6 3/4	10,954 ft	98.0	7,856 ft	80.2	2,240 psi			
Remarks/Recommendations:							Rig Activity:								
OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)							Circulated Clean up Cycle with 3 (30bbls) sweeps. Pump and ream out of the hole up to 15430'. At this point Circulated BU, followed by 200bbls of LCM pill (First Response;New Carb;Cyberseal; Bentone38) and spot same out of the bit. With Casing pressure between 350-450psi; strip out of the hole up to 10420' pumping calculated fill through kill line on back side. Circulate BU follwed by 85bbls of 14ppg Mud Cap, spot same out of the bit. Casing pressure 0, POOH conventional manner up to 8400' and perform Flow Ck. Pull rotating head and resume POOH to lay down Directional BHA and start Casing Run. At time of the report, bit passing 8200'.								
OBM On Surface ----2,656 bbls (Storage + Active Pits)															
OBM Daily Gan/Loss--- (+17); Total Gain/Loss---(+115)															
14.5# Kill OBM (265bbl)----9# OBM (1143bbls)---- \$65.00/bbl															
Discounted OBM (280bbls--11#) -----\$15.00/bbl															
Eng. 1: Mike Washburn		Eng. 2: Adolfo Roman		WH 1: MIDLAND		WH 2: WH #2		Rig Phone:		Daily Total		Cumulative Cost			
Phone: 361-945-5777		Phone: 956-821-9994		Phone: 432-686-7361		Phone: -				\$2,492.88		\$77,648.18			
W	P	Y	E	C	g	G	H	O	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.						
1	1	1	1	1	1	1	1	1							
								INCLUDING 3RD PARTY CHARGES				\$5,798.69		\$121,528.65	



### THIRD PARTY COST SHEET

[illegible]



## FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

3,284

6/30/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 16 pm

TEL: (337) 394-1078

0.5°181' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg.		Drilled Depth <b>17,886 ft</b>					
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP		Activity <b>POOH</b>					
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER					
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 850 bbl		Liner Size 5.25		Liner Size 5.25		Liner Size				
								In Hole 814 bbl		Stroke 12		Stroke 12		Stroke				
								Active 857 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk				
								Storage 1688 bbl		stk/min		stk/min		stk/min				
								Tot. on Location 3352 bbl		gal/min		gal/min		gal/min				
Flowline Temperature °F				150 °F				Mud Wt. = 8.9 PV=10 YP=11		CIRCULATION DATA		n = 0.562 K = 322.1						
Depth (ft)				17,886'				17,886'		Bit Depth = 181 '		Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				8.9				8.9		Drill String Disp.	Volume to Bit 2.6 bbl	Strokes To Bit		Time To Bit				
Funnel Vis (sec/qt) @ 110 °F				44		42		Bottoms Up Vol. 4.8 bbl	BottomsUp Stks		BottomsUp Time							
600 rpm				31		29		1.0 bbl	TotalCirc.Vol. 857.3 bbl		TotalCirc.Stks		Total Circ. Time					
300 rpm				21				19		DRILLING ASSEMBLY DATA						SOLIDS CONTROL		
200 rpm				15				15		Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours	
100 rpm				11				10		Drill Pipe	4.500	3.826	181'		Shaker 1	170		
6 rpm				6				6		Agitator			181'		Shaker 2	170		
3 rpm				5				5		Drill Pipe			181'		Shaker 3	170		
Plastic Viscosity (cp) @ 150 °F				10				10		Dir. BHA			181'		Centrifuge 1			
Yield Point (lb/100 ft²) T0 = 4				11				9		CASING & HOLE DATA								
Gel Strength (lb/100 ft²) 10 sec / 10 min				6/10				6/9		Casing	OD (in.)	ID (in.)	Depth	Top	VOLUME ACCOUNTING (bbbls)  Prev. Total on Location 3423.7  Transferred In(+)/Out(-)  Oil Added (+)  Barite Added (+)  Other Product Usage (+)  Water Added (+)  Left on Cuttings (-)  Non-Recoverable Vol. (-)  Cent/Evap/Trip  Est. Total on Location 3423.7  Est. Losses/Gains (-)/(+) -71.3			
Gel Strength (lb/100 ft2) 30 min				13				11		Riser								
HTHP Filtrate (cm/30 min) @ 250 °F				6.0				6.0		Surface	10 3/4		3,000'					
HTHP Cake Thickness (32nds)				2.0				2.0		Int. Csg.	7 5/8	6.875	10,245'					
Retort Solids Content				10%				10%		Washout 1								
Corrected Solids (vol%)				8.3%				8.3%		Washout 2								
Retort Oil Content				71%				71%		Open Hole Size	6.818	17,886'						
Retort Water Content				19%				19%		ANNULAR GEOMETRY & RHEOLOGY								
O/W Ratio				79:21				79:21		annular section	depth	velocity ft/min	flow reg	ECD lb/gal				
Whole Mud Chlorides (mg/L)				43,000				43,000										
Water Phase Salinity (ppm)				261,928				261,928		6.875x4.5	181'		lam	8.94				
Whole Mud Alkalinity, Pom				2.0				1.9										
Excess Lime (lb/bbl)				2.6 ppb				2.5 ppb										
Electrical Stability (volts)				555 v				567 v										
Average Specific Gravity of Solids				2.64				2.58										
Percent Low Gravity Solids				6.9%				7.2%										
ppb Low Gravity Solids				57 ppb				59 ppb										
Percent Barite				1.4%				1.1%										
ppb Barite				20 ppb				16 ppb		BIT DATA		Manuf./Type Hal./GTD64c						
Estimated Total LCM in System										Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure	
Sample Taken By				A. Roman				M Washburn		6 3/4	10,954 ft	98.0	7,856 ft	80.2	2,240 psi		2,244 psi	
Afternoon Remarks/Recommendations:  LCM sweep contains:  15 ppb First Response  10 ppb Newcarb Med  10 ppb Cyberseal  5 ppb VARISEAL								Afternoon Rig Activity:          Continue pull out of hole, laying down drillpipe and BHA, trip depth at time of report is 181', hole took correct amount of pipe fill during trip. Frac tanks arrived at new location, spot same, rigging up manifold and pumps start transferring auxiliary OBM to new location in preparation for rig move.										

07/01/20

110 Old Market St.  
St Martinville, LA 70582

Report #17

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

11.6° 9,872' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>			Engineer Start Date <b>04/29/20</b>			24 hr fig. <b>0 ft</b>		Drilled Depth <b>17,886 ft</b>	
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>			Spud Date <b>04/28/20</b>			Current ROP <b>0 ft/hr</b>		Activity <b>Run Casing</b>	
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>			Fluid Type <b>OBM</b>			Circulating Rate <b>320 gpm</b>		Circulating Pressure <b>790 psi</b>	
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)			PUMP #1		PUMP #2		RISER BOOSTER		
Weight <b>8.8-10.2</b>	PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 980 bbl	In Hole 748 bbl	Liner Size 5.25	Stroke 12	Liner Size 5.25	Stroke 12	Liner Size			
				7/1/20		6/30/20	Active 1371 bbl		bbl/stk 0.0763		bbl/stk 0.0763		bbl/stk 0.0000			
Time Sample Taken				2:00		12:30	Storage <u>1688 bbl</u>		stk/min 100		stk/min 0		stk/min			
Sample Location				suction		suction	Tot. on Location 3416 bbl		gal/min 320		gal/min 0		gal/min 0			
Flowline Temperature °F							PHHP = 148 CIRCULATION DATA n = 0.608 K = 242.063									
Depth (ft)				8,467'		17,886'	Bit Depth = 10,000 '			Washout = 1%		Pump Efficiency = 95%				
Mud Weight (ppg)				9.1		8.9	Drill String Disp.  67.9 bbl	Volume to Bit 183.1 bbl	Strokes To Bit 2,399		Time To Bit 24 min					
Funnel Vis (sec/qt) @ 85 °F				46		42		Bottoms Up Vol. 208.2 bbl	BottomsUp Stks 2,728		BottomsUp Time 27 min					
600 rpm				32		29		TotalCirc.Vol. 1371.2 bbl	TotalCirc.Stks 17,970		Total Circ. Time 180 min					
300 rpm				21		19	DRILLING ASSEMBLY DATA					SOLIDS CONTROL				
200 rpm				16		15	Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours		
100 rpm				12		10	Casing	5.500	4.670	1,595'	0'	Shaker 1	170	18.0		
6 rpm				7		6	Casing	5.000	4.276	8,405'	1,595'	Shaker 2	170	18.0		
3 rpm				5		5					10,000'	Shaker 3	170	18.0		
Plastic Viscosity (cp) @ 150 °F				11		10					10,000'	Centrifuge 1		4.0		
Yield Point (lb/100 ft²) T0 = 3				10		9	CASING & HOLE DATA					VOLUME ACCOUNTING (bbls)				
Gel Strength (lb/100 ft²) 10 sec/10 min				7/11		6/9	Casing	OD (in.)	ID (in.)	Depth	Top	Prev. Total on Location 3423.7  Transferred In(+)/Out(-)  Oil Added (+) 18.1 Barite Added (+) 0.0 Other Product Usage (+) 0.0 Water Added (+) Left on Cuttings (-) 0.0 Non-Recoverable Vol. (-)  Cent/Evap/Trip -26.3 Est. Total on Location 3415.5 Est. Losses/Gains (-)/(+) 0.0				
Gel Strength (lb/100 ft²) 30 min				14		11	Riser									
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0	Surface	10 3/4		3,000'	0'					
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	10,245'	0'					
Retort Solids Content				10%		10%	Washout 1									
Corrected Solids (vol%)				8.3%		8.3%	Washout 2									
Retort Oil Content				72%		71%	Open Hole Size		6.818	17,886'						
Retort Water Content				18%		19%	ANNULAR GEOMETRY & RHEOLOGY									
O/W Ratio				80:20		79:21	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal					
Whole Mud Chlorides (mg/L)				42,000		43,000										
Water Phase Salinity (ppm)				267,875		261,928										
Whole Mud Alkalinity, Pom				1.8		1.9	6.875x5.5	1,595'	461.7	turb	11.59					
Excess Lime (lb/bbl)				2.3 ppb		2.5 ppb	6.875x5	10,000'	352.8	turb	10.40					
Electrical Stability (volts)				580 v		567 v										
Average Specific Gravity of Solids				2.90		2.58										
Percent Low Gravity Solids				5.7%		7.2%										
ppb Low Gravity Solids				47 ppb		59 ppb										
Percent Barite				2.6%		1.1%										
ppb Barite				38 ppb		16 ppb	BIT DATA		Manuf./Type							
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure			
Sample Taken By				A. Roman	0	M Washburn	6 3/4									
Remarks/Recommendations:  OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)  OBM On Surface ----2,632 bbls (Storage + Active Pits)  OBM Daily Gan/Loss--- (-8); Total Gain/Loss---(+107)  14.5# Kill OBM (265bbl)----9# OBM (1143bbls)---- \$65.00/bbl  Discounted OBM (280bbls--11#) -----\$15.00/bbl						Rig Activity:  Finish lay down BHA. Pick up and rig up Casing running tools. Start running casing @ 16:00hrs. Mornitor displacement on trip tanks and transfer same to active system. Run Casing to 9000' and circulate BU at this point. MW in the pits 9.1ppg (cold). Resume casing run down to 10,000'. and circulate BU. At this time we are 100stks into BU at 10000'. Will circulate again at 11,000' before continue down into lateral section.										
Eng. 1: Mike Washburn Phone: 361-945-5777		Eng. 2: Adolfo Roman Phone: 956-821-9994		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total			Cumulative Cost			
W 1	P 1	Y 1	E 1	C 1	G 1	H 1	O 1	Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.						\$1,910.00	\$79,558.18	
								INCLUDING 3RD PARTY CHARGES				\$2,891.69		\$124,420.34		



### THIRD PARTY COST SHEET

[illegible]

# FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

3,284
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7/1/2020

110 Old Market St.  
St Martinville, LA 70582

OUTSOURCE FLUID SOLUTIONS LLC.

Report 17 pm

TEL: (337) 394-1078

93.8°                      10,335' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr ftg.		Drilled Depth <b>17,886 ft</b>								
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP		Activity <b>RUN PROD CSG</b>								
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OSC-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate		Circulating Pressure								
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER								
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits      980 bbl		Liner Size      5.25		Liner Size      5.25		Liner Size							
								In Hole      699 bbl		Stroke      12		Stroke      12		Stroke							
								Active      1589 bbl		bbl/stk      0.0763		bbl/stk      0.0763		bbl/stk							
								Storage <u>1688 bbl</u>		stk/min		stk/min		stk/min							
								Tot. on Location      3367 bbl		gal/min		gal/min		gal/min							
Flowline Temperature °F								Mud Wt. = 9.1      PV=11      YP=10		CIRCULATION DATA		n = 0.608    K = 242.1									
Depth (ft)				8,467'					Bit Depth = 15,883 '			Washout = 1%		Pump Efficiency = 95%							
Mud Weight (ppg)				9.1					Drill String	Volume to Bit      307.7 bbl		Strokes To Bit		Time To Bit							
Funnel Vis (sec/qt)				@ 99 °F      46					Disp.	Bottoms Up Vol.      301.1 bbl		BottomsUp Stks		BottomsUp Time							
600 rpm				32					116.2 bbl	TotalCirc.Vol.      1588.8 bbl		TotalCirc.Stks		Total Circ. Time							
300 rpm				21					DRILLING ASSEMBLY DATA				SOLIDS CONTROL								
200 rpm				16					Tubulars	OD (in.)	ID (in.)	Length	Top	Unit	Screens	Hours					
100 rpm				12					Casing	5.500	4.670	7,478'		Shaker 1	170						
6 rpm				7					Casing	5.000	4.276	8,405'	7,478'	Shaker 2	170						
3 rpm				5								15,883'	Shaker 3	170							
Plastic Viscosity (cp)				@ 150 °F      11								15,883'	Centrifuge 1								
Yield Point (lb/100 ft²)				T0 =    3      10					CASING & HOLE DATA												
Gel Strength (lb/100 ft²)				10 sec / 10 min      7/11					Casing	OD (in.)	ID (in.)	Depth	Top								
Gel Strength (lb/100 ft2)				30 min      14					Riser					VOLUME ACCOUNTING (bbls)							
HTHP Filtrate (cm/30 min)				@ 250 °F      6.0					Surface	10    3/4		3,000'		Prev. Total on Location	3415.5						
HTHP Cake Thickness (32nds)				2.0					Int. Csg.	7    5/8	6.875	10,245'		Transferred In(+)/Out(-)							
Retort Solids Content				10%					Washout 1				Oil Added (+)								
Corrected Solids (vol%)				8.3%					Washout 2				Barite Added (+)								
Retort Oil Content				72%					Open Hole Size	6.818	17,886'		Other Product Usage (+)								
Retort Water Content				18%					ANNULAR GEOMETRY & RHEOLOGY												
O/W Ratio				80:20					annular	section	depth	velocity	ft/min	flow	reg	ECD					
Whole Mud Chlorides (mg/L)				42,000																	
Water Phase Salinity (ppm)				267,875																	
Whole Mud Alkalinity, Pom				1.8					6.875x5.5	7,478'		lam	9.10	Est. Total on Location	3415.5						
Excess Lime (lb/bbl)				2.3 ppb					6.875x5	10,245'		lam	9.10	Est. Losses/Gains (-)/(+)	-48.2						
Electrical Stability (volts)				580 v					6.818x5	15,883'		lam	9.10	BIT HYDRAULICS DATA							
Average Specific Gravity of Solids				2.90										Bit H.S.I.	Bit ΔP	Nozzles (32nds)					
Percent Low Gravity Solids				5.7%										#DIV/0!	#DIV/0!						
ppb Low Gravity Solids				47 ppb										Bit Impact	Nozzle						
Percent Barite				2.6%										Force	Velocity						
ppb Barite				38 ppb										#DIV/0!							
Estimated Total LCM in System									Size		Depth In		Hours		Footage		ROP ft/hr				
Sample Taken By				A. Roman					6 3/4								Motor/MWD				
																	Calc. Circ. Pressure				
																	#DIV/0!				
Afternoon Remarks/Recommendations:								Afternoon Rig Activity:													
								Continue to pick up and run in hole with 5-1/2" 23# P110 casing circulate thru choke and gas buster at 9000', 10000' and 11200' with full reurns, currently circulating at 15489. Maintain 8.9 ppg mud wt with diesel dilution and centrifuge. Transferring reserve OBM to new location. Scheduled to transfer Chemicals tlater today.													

07/02/20

110 Old Market St.  
St Martinville, LA 70582

Report #18

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0°

0' TVD

Operator <b>MAGNOLIA OIL &amp; GAS</b>				Contractor <b>PATTERSON</b>			County / Parish / Block <b>WASHINGTON</b>		Engineer Start Date <b>04/29/20</b>		24 hr fig. <b>0 ft</b>		Drilled Depth <b>17,886 ft</b>					
Well Name and No. <b>GRAND CANYON A - 1H</b>				Rig Name and No. <b>248</b>			State <b>TEXAS</b>		Spud Date <b>04/28/20</b>		Current ROP <b>0 ft/hr</b>		Activity <b>WOC/Lay down DP</b>					
Report for <b>JAMES DYER / BOBBY GWIN</b>				Report for <b>Tool Pusher</b>			Field / OCS-G # <b>GIDDINGS</b>		Fluid Type <b>OBM</b>		Circulating Rate <b>0 gpm</b>		Circulating Pressure <b>psi</b>					
MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER					
Weight <b>8.8-10.2</b>		PV <b>8-20</b>	YP <b>5-12</b>	E.S. <b>&gt;300</b>	CaCl2 <b>±260K</b>	GELS <b>&lt;10 &lt;25</b>	HTHP <b>&lt;10</b>	In Pits 0 bbl In Hole 0 bbl Active 0 bbl Storage <u>3084 bbl</u> Tot. on Location 3084 bbl		Liner Size 5.25 Stroke 12 bbl/stk 0.0763 stk/min 0 gal/min 0		Liner Size 5.25 Stroke 12 bbl/stk 0.0763 stk/min 0 gal/min 0		Liner Size Stroke bbl/stk 0.0000 stk/min gal/min 0				
				7/1/20		7/1/20												
Time Sample Taken				2:00		12:30												
Sample Location				No Mud		suction												
Flowline Temperature °F							PHHP = 0 <b>CIRCULATION DATA</b> n = 0.608 K = 242.063											
Depth (ft)				17,886'		17,886'	Bit Depth = '			Washout = 1%			Pump Efficiency = 95%					
Mud Weight (ppg)				9.0		8.9	Drill String Disp.  0.0 bbl	Volume to Bit 0.0 bbl Bottoms Up Vol. 0.0 bbl TotalCirc.Vol. 0.0 bbl		Strokes To Bit  BottomsUp Stks  TotalCirc.Stks			Time To Bit  BottomsUp Time  Total Circ. Time					
Funnel Vis (sec/qt) @ 85 °F				46		45												
600 rpm				32		30												
300 rpm				21		20	<b>DRILLING ASSEMBLY DATA</b>						<b>SOLIDS CONTROL</b>					
200 rpm				16		16	Tubulars OD (in.) ID (in.)		Length Top		Unit Screens Hours							
100 rpm				12		10			0' 0'		Shaker 1 170 20.0							
6 rpm				7		6			0'		Shaker 2 170 20.0							
3 rpm				5		5			0'		Shaker 3 170 20.0							
Plastic Viscosity (cp) @ 150 °F				11		10			0'		Centrifuge 1 12.0							
Yield Point (lb/100 ft²) T0 = 3				10		10	<b>CASING &amp; HOLE DATA</b>											
Gel Strength (lb/100 ft²) 10 sec/10 min				7/11		6/10	Casing OD (in.) ID (in.)		Depth Top									
Gel Strength (lb/100 ft²) 30 min				14		12	Riser				<b>VOLUME ACCOUNTING (bbls)</b>							
HTHP Filtrate (cm/30 min) @ 250 °F				6.0		6.0	Surface 10 3/4		3,000' 0'		Prev. Total on Location 3415.5							
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg. 7 5/8		10,245' 0'		Transferred In(+)/Out(-)							
Retort Solids Content				10%		10%	Prod. 5 1/2		9,465' 0'		Oil Added (+) 176.2							
Corrected Solids (vol%)				8.3%		8.4%	Prod. 5		17,886' 9,465'		Barite Added (+) 0.0							
Retort Oil Content				72%		72%	Open Hole Size 0.000		17,886'		Other Product Usage (+) 0.0							
Retort Water Content				18%		18%	<b>ANNULAR GEOMETRY &amp; RHEOLOGY</b>						Water Added (+)					
O/W Ratio				80:20		80:20	annular section		meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-) 0.0					
Whole Mud Chlorides (mg/L)				42,000		41,000							Non-Recoverable Vol. (-) -327.7					
Water Phase Salinity (ppm)				267,875		263,175							Cent/Evap/Trip -180.0					
Whole Mud Alkalinity, Pom				1.8		1.9							Est. Total on Location 3084.0					
Excess Lime (lb/bbl)				2.3 ppb		2.5 ppb							Est. Losses/Gains (-)/(+) 0.0					
Electrical Stability (volts)				580 v		610 v							<b>BIT HYDRAULICS DATA</b>					
Average Specific Gravity of Solids				2.76		2.61							Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
Percent Low Gravity Solids				6.4%		7.1%												
ppb Low Gravity Solids				52 ppb		59 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)				
Percent Barite				1.9%		1.3%												
ppb Barite				28 ppb		18 ppb	<b>BIT DATA</b>		Manuf./Type									
Estimated Total LCM in System ppb							Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure				
Sample Taken By				A. Roman	0	M Washburn												
Remarks/Recommendations:  OBM Received:-----3,310 bbls-----Daily Received--( 0 bbls)  OBM On Surface ----3,084 bbls (Storage)  OBM Daily Gan/Loss--- (-331); Total Gain/Loss---(-224)  12.5# OBM (492bbl)----9# OBM (2592bbls)---- \$65.00/bbl							Rig Activity:  Finish running production casing in the hole. Set circulation and continue with Surf-Surf cycle. Circulate gas out prior to start cement job. Pump Cement as follows: (spacer 50bbls/9.5#...Cement 250bbls/13.5#) displace Cement with 349bbls of fresh water. Bump plug 1000psi over. Floats holding, shut well in and monitor casing pressure (378psi) and increasing. Start to lay down DP in the mouse hole.----Losses while running casing (180bbl centrifuge / TIH); While Circulating casing on bottom (189bbls); Losses while pumping cement 100bbls. Losses displacing Cement 12bbls + 26bbls on back side on calculated displacement. . Total losses on cement job 327bbls. At this time WOC and lay down DP.											
Eng. 1: Mike Washburn Phone: 361-945-5777				Eng. 2: Adolfo Roman Phone: 956-821-9994		WH 1: MIDLAND Phone: 432-686-7361		WH 2: WH #2 Phone: -		Rig Phone:		Daily Total		Cumulative Cost				
W P Y E C g G H O 1 1 1 1 1 1 1 1 1				Any opinion and or recommendation, expressed orally or written herein, has been prepared carefully and may be used if the user so elects, however, no representation is made as to the validity of this information, and this is a recommendation only.									\$5,195.00		\$84,753.18			
							INCLUDING 3RD PARTY CHARGES					\$14,739.71		\$139,160.05				





### THIRD PARTY COST SHEET

[illegible]

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID  
VOLUME  
ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	GRAND CANYON A - 1H

	Date	WEEK 1							WEEK 2							WEEK 3							
		6/22/20	6/23/20	6/24/20	6/25/20	6/26/20	6/27/20	6/28/20	6/29/20	6/30/20	7/1/20	7/2/20	7/3/20	7/4/20	7/5/20	7/6/20	7/7/20	7/8/20	7/9/20	7/10/20	7/11/20	7/12/20	
		Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Grand Totals	Starting Depth	10,335	10,335	10,335	10,862	10,954	11,900	14,160	16,220	17,427	17,886	17,886	17,886										
	Ending Depth	10,335	10,335	10,862	10,954	11,900	14,160	16,220	17,427	17,886	17,886	17,886											
	Footage Drilled	-	-	527	92	946	2,260	2,060	1,207	459	-	-	-	-	-	-	-	-	-	-	-	-	
334	New Hole Vol.	-	-	23	4	42	100	91	53	20	-	-	-	-	-	-	-	-	-	-	-	-	
	Starting System Volume	470	3,310	3,284	3,310	3,303	3,307	3,357	3,368	3,408	3,424	3,416	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,084	
61	Chemical Additions	-	-	7	0	5	17	13	17	3	-	-											
735	Base Fluid Added	-	-	92	55	32	89	108	113	53	18	176											
7	Barite Increase	-	-	7	-	-	-	-	-	-	-	-											
2,840	Weighted Mud Added	2,840	-	-	-	-	-	-	-	-	-	-											
-	Slurry Added	-	-	-	-	-	-	-	-	-	-	-											
321	Water Added	-	-	60	-	11	60	80	80	30	-	-											
-	Added for Washout	-	-	-	-	-	-	-	-	-	-	-											
3,964	Total Additions	2,840	-	166	55	47	166	201	210	86	18	176	-	-	-	-	-	-	-	-	-	-	
135	Surface Losses	-		30	15	-	-	30	30	30	-												
52	Formation Loss	-	-	-	-	-	-	52	-	-	-												
347	Mud Loss to Cuttings	-	-	30	4	43	102	93	55	21	-	-											
487	Unrecoverable Volume	-	-	60	15	-	-	-	70	-	14	328											
303	Centrifuge Losses	-	-	20	28	-	14	15	15	20	12	180											
1,324	Total Losses	-	-	140	62	43	116	190	170	70	26	508	-	-	-	-	-	-	-	-	-	-	
26	Mud Transferred Out	-	26	-	-	-																	
3,084	Ending System Volume	3,310	3,284	3,310	3,303	3,307	3,357	3,368	3,408	3,424	3,416	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,084	3,084	
-	Mud Recovered	-																					
3,284	Comments:							Comments:							Comments:								
	6/22/20	Transfer sack material and OBM from Levi Goodrich U2-3H. Skid Rig / Nipple Up, Test BOP's							6/29/20	Drilling ahead on lateral. Constant addition of diesel and water. Volume build 40bbbs. No Losses or Seepage at this time.							7/6/20						
	6/23/20	Test BOP's, Pick up and Make up new BHA, TIH 26bbbs lost to gas separator.							6/30/20	TD 17886'. Circulate Clean up cycle and short trip. POOH and spot 200bbbs LCM @15430'. POOH up to shoe, circulate and spot 85bbbs 14#mud cap. POOH to run casing.							7/7/20						
	6/24/20	Drilled on curve section to 10862'. Mud Motor not giving build rates. POOH to change mud motor.							7/1/20	Lay down BHA, Start production casing run. Circulate BU @ 9000'--10000'---& 11000'. Push mud cap out of wellbore. No losses down hole at this time.							7/8/20						
	6/25/20	TIH and drill to 10954'. Circulate BU and monitor well. Pump slug and POOH to change out Mud Motor.							7/2/20	Casing on bottom. Cement. Losses: 180bbbs while running casing; 189bbbs while circulating casing on bottom; 100bbbs while pumping cement and 38bbbs on displacement.							7/9/20						
	6/26/20	TIH resume drilling, MW 8.9ppg. (+4bbbs OBM)							7/3/20								7/10/20						
	6/27/20	Drilling ahead, gain 50bbbs. Total gain 47bbbs on the well . No losses noted at this time.							7/4/20								7/11/20						
	6/28/20	Drilling ahead, gain 11bbbs. Total gain 58bbbs on the well .Lost 52bbbs to formation at 14500', fracture. No seepeage or losses pass that point.							7/5/20								7/12/20						