05/14/21 **Report #2**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.3° **208' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**3,033 ft**	**3,033 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**TOOH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jesse Collinson/ Jim Harrison	**Tool Pusher**	**GIDDINGS**	**WBM**	**0 gpm**	**psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	GELS	pH	API fl	% Solids
8.4-9.2	**0-10**	**0-10**	**<5 <10**	**6.8-8**	**<25**	**2-10**
				5/14/21		
Time Sample Taken				2:00		
Sample Location				Suction		
Flowline Temperature °F				86 °F		
Depth (ft)				3,026'		
Mud Weight (ppg)				9.1		
Funnel Vis (sec/qt)			@ 83 °F	36		
600 rpm				8		
300 rpm				6		
200 rpm				5		
100 rpm				3		
6 rpm				2		
3 rpm				1		
Plastic Viscosity (cp)			@ 120 °F	2		
Yield Point (lb/100 ft²)			T0 = 0	4		
Gel Strength (lb/100 ft²)			10 sec/10 min	2/3		
Gel Strength (lb/100 ft^2)			30 min	5		
API Filtrate / Cake Thickness				25/3		
HTHP Filtrate / Cake Thickness			@ 0 °F			
Retort Solids Content				5.7%		
Retort Oil Content						
Retort Water Content				94.3%		
Sand Content				0.3%		
M.B.T. (Methylene Blue Capacity) (ppb)						
pH				7.3		
Alkalinity, Mud Pm						
Alkalinities, Filtrate Pf/Mf						
Chlorides (mg/L)				300		
Calcium (ppm)				40		
Excess Lime (lb/bbl)						
Average Specific Gravity of Solids				2.60	2.60	2.60
Percent Low Gravity Solids				5.6%		
Percent Drill Solids				5.6%		
PPA Spurt / Total (ml) @			@ 0 °F			
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin		

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	755 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size	5.25
In Hole	602 bbl	Stroke	12	Stroke	12	Stroke	12
Active	805 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763
Storage		stk/min		stk/min		stk/min	
Tot. on Location	1357 bbl	gal/min	0	gal/min	0	gal/min	0

PHHP = 0 **CIRCULATION DATA** n = 0.415 K = 229.946

Bit Depth = 208 ' | Washout = 5% | Pump Efficiency = 95%

Drill String Disp.	Volume to Bit	2.0 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	48.2 bbl	BottomsUp Stks	BottomsUp Time
7.3 bbl	Riser Ann. Vol.	28.7 bbl	Riser Strokes	Riser Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.760	**0'**	0'
Hevi Wt	5.000	3.000	88'	**0'**
Collars	7.750	3.250	81'	88'
Dir. BHA	7.938	3.170	39'	169'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser	20	19.000	108'	
Surface				108'
Int. Csg.				108'
Washout 1				
Washout 2				
Open Hole Size	14.175	3,033'		

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
19x5	88'	0.0	lam	9.10
19x7.75	108'	0.0	lam	9.10
14.175x7.75	169'	0.0	lam	9.10
14.175x7.938	208'	0.0	lam	9.10

BIT DATA Manuf./Type ULTERA 616

Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
13 1/2	108 ft	9.0	2,925 ft	325.0		

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	140	10.5
Shaker 2	140	10.5
Shaker 3	140	10.5
NOV Dryers	140	10.5
Desander/ Desilter		10.5
Centrifuge 1		10.5

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	0.0
Transferred In(+)/Out(-)	
Oil Added (+)	0.0
Barite Added (+)	0.0
Other Product Usage (+)	2.4
Water Added (+)	2975.1
Left on Cuttings (-)	-592.0
SAND TRAP/ DESANDER	-796.0
DUMP MW CONTROL	-233.0
Est. Total on Location	1356.5
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.00	psi	14	14	14
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14
0 lbs	0			

Remarks/Recommendations:

OBM RECEIVED: 1860bbls @ $65.00_665bbls @ $10.00

Pump Rate @ 883-GPM

MWD Temp: 109 Degress

Rig Activity:

Finalized rigging up and performing operational checks. PU the 13.5" directional BHA and spud in. Pretreated the active with SAPP and detergent, built SAPP and detergent laden sweeps and pumped the same every stand for the first 1,000' and every other from 1,000'MD to 2,700'MD. Soap and SAPP sticks down the DP every connection after 500'MD. Maintained the density at 8.5-8.7ppg until 2,700'MD at this depth allowed to density to increase to 9.1-9.2ppg and viscosity at 36-38 seconds. At TD pumped (2) 30BBL SAPP/ detergent sweeps as the clean up cycle. Observed trace amounts of reactive clays (GUMBO). TD surface at 3,033'MD. At the time of the am report TOOH.

Eng. 1:	Mike Washburn	Eng. 2:	Rob Bowlin	WH 1:	MIDLAND	WH 2:	WH #2	Rig Phone:
Phone:	361-945-5777	Phone:	956-821-9994	Phone:	432-686-7361	Phone:	-	

W	P	Y	g	G	p	A	S	C
1	1	1	1	1	1	1	1	0

	Daily Total	Cumulative Cost
	$4,272.92	**$16,774.78**
INCLUDING 3RD PARTY CHARGES	**$4,272.92**	**$16,774.78**

05/14/21 **Report #3**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0° **0' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**3,033 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**Testing BOP's**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**0 gpm**	

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±275K**	**<10 <15**	**<8**
				5/14/21		
Time Sample Taken				1:00		
Sample Location				storage		
Flowline Temperature °F						
Depth (ft)				3,033'		
Mud Weight (ppg)				8.9		
Funnel Vis (sec/qt)			@ 82 °F	45		
600 rpm				19		
300 rpm				13		
200 rpm				12		
100 rpm				8		
6 rpm				4		
3 rpm				3		
Plastic Viscosity (cp)			@ 150 °F	6		
Yield Point (lb/100 ft²)			T0 = 2	7		
Gel Strength (lb/100 ft²)			10 sec/10 min	3/5		
Gel Strength (lb/100 ft^2)			30 min	7		
HTHP Filtrate (cm/30 min)			@ 250 °F	10.0		
HTHP Cake Thickness (32nds)				2.0		
Retort Solids Content				8%		
Corrected Solids (vol%)				6.2%		
Retort Oil Content				70.5%		
Retort Water Content				21.5%		
O/W Ratio				77:23		
Whole Mud Chlorides (mg/L)				45,000		
Water Phase Salinity (ppm)				247,103		
Whole Mud Alkalinity, Pom				0.9		
Excess Lime (lb/bbl)				1.2 ppb		
Electrical Stability (volts)				278 v		
Average Specific Gravity of Solids				3.06		
Percent Low Gravity Solids				3.7%		
ppb Low Gravity Solids				31 ppb		
Percent Barite				2.5%		
ppb Barite				36 ppb		
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin	0	0

MUD VOLUME (BBL)

In Pits	633 bbl
In Hole	280 bbl
Active	633 bbl
Storage	1612 bbl
Tot. on Location	2525 bbl

PUMP #1

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	
gal/min	0

PUMP #2

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	
gal/min	0

RISER BOOSTER

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	
gal/min	0

PHHP = 0 **CIRCULATION DATA** n = 0.547 K = 218.115

Washout = 2% Pump Efficiency = 95%

Drill String Disp.				
0.0 bbl	Volume to Bit	0.0 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	0.0 bbl	BottomsUp Stks	BottomsUp Time
	Riser Ann. Vol.	0.0 bbl	Riser Strokes	Riser Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
			0'	0'
				0'
				0'
				0'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser	20		108'	
Surface	10 3/4	9.950	3,018'	108'
Int. Csg.				108'
Washout 1				
Washout 2				
Open Hole Size	0.000	3,033'		

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal

BIT DATA Manuf./Type ULTERA 616

Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	140	
Shaker 2	140	
Shaker 3	140	
NOV Dryers	140	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	1356.5
Transferred In(+)/Out(-)	2525.0
Oil Added (+)	0.0
Barite Added (+)	0.0
Other Product Usage (+)	0.0
Water Added (+)	
Left on Cuttings (-)	0.0
WBM Sent to Disposal	-1356.5
Est. Total on Location	2525.0
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
Bit Impact Force	Nozzle Velocity (ft/sec)			

Remarks/Recommendations:

OBM RECEIVED: 1860bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2245bbls

Testing BOP's

Rig Activity:

Made a wiper trip while waiting on Franks casing crew to arrive on location. RU Franks and ran the 10.75" surface casing to bottom setting the shoe at 3,018'MD. RU Nine cementers and cemented the surface casing in good fashion, observed cement back to surface dumping 40bbls of spacer and 130bbls of excess cement. Displaced cement with 8.9-9.0ppg OBM. Cleaned rig pits and filled the same with 8.9ppg OBM, this volume is currently being reconditioned with CaCl2 to maintain the WPS of the H2O used to wash on top of the surface plug. Additions of Lime, Mul, Wet, Bentone 38/990 and Opti-G are currently being made for upcoming fast hole operation's. The mud check was on the frac volume absent of good circulation and no shear.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W P Y E C g G H O
1 1 0 0 0 1 1 2 1

	Daily Total	Cumulative Cost
	$2,040.00	**$18,814.78**
INCLUDING 3RD PARTY CHARGES	**$2,040.00**	**$18,814.78**

05/15/21 **Report #4**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

12.3° **4,432' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**1,471 ft**	**4,504 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**350 ft/hr**	**Drilling**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**603 gpm**	**4,595 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±275K**	**<10 <15**	**<8**
				5/14/21		5/14/21
Time Sample Taken				2:30		11:00
Sample Location				Suction		suction
Flowline Temperature °F				123 °F		
Depth (ft)				3,907'		3,033'
Mud Weight (ppg)				8.9		8.9
Funnel Vis (sec/qt)			@ 105 °F	42		46
600 rpm				27		22
300 rpm				18		15
200 rpm				12		13
100 rpm				8		9
6 rpm				5		5
3 rpm				4		4
Plastic Viscosity (cp)			@ 150 °F	9		7
Yield Point (lb/100 ft²)			T0 = 3	9		8
Gel Strength (lb/100 ft²)			10 sec/10 min	4/7		4/7
Gel Strength (lb/100 ft^2)			30 min	9		8
HTHP Filtrate (cm/30 min)			@ 250 °F	7.2		8.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				8.6%		8%
Corrected Solids (vol%)				6.4%		6.2%
Retort Oil Content				65.4%		70.5%
Retort Water Content				26%		21.5%
O/W Ratio				72:28		77:23
Whole Mud Chlorides (mg/L)				55,000		46,000
Water Phase Salinity (ppm)				249,086		251,215
Whole Mud Alkalinity, Pom				2.0		2.5
Excess Lime (lb/bbl)				2.6 ppb		3.3 ppb
Electrical Stability (volts)				388 v		356 v
Average Specific Gravity of Solids				2.68		3.04
Percent Low Gravity Solids				5.2%		3.8%
ppb Low Gravity Solids				43 ppb		31 ppb
Percent Barite				1.2%		2.5%
ppb Barite				17 ppb		35 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin	0	M.Meehan

MUD VOLUME (BBL)	
In Pits	650 bbl
In Hole	384 bbl
Active	1034 bbl
Storage	1468 bbl
Tot. on Location	2502 bbl

PUMP #1	
Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	94
gal/min	301

PUMP #2	
Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	94
gal/min	301

RISER BOOSTER	
Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	94
gal/min	301

PHHP = 1615 **CIRCULATION DATA** n = 0.585 K = 239.066

Bit Depth = 4,504 ' | Washout = 0% | Pump Efficiency = 95%

Drill String Disp.							
37.1 bbl	Volume to Bit	76.5 bbl	Strokes To Bit	1,002	Time To Bit	5 min
	Bottoms Up Vol.	307.1 bbl	BottomsUp Stks	4,024	BottomsUp Time	14 min
	Riser Ann. Vol.	-2.6 bbl	Riser Strokes	-34	Riser Circ. Time	0 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.276	4,117'	0'
Hevi Wt	5.000	3.000	277'	4,117'
Collars	8.000	3.250	71'	4,394'
Dir. BHA	8.000	2.250	39'	4,465'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser	20		108'	
Surface	10 3/4	9.950	3,018'	108'
Int. Csg.				108'
Washout 1				
Washout 2				
Open Hole Size		9.875	4,504'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
0x5	108'	-886.1		9.16
9.95x5	3,018'	199.6	lam	9.35
9.875x5	4,117'	203.7	lam	9.55
9.875x5	4,394'	203.7	lam	9.80
9.875x8	4,465'	440.6	turb	10.08
9.875x8	4,504'	440.6	turb	10.35

BIT DATA Manuf./Type ULTERA 613

Size	Depth In	Hours	Footage	ROP ft/hr
9 7/8	2,938 ft	5.5	1,566 ft	284.7

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	170	5.5
Shaker 2	170	5.5
Shaker 3	170	5.5
NOV Dryers	170	5.5
Centrifuge 1		2.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2525.1
Transferred In(+)/Out(-)	
Oil Added (+)	38.2
Barite Added (+)	13.0
Other Product Usage (+)	15.2
Water Added (+)	60.0
Left on Cuttings (-)	-125.4
Evap/ Cent/ Shakers	-24.5
Est. Total on Location	2501.5
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.61	134 psi	16	16	16
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14
360 lbs	130			

Motor/MWD	Calc. Circ. Pressure
3,800 psi	4,532 psi

Remarks/Recommendations:

OBM RECEIVED: 1860bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2118bbls

OBM LOST_ DAILY 24bbls_TOTAL 24bbls

Pump Rate 900GPM

MWD Temp: 162 Degrees

Rig Activity:

Completed testing BOP's, PU 9.875" directional BHA TIH to float equipment at 2,938'MD. Drilled the shoe track plus 10' of new formation and performed a FIT to 11.6ppg EMW with a 8.8ppg MW at 1,500PSI. Pumping LCM laden sweeps every 300' drilled down, diesel dilutions at 7BPH. Fluid very responsive to the initial treatments, observing minimal shaker runoff when sweeps are back to surface. Currently dusting the MW in 1/10th increments every 1,000' with a target MW of 9.2-9.3ppg by 8,000'MD and an interval final density of 9.6-9.8ppg. Drilling ahead at 4,504'MD at the time of the morning report.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	0	0	1	1	1	1

	Daily Total	Cumulative Cost
	$12,921.15	**$31,735.93**
INCLUDING 3RD PARTY CHARGES	**$16,118.19**	**$34,932.97**

5/15/2021 **Report 4 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

11.7° **6,171' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**1,777 ft**	**6,281 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**348 ft/hr**	**Drilling**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**603 gpm**	**4,537 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±275K**	**<10 <15**	**<8**

MUD PROPERTIES

Time Sample Taken	2:30		11:00
Sample Location	Suction		suction
Flowline Temperature °F	123 °F		152 °F
Depth (ft)	3,907'		6,281'
Mud Weight (ppg)	8.9		9.1
Funnel Vis (sec/qt) @ 105 °F	42		42
600 rpm	27		29
300 rpm	18		19
200 rpm	12		14
100 rpm	8		10
6 rpm	5		5
3 rpm	4		4
Plastic Viscosity (cp) @ 150 °F	9		10
Yield Point (lb/100 ft²) T0 = 3	9		9
Gel Strength (lb/100 ft²) 10 sec / 10 min	4/7		5/8
Gel Strength (lb/100 ft2) 30 min	9		10
HTHP Filtrate (cm/30 min) @ 250 °F	7.2		8.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	8.6%		10%
Corrected Solids (vol%)	6.4%		7.9%
Retort Oil Content	65.4%		66%
Retort Water Content	26%		24%
O/W Ratio	72:28		73:27
Whole Mud Chlorides (mg/L)	55,000		54,000
Water Phase Salinity (ppm)	249,086		260,803
Whole Mud Alkalinity, Pom	2.0		2.6
Excess Lime (lb/bbl)	2.6 ppb		3.4 ppb
Electrical Stability (volts)	388 v		404 v
Average Specific Gravity of Solids	2.68		2.70
Percent Low Gravity Solids	5.2%		6.3%
ppb Low Gravity Solids	43 ppb		52 ppb
Percent Barite	1.2%		1.6%
ppb Barite	17 ppb		23 ppb
Estimated Total LCM in System			
Sample Taken By	R. Bowlin		M.Meehan

MUD VOLUME (BBL)

In Pits	640 bbl
In Hole	540 bbl
Active	1180 bbl
Storage	1268 bbl
Tot. on Location	2448 bbl

PUMP #1

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	94
gal/min	301

PUMP #2

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	94
gal/min	301

RISER BOOSTER

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	94
gal/min	301

Mud Wt. = 8.9 PV=9 YP=9 **CIRCULATION DATA** n = 0.585 K = 239.1

Bit Depth = 6,281 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.						
48.7 bbl	Volume to Bit	108.0 bbl	Strokes To Bit	1,416	Time To Bit	8 min
	Bottoms Up Vol.	432.3 bbl	BottomsUp Stks	5,665	BottomsUp Time	20 min
	Riser Ann. Vol.	-2.6 bbl	Riser Strokes	-34	Riser Circ. Time	0 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.276	5,894'	
Hevi Wt	5.000	3.000	277'	5,894'
Collars	8.000	3.250	71'	6,171'
Dir. BHA	8.000	2.250	39'	6,242'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser	20		108'	
Surface	10 3/4	9.950	3,018'	108'
Int. Csg.				108'
Washout 1				
Washout 2				
Open Hole Size	9.875	6,281'		

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
0x5	108'	-886.1		9.16
9.95x5	3,018'	199.6	lam	9.35
9.875x5	5,894'	203.7	lam	9.49
9.875x5	6,171'	203.7	lam	9.74
9.875x8	6,242'	440.6	turb	10.02
9.875x8	6,281'	440.6	turb	10.29

BIT DATA Manuf./Type ULTERA 613

Size	Depth In	Hours	Footage	ROP ft/hr
9 7/8	2,938 ft	13.5	3,343 ft	247.6

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	170	12.0
Shaker 2	170	12.0
Shaker 3	170	12.0
NOV Dryers	170	12.0
Centrifuge 1		1.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2501.5
Transferred In(+)/Out(-)	
Oil Added (+)	108.6
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	-151.5
Evap/ Cent/ Shakers	-10.3
Est. Total on Location	2448.3
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.61	134 psi	16	16	16
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14
360 lbs	130			

Motor/MWD	Calc. Circ. Pressure
3,650 psi	4,537 psi

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

Afternoon Rig Activity:

Drilling ahead and sliding as needed in the vertical section. Pumping a 10 bbl LCM sweep every 300 ft. Increased the mud wt. to 9.1 ppg, Adding Lime and Optimul to maintian the emulsion. Increased the chlorides content with additions of CaCL2.Adding increased amounts of diesel and whole mud to maintain the volume due to rapid ROP.

05/16/21 **Report #5**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

11.0° **7,542' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**3,176 ft**	**7,680 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**43 ft/hr**	**Drilling**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**596 gpm**	**4,586 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**
				5/16/21		5/15/21
Time Sample Taken				2:30		11:00
Sample Location				Suction		suction
Flowline Temperature °F				166 °F		152 °F
Depth (ft)				7,661'		6,281'
Mud Weight (ppg)				9.1		9.1
Funnel Vis (sec/qt)			@ 146 °F	40		42
600 rpm				25		29
300 rpm				17		19
200 rpm				13		14
100 rpm				9		10
6 rpm				5		5
3 rpm				4		4
Plastic Viscosity (cp)			@ 150 °F	8		10
Yield Point (lb/100 ft²)			T0 = 3	9		9
Gel Strength (lb/100 ft²)			10 sec/10 min	4/6		5/8
Gel Strength (lb/100 ft^2)			30 min	10		10
HTHP Filtrate (cm/30 min)			@ 250 °F	7.6		8.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				10.1%		10%
Corrected Solids (vol%)				8.3%		7.9%
Retort Oil Content				68.9%		66%
Retort Water Content				21%		24%
O/W Ratio				77:23		73:27
Whole Mud Chlorides (mg/L)				45,000		54,000
Water Phase Salinity (ppm)				251,507		260,803
Whole Mud Alkalinity, Pom				2.0		2.6
Excess Lime (lb/bbl)				2.6 ppb		3.4 ppb
Electrical Stability (volts)				438 v		404 v
Average Specific Gravity of Solids				2.80		2.70
Percent Low Gravity Solids				6.2%		6.3%
ppb Low Gravity Solids				51 ppb		52 ppb
Percent Barite				2.1%		1.6%
ppb Barite				30 ppb		23 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin	0	M.Meehan

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	621 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size	5.25
In Hole	664 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1285 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763
Storage	1485 bbl	stk/min	93	stk/min	93	stk/min	93
Tot. on Location	2770 bbl	gal/min	298	gal/min	298	gal/min	298

CIRCULATION DATA					
PHHP = 1595					n = 0.556 K = 269.819
Bit Depth = 7,680 '			Washout = 0%		Pump Efficiency = 95%
Drill String Disp.	Volume to Bit	132.9 bbl	Strokes To Bit	1,741	Time To Bit 9 min
	Bottoms Up Vol.	530.8 bbl	BottomsUp Stks	6,956	BottomsUp Time 25 min
57.8 bbl	Riser Ann. Vol.	-2.6 bbl	Riser Strokes	-34	Riser Circ. Time 0 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.276	7,293'	0'
Hevi Wt	5.000	3.000	277'	7,293'
Collars	8.000	3.250	71'	7,570'
Dir. BHA	8.000	2.250	39'	7,641'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser	20		108'	
Surface	10 3/4	9.950	3,018'	108'
Int. Csg.				108'
Washout 1				
Washout 2				
Open Hole Size		9.875	7,680'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
0x5	108'	-876.7		9.13
9.95x5	3,018'	197.4	lam	9.30
9.875x5	7,293'	201.5	lam	9.32
9.875x5	7,570'	201.5	lam	9.35
9.875x8	7,641'	435.9	turb	9.40
9.875x8	7,680'	435.9	turb	9.44

BIT DATA Manuf./Type ULTERA 613

Size	Depth In	Hours	Footage	ROP ft/hr
9 7/8	2,938 ft	27.5	4,742 ft	172.4

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	170	22.0
Shaker 2	170	22.0
Shaker 3	170	22.0
NOV Dryers	170	22.0
Centrifuge 1		5.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2501.5
Transferred In(+)/Out(-)	300.0
Oil Added (+)	392.8
Barite Added (+)	12.9
Other Product Usage (+)	13.8
Water Added (+)	
Left on Cuttings (-)	-300.9
Evap/ Cent/ Shakers	-100.5
Seepage Losses	-50.1
Est. Total on Location	2769.7
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.61	134 psi	16	16	16
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14
360 lbs	128			

Motor/MWD	Calc. Circ. Pressure
3,500 psi	4,483 psi

Remarks/Recommendations:

OBM RECEIVED: 2160bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2136bbls

Pump Rate 900GPM

MWD Temp: 205 Degrees

Rig Activity:

Continued drilling ahead from 4,504'MD to 7,680'MD at the time of the am report. Pumping LCM laden sweeps every other connection until 6,920'MD, began pumping 10bbls every connection. Decreased the active density from 9.1ppg to 8.9ppg in an attempt to help during slides, observed no change in drilling parameters. Hole continued to drill erratically, stacking weight during slides. Torque 8-22K, ROP 486'hr, 80 Rotary. Active density currently at 9.1ppg, making aggressive dilutions with diesel at 30BPH. Began drill H2O additions at 2BPH, CaCl2 additions will be made aty a proportional rate to maintain WPS @ 250k. Processing the active at a slow rate with the NOV centrifuge to remove/ maintain low gravity solids percentage.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

	Daily Total	Cumulative Cost
	$10,272.61	**$42,008.54**
INCLUDING 3RD PARTY CHARGES	**$48,274.91**	**$83,207.88**

05/17/21 **Report #6**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

11.0° **9,353' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**1,941 ft**	**9,621 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**Change Rot Head**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ 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	646 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size	5.25
8.5-9.8	**5-16**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**	In Hole	861 bbl	Stroke	12	Stroke	12	Stroke	12
				5/17/21	5/16/21	5/16/21	Active	1497 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763
Time Sample Taken				2:30	18:46	11:30	Storage	1075 bbl	stk/min		stk/min		stk/min	
Sample Location				Suction	Shaker	suction	Tot. on Location	2582 bbl	gal/min	0	gal/min	0	gal/min	0
Flowline Temperature °F				192 °F	201 °F	168 °F	PHHP = 0		**CIRCULATION DATA**				n = 0.657	K = 220.195
Depth (ft)				9,549'	9,148'	8,599'	Bit Depth = 9,525 '		Washout = 2%		Pump Efficiency = 95%			
Mud Weight (ppg)				9.5	9.3	9.0	Drill String Disp.	Volume to Bit 165.6 bbl	Strokes To Bit		Time To Bit			
Funnel Vis (sec/qt)			@ 168 °F	43	39	40		Bottoms Up Vol. 685.7 bbl	BottomsUp Stks		BottomsUp Time			
600 rpm				41	35	26	69.8 bbl	Riser Ann. Vol. -2.6 bbl	Riser Strokes		Riser Circ. Time			
300 rpm				26	22	17	**DRILLING ASSEMBLY DATA**				**SOLIDS CONTROL**			
200 rpm				21	18	13	Tubulars	OD (in.) ID (in.) Length Top			Unit	Screens	Hours	
100 rpm				14	13	10	Drill Pipe	5.000 4.276 9,138' 0'			Shaker 1	170	23.0	
6 rpm				7	6	5	Hevi Wt	5.000 3.000 277' 9,138'			Shaker 2	170	23.0	
3 rpm				6	5	4	Collars	8.000 3.250 71' 9,415'			Shaker 3	170	23.0	
Plastic Viscosity (cp)			@ 150 °F	15	13	9	Dir. BHA	8.000 2.250 39' 9,486'			NOV Dryers	170	23.0	
Yield Point (lb/100 ft²)		T0 =	5	11	9	8	**CASING & HOLE DATA**							
Gel Strength (lb/100 ft²)		10 sec/10 min		7/10	6/9	4/7	Casing	OD (in.) ID (in.) Depth Top			Centrifuge 1		6.0	
Gel Strength (lb/100 ft^2)		30 min		13	12	10	Riser	20 108'			**VOLUME ACCOUNTING (bbls)**			
HTHP Filtrate (cm/30 min)			@ 250 °F	8.0	8.0	7.6	Surface	10 3/4 9.950 3,018' 108'			Prev. Total on Location		2769.7	
HTHP Cake Thickness (32nds)				2.0	2.0	2.0	Int. Csg.	108'			Transferred In(+)/Out(-)			
Retort Solids Content				11.7%	11.5%	9.8%	Washout 1				Oil Added (+)		157.5	
Corrected Solids (vol%)				9.6%	9.8%	7.9%	Washout 2				Barite Added (+)		18.8	
Retort Oil Content				66%	67.2%	68.2%	Open Hole Size	10.073 9,621'			Other Product Usage (+)		17.9	
Retort Water Content				22.3%	21.3%	22%	**ANNULAR GEOMETRY & RHEOLOGY**				Water Added (+)		70.2	
O/W Ratio				75:25	76:24	76:24	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal	Left on Cuttings (-)		-191.3
Whole Mud Chlorides (mg/L)				53,000	44,000	48,000						Evap/ Cent/ Shakers		-177.8
Water Phase Salinity (ppm)				271,500	244,669	254,914	0x5	108'	0.0		9.50	Seepage Losses		-83.1
Whole Mud Alkalinity, Pom				1.8	1.7	2.5	9.95x5	3,018'	0.0	lam	9.50	Est. Total on Location		2581.9
Excess Lime (lb/bbl)				2.3 ppb	2.2 ppb	3.3 ppb	10.073x5	9,138'	0.0	lam	9.50	Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				448 v	411 v	447 v	10.073x5	9,415'	0.0	lam	9.50	**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				2.92	2.75	2.67	10.073x8	9,486'	0.0	lam	9.50	Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				6.4%	7.5%	6.5%	10.073x8	9,525'	0.0	lam	9.50	0.00	psi	16 16 16
ppb Low Gravity Solids				53 ppb	62 ppb	53 ppb						Bit Impact Force	Nozzle Velocity (ft/sec)	14 14 14
Percent Barite				3.1%	2.3%	1.5%								14 14 14
ppb Barite				45 ppb	32 ppb	21 ppb	**BIT DATA**		Manuf./Type	ULTERA 613		0 lbs	0	
Estimated Total LCM in System			ppb				Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD		Calc. Circ. Pressure
Sample Taken By				R. Bowlin	R. Bowlin	M.Meehan	9 7/8	2,938 ft	50.5	6,683 ft	132.3	psi		

Remarks/Recommendations:

OBM RECEIVED: 2160bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 1721bbls

Pump Rate 800GPM

MWD Temp: 234 Degrees

Rig Activity:

Continued to drill ahead on the intermediate section from 7,680'MD to MD at the time of the morning report. Pumping 10bbl/12.5PPB LCM laden sweeps every stand, sweeps consist of MagmaFiber Fine, NewCarb Med, NewPhalt and Opti-G. Increased the active density to 9.4ppg due to observed sloughing, at 9,160"MD. Made drill H2O additions at 2BPH for 12 hours and increased to 4BPH at 20:00hrs, proportional additions of CaCl2 are being made to maintain water phase salinity at 250,000. At 9,077'MD began back ground LCM additions of First Response and NewCarb M. at 5-sx hr due to observed seepage losses. No losses at the time of the report.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -		**$20,315.62**	**$62,324.16**

W P Y E C g G H O
1 1 1 1 2 1 1 2 1

INCLUDING 3RD PARTY CHARGES	**$36,818.77**	**$120,026.65**

5/18/2021 **Report 6 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

6.2° **10,201' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**765 ft**	**10,386 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**235 ft/hr**	**Drilling**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**577 gpm**	**5,651 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**

MUD PROPERTIES

Time Sample Taken	2:30	18:46	12:00
Sample Location	Suction	Shaker	suction
Flowline Temperature °F	192 °F	201 °F	195 °F
Depth (ft)	9,549'	9,148'	10,386'
Mud Weight (ppg)	9.5	9.3	9.5
Funnel Vis (sec/qt) @ 168 °F	43	39	44
600 rpm	41	35	40
300 rpm	26	22	25
200 rpm	21	18	19
100 rpm	14	13	15
6 rpm	7	6	7
3 rpm	6	5	6
Plastic Viscosity (cp) @ 150 °F	15	13	15
Yield Point (lb/100 ft²) T0 = 5	11	9	10
Gel Strength (lb/100 ft²) 10 sec / 10 min	7/10	6/9	7/10
Gel Strength (lb/100 ft2) 30 min	13	12	13
HTHP Filtrate (cm/30 min) @ 250 °F	8.0	8.0	8.0
HTHP Cake Thickness (32nds)	2.0	2.0	2.0
Retort Solids Content	11.7%	11.5%	11.9%
Corrected Solids (vol%)	9.6%	9.8%	9.9%
Retort Oil Content	66%	67.2%	66.1%
Retort Water Content	22.3%	21.3%	22%
O/W Ratio	75:25	76:24	75:25
Whole Mud Chlorides (mg/L)	53,000	44,000	51,000
Water Phase Salinity (ppm)	271,500	244,669	266,599
Whole Mud Alkalinity, Pom	1.8	1.7	2.2
Excess Lime (lb/bbl)	2.3 ppb	2.2 ppb	2.9 ppb
Electrical Stability (volts)	448 v	411 v	420 v
Average Specific Gravity of Solids	2.92	2.75	2.88
Percent Low Gravity Solids	6.4%	7.5%	6.9%
ppb Low Gravity Solids	53 ppb	62 ppb	57 ppb
Percent Barite	3.1%	2.3%	3%
ppb Barite	45 ppb	32 ppb	43 ppb
Estimated Total LCM in System			
Sample Taken By	R. Bowlin	R. Bowlin	M.Meehan

MUD VOLUME (BBL)

In Pits	627 bbl
In Hole	931 bbl
Active	1558 bbl
Storage	1075 bbl
Tot. on Location	2633 bbl

PUMP #1

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	90
gal/min	288

PUMP #2

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	90
gal/min	288

RISER BOOSTER

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	90
gal/min	288

Mud Wt. = 9.5 PV=15 YP=11 **CIRCULATION DATA** n = 0.657 K = 220.2

Bit Depth = 10,386 ' Washout = 2% Pump Efficiency = 95%

Drill String Disp.							
75.5 bbl	Volume to Bit	180.9 bbl	Strokes To Bit	2,371	Time To Bit	13 min
	Bottoms Up Vol.	749.7 bbl	BottomsUp Stks	9,825	BottomsUp Time	36 min
	Riser Ann. Vol.	-2.6 bbl	Riser Strokes	-34	Riser Circ. Time	0 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.276	9,999'	
Hevi Wt	5.000	3.000	277'	9,999'
Collars	8.000	3.250	71'	10,276'
Dir. BHA	8.000	2.250	39'	10,347'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser	20		108'	
Surface	10 3/4	9.950	3,018'	108'
Int. Csg.				108'
Washout 1				
Washout 2				
Open Hole Size	10.073	10,386'		

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
0x5	108'	-848.4		9.68
9.95x5	3,018'	191.1	lam	9.90
10.073x5	9,999'	184.9	lam	9.96
10.073x5	10,276'	184.9	lam	10.14
10.073x8	10,347'	377.4	turb	10.33
10.073x8	10,386'	377.4	turb	10.52

BIT DATA Manuf./Type ULTERA 613

Size	Depth In	Hours	Footage	ROP ft/hr
9 7/8	2,938 ft	59.5	7,448 ft	125.2

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	170	12.0
Shaker 2	170	12.0
Shaker 3	170	12.0
NOV Dryers	170	12.0
Centrifuge 1		1.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2581.9
Transferred In(+)/Out(-)	82.0
Oil Added (+)	93.1
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	-75.4
Evap/ Cent/ Shakers	-9.9
Seepage Losses	-39.0
Est. Total on Location	2632.7
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.58	131 psi	16	16	16
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14
352 lbs	124			

Motor/MWD	Calc. Circ. Pressure
	1,367 psi

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

Afternoon Rig Activity:

Drilling ahead and sliding as needed in the vertical section. Pumping a 10 bbl LCM sweep every connection. Raised the mud wt. to 9.5 ppg. Adding Lime to maintian the alkalinity. Maintianing the chlorides content with additions of CaCL2. Added Opti-G to maintain the HTHP fluid loss. Changed 3 worn shale shaker screens. Adding First Response and NewCarb directly to the system to prevent seepage losses.

05/18/21 **Report #7**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

3.9° **11,149' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**1,716 ft**	**11,337 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**21 ft/hr**	**Drilling**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**673 gpm**	**3,827 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**
				5/18/21		5/17/21
Time Sample Taken				2:30		12:00
Sample Location				Suction		suction
Flowline Temperature °F				198 °F		195 °F
Depth (ft)				11,327'		10,386'
Mud Weight (ppg)				9.6		9.5
Funnel Vis (sec/qt)			@ 161 °F	44		44
600 rpm				37		40
300 rpm				24		25
200 rpm				17		19
100 rpm				15		15
6 rpm				7		7
3 rpm				6		6
Plastic Viscosity (cp)			@ 150 °F	13		15
Yield Point (lb/100 ft²)			T0 = 5	11		10
Gel Strength (lb/100 ft²)			10 sec/10 min	5/7		7/10
Gel Strength (lb/100 ft^2)			30 min	12		13
HTHP Filtrate (cm/30 min)			@ 300 °F	8.0		8.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				12.3%		11.9%
Corrected Solids (vol%)				10.1%		9.9%
Retort Oil Content				64.7%		66.1%
Retort Water Content				23%		22%
O/W Ratio				74:26		75:25
Whole Mud Chlorides (mg/L)				54,000		51,000
Water Phase Salinity (ppm)				269,091		266,599
Whole Mud Alkalinity, Pom				1.7		2.2
Excess Lime (lb/bbl)				2.2 ppb		2.9 ppb
Electrical Stability (volts)				423 v		420 v
Average Specific Gravity of Solids				2.90		2.88
Percent Low Gravity Solids				6.9%		6.9%
ppb Low Gravity Solids				57 ppb		57 ppb
Percent Barite				3.2%		3%
ppb Barite				46 ppb		43 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin	0	M.Meehan

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	654 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size	5.25
In Hole	1029 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1683 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763
Storage	1341 bbl	stk/min	105	stk/min	105	stk/min	0
Tot. on Location	3024 bbl	gal/min	337	gal/min	337	gal/min	0

CIRCULATION DATA					
PHHP = 1503					n = 0.624 K = 249.114
Bit Depth = 11,337 '			Washout = 2%		Pump Efficiency = 95%
Drill String Disp.	Volume to Bit	197.8 bbl	Strokes To Bit	2,593	Time To Bit 12 min
	Bottoms Up Vol.	830.7 bbl	BottomsUp Stks	10,886	BottomsUp Time 52 min
81.7 bbl	TotalCirc.Vol.	1682.6 bbl	TotalCirc.Stks	22,049	Total Circ. Time 105 min

DRILLING ASSEMBLY DATA				
Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.276	10,950'	0'
Hevi Wt	5.000	3.000	277'	10,950'
Collars	8.000	3.250	71'	11,227'
Dir. BHA	8.000	2.250	39'	11,298'

CASING & HOLE DATA				
Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4	9.950	3,018'	0'
Int. Csg.				0'
Washout 1				
Washout 2				
Open Hole Size	10.073		11,337'	

ANNULAR GEOMETRY & RHEOLOGY				
annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
9.95x5	3,018'	222.9	lam	9.85
10.073x5	10,950'	215.7	lam	9.85
10.073x5	11,227'	215.7	lam	9.88
10.073x8	11,298'	440.3	turb	9.91
10.073x8	11,337'	440.3	turb	9.94

BIT DATA					Manuf./Type	ULTERA 613
Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
9 7/8	2,938 ft	73.0	8,499 ft	116.4	2,000 psi	3,835 psi

SOLIDS CONTROL		
Unit	Screens	Hours
Shaker 1	170	23.0
Shaker 2	170	23.0
Shaker 3	170	23.0
NOV Dryers	170	23.0
Centrifuge 1		6.0

VOLUME ACCOUNTING (bbls)	
Prev. Total on Location	2581.9
Transferred In(+)/Out(-)	479.0
Oil Added (+)	213.5
Barite Added (+)	0.0
Other Product Usage (+)	12.9
Water Added (+)	83.0
Left on Cuttings (-)	-135.3
Evap/ Cent	-119.6
Seepage Losses	-91.8
Est. Total on Location	3023.6
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA					
Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
0.92	180 psi	16	16	16	
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14	
		14	14	14	
485 lbs	145				

Remarks/Recommendations:

OBM RECEIVED: 2460bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 1995bbls

Pump Rate 674GPM

MWD Temp: 237 Degrees

Rig Activity:

Continued to drill ahead on the intermediate section from 9,621'MD to 11,337' MD at the time of the morning report. Pumping 10bbl/12.5PPB LCM laden sweeps every stand, sweeps consist of MagmaFiber Fine, NewCarb Med, NewPhalt and Opti-G. Increased the active density to 9.6ppg as per wll plan. Made drill H2O additions at 4BPH for 15.5 hours and decreased to 2BPH at 19:30hrs, proportional additions of CaCl2 have been made to maintain water phase salinity at 250K-275K. When seepage losses are observed back ground LCM additions are made at the suction of First Response and NewCarb M. at 3-sx hr. Drilling with two mud pumps while pump #2 is being repaired. Interval TD will be at +/- 11,997'MD

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	2	1	1	2	1

	Daily Total	Cumulative Cost
	$7,029.51	**$69,353.67**
INCLUDING 3RD PARTY CHARGES	**$28,973.06**	**$148,999.71**

5/18/2021 **Report 7 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

3.9° **11,421' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**273 ft**	**11,610 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**236 ft/hr**	**Drilling**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**561 gpm**	**5,588 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:30		12:00
Sample Location		Suction		suction
Flowline Temperature °F		198 °F		195 °F
Depth (ft)		11,327'		11,610'
Mud Weight (ppg)		9.6		9.6
Funnel Vis (sec/qt)	@ 161 °F	44		44
600 rpm		37		40
300 rpm		24		25
200 rpm		17		18
100 rpm		15		14
6 rpm		7		6
3 rpm		6		5
Plastic Viscosity (cp)	@ 150 °F	13		15
Yield Point (lb/100 ft²)	T0 = 5	11		10
Gel Strength (lb/100 ft²)	10 sec / 10 min	5/7		6/9
Gel Strength (lb/100 ft2)	30 min	12		12
HTHP Filtrate (cm/30 min)	@ 300 °F	8.0		8.0
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		12.3%		12.3%
Corrected Solids (vol%)		10.1%		10.3%
Retort Oil Content		64.7%		65.7%
Retort Water Content		23%		22%
O/W Ratio		74:26		75:25
Whole Mud Chlorides (mg/L)		54,000		51,000
Water Phase Salinity (ppm)		269,091		266,599
Whole Mud Alkalinity, Pom		1.7		2.2
Excess Lime (lb/bbl)		2.2 ppb		2.9 ppb
Electrical Stability (volts)		423 v		454 v
Average Specific Gravity of Solids		2.90		2.92
Percent Low Gravity Solids		6.9%		6.9%
ppb Low Gravity Solids		57 ppb		57 ppb
Percent Barite		3.2%		3.3%
ppb Barite		46 ppb		48 ppb
Estimated Total LCM in System				
Sample Taken By		R. Bowlin		M.Meehan

MUD VOLUME (BBL)

In Pits	613 bbl
In Hole	1054 bbl
Active	1667 bbl
Storage	1341 bbl
Tot. on Location	3008 bbl

PUMP #1		PUMP #2		RISER BOOSTER	
Liner Size	5.25	Liner Size	5.25	Liner Size	5.25
Stroke	12	Stroke	12	Stroke	12
bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763
stk/min	87	stk/min	88	stk/min	84
gal/min	279	gal/min	282	gal/min	

Mud Wt. = 9.6 PV=13 YP=11 **CIRCULATION DATA** n = 0.624 K = 249.1

Bit Depth = 11,610 ' Washout = 2% Pump Efficiency = 95%

Drill String Disp.							
83.4 bbl	Volume to Bit	202.7 bbl	Strokes To Bit	2,656	Time To Bit	15 min
	Bottoms Up Vol.	851.0 bbl	BottomsUp Stks	16,505	BottomsUp Time	64 min
	TotalCirc.Vol.	1666.7 bbl	TotalCirc.Stks	21,841	Total Circ. Time	125 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.276	11,223'	
Hevi Wt	5.000	3.000	277'	11,223'
Collars	8.000	3.250	71'	11,500'
Dir. BHA	8.000	2.250	39'	11,571'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4	9.950	3,018'	
Int. Csg.				
Washout 1				
Washout 2				
Open Hole Size	10.073		11,610'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
9.95x5	3,018'	185.8	lam	10.18
10.073x5	11,223'	179.8	lam	10.28
10.073x5	11,500'	179.8	lam	10.63
10.073x8	11,571'	366.9	turb	10.98
10.073x8	11,610'	366.9	turb	11.33

BIT DATA Manuf./Type ULTERA 613

Size	Depth In	Hours	Footage	ROP ft/hr
9 7/8	2,938 ft	82.0	8,672 ft	105.8

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	170	12.0
Shaker 2	170	12.0
Shaker 3	170	12.0
NOV Dryers	170	12.0
Centrifuge 1		1.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3023.6
Transferred In(+)/Out(-)	
Oil Added (+)	56.2
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	-21.5
Evap/ Cent	-10.6
Seepage Losses	-40.0
Est. Total on Location	3007.7
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.53	125 psi	16	16	16
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14
337 lbs	121			

Motor/MWD	Calc. Circ. Pressure
4,200 psi	5,588 psi

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

10 ppb Graphite

Afternoon Rig Activity:

Drilling ahead and sliding as needed in the vertical section. Pumping a 10 bbl LCM sweep every connection. Added 10 ppb Graphite to the sweeps to improve lubricity. Raised the mud wt. to 9.6 ppg. Adding Lime to maintian the alkalinity. Maintianing the chlorides content with additions of CaCL2. Changed 2 worn shale shaker screens. Completed repairs to the mud pumps.

05/19/21 **Report #8**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

14.1° **11,749' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**640 ft**	**11,977 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**37 ft/hr**	**Drilling Curve**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**705 gpm**	**3,676 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-9.8	**5-16**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**
				5/19/21		5/18/21
Time Sample Taken				2:00		12:00
Sample Location				Suction		suction
Flowline Temperature °F				190 °F		195 °F
Depth (ft)				11,593'		11,610'
Mud Weight (ppg)				9.7		9.6
Funnel Vis (sec/qt)			@ 171 °F	45		44
600 rpm				40		40
300 rpm				25		25
200 rpm				17		18
100 rpm				15		14
6 rpm				6		6
3 rpm				5		5
Plastic Viscosity (cp)			@ 150 °F	15		15
Yield Point (lb/100 ft²)			T0 = 4	10		10
Gel Strength (lb/100 ft²)			10 sec/10 min	5/9		6/9
Gel Strength (lb/100 ft^2)			30 min	12		12
HTHP Filtrate (cm/30 min)			@ 300 °F	8.0		8.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				12.5%		12.3%
Corrected Solids (vol%)				10.4%		10.3%
Retort Oil Content				64.7%		65.7%
Retort Water Content				22.8%		22%
O/W Ratio				74:26		75:25
Whole Mud Chlorides (mg/L)				52,000		51,000
Water Phase Salinity (ppm)				263,424		266,599
Whole Mud Alkalinity, Pom				1.9		2.2
Excess Lime (lb/bbl)				2.5 ppb		2.9 ppb
Electrical Stability (volts)				448 v		454 v
Average Specific Gravity of Solids				2.98		2.92
Percent Low Gravity Solids				6.6%		6.9%
ppb Low Gravity Solids				55 ppb		57 ppb
Percent Barite				3.8%		3.3%
ppb Barite				54 ppb		48 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin	0	M.Meehan

MUD VOLUME (BBL)

In Pits	659 bbl
In Hole	1087 bbl
Active	1746 bbl
Storage	1154 bbl
Tot. on Location	2900 bbl

PUMP #1

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	110
gal/min	353

PUMP #2

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	110
gal/min	353

RISER BOOSTER

Liner Size	5.25
Stroke	12
bbl/stk	0.0763
stk/min	
gal/min	0

PHHP = 1512 **CIRCULATION DATA** n = 0.678 K = 185.783

Bit Depth = 11,977 ' | Washout = 2% | Pump Efficiency = 95%

Drill String Disp.							
85.8 bbl	Volume to Bit	209.2 bbl	Strokes To Bit	2,741	Time To Bit	12 min
	Bottoms Up Vol.	878.3 bbl	BottomsUp Stks	11,509	BottomsUp Time	52 min
	TotalCirc.Vol.	1746.5 bbl	TotalCirc.Stks	22,887	Total Circ. Time	104 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	5.000	4.276	11,590'	0'
Hevi Wt	5.000	3.000	277'	11,590'
Collars	8.000	3.250	71'	11,867'
Dir. BHA	8.000	2.250	39'	11,938'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4	9.950	3,018'	0'
Int. Csg.				0'
Washout 1				
Washout 2				
Open Hole Size	10.073		11,977'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
9.95x5	3,018'	233.5	lam	9.95
10.073x5	11,590'	226.0	lam	9.96
10.073x5	11,867'	226.0	lam	10.01
10.073x8	11,938'	461.3	turb	10.06
10.073x8	11,977'	461.3	turb	10.11

BIT DATA Manuf./Type ULTERA 613

Size	Depth In	Hours	Footage	ROP ft/hr
9 7/8	2,938 ft	95.0	9,039 ft	95.1

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	170	22.0
Shaker 2	170	22.0
Shaker 3	170	22.0
NOV Dryers	170	22.0
Centrifuge 1		2.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3023.6
Transferred In(+)/Out(-)	
Oil Added (+)	174.3
Barite Added (+)	3.1
Other Product Usage (+)	8.6
Water Added (+)	37.4
Left on Cuttings (-)	-63.1
Non-Recoverable Vol. (-)	-149.5
Seepage Losses	-133.9
Est. Total on Location	2900.5
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
1.07	200 psi	16	16	16
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14
538 lbs	152			

Motor/MWD	Calc. Circ. Pressure
1,550 psi	3,685 psi

Remarks/Recommendations:

OBM RECEIVED: 2460bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 1813bbls

Averaged 5.5bbls/Hr lost to Seepage

Mud Pump #3 Down

MWD Temp: 237 Degrees

Rig Activity:

Drill the intermediate section from 11,337'MD to KOP at 11,700'MD 11,511'TVD. Drilling/ sliding on the build section to 11,977'MD at rpt time. Pumped 10bbl LCM laden sweeps every stand, sweeps consisted of 2.5-ppb MagmaFiber Fine, NewCarb Med, NewPhalt and Graphite was also added to aide in lubricity. Diesel and H2O as needed to maintain MW at 9.6ppg, offset evaporation and ROC. Began pumping 10bbls of active whole mud laden with 6-ppb Graphite hourly for lubricity. Had to space out and shut the well in to take shelter for one hour due to weather in the area at 19:22hrs.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	2	1	1	2	1

	Daily Total	Cumulative Cost
	$12,427.39	**$81,781.06**
INCLUDING 3RD PARTY CHARGES	**$30,187.19**	**$179,186.90**

05/20/21 **Report #9**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

10.6° **5,639' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**8 ft**	**11,985 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**Run Casing**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ 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	630 bbl	Liner Size	5.25	Liner Size	5.25	Liner Size	5.25
8.5-11	**5-20**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**	In Hole	1148 bbl	Stroke	12	Stroke	12	Stroke	12
				5/19/21		5/19/21	Active	1139 bbl	bbl/stk	0.0763	bbl/stk	0.0763	bbl/stk	0.0763
Time Sample Taken				2:00		12:00	Storage	1095 bbl	stk/min		stk/min		stk/min	
Sample Location				Suction		suction	Tot. on Location	2873 bbl	gal/min	0	gal/min	0	gal/min	0
Flowline Temperature °F				190 °F		195 °F	PHHP = 0		**CIRCULATION DATA**				n = 0.726	K = 143.451
Depth (ft)				11,593'		11,985'	Bit Depth = 5,740 '		Washout = 4%				Pump Efficiency = 95%	
Mud Weight (ppg)				9.9		9.7	Drill String Disp.	Volume to Bit 263.6 bbl	Strokes To Bit				Time To Bit	
Funnel Vis (sec/qt)		@ 111 °F		54		47		Bottoms Up Vol. 245.0 bbl	BottomsUp Stks				BottomsUp Time	
600 rpm				43		41	60.6 bbl	TotalCirc.Vol. 1138.6 bbl	TotalCirc.Stks				Total Circ. Time	
300 rpm				26		25	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**	
200 rpm				20		18	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours
100 rpm				17		14	Casing	7.625	6.875	5,740'	0'		Shaker 1	170	12.0
6 rpm				6		6					5,740'		Shaker 2	170	12.0
3 rpm				5		5					5,740'		Shaker 3	170	12.0
Plastic Viscosity (cp)		@ 150 °F		17		16					5,740'		NOV Dryers	170	12.0
Yield Point (lb/100 ft²)		T0 = 4		9		9	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		6/9		6/9	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		
Gel Strength (lb/100 ft^2)		30 min		11		12	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)		@ 300 °F		8.0		8.0	Surface	10 3/4	9.950	3,018'	0'		Prev. Total on Location		2900.5
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.				0'		Transferred In(+)/Out(-)		
Retort Solids Content				13.3%		12.5%	Washout 1						Oil Added (+)		25.5
Corrected Solids (vol%)				11.2%		10.5%	Washout 2						Barite Added (+)		6.1
Retort Oil Content				63.5%		64.5%	Open Hole Size	10.270	11,985'				Other Product Usage (+)		0.0
Retort Water Content				23.2%		23%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		
O/W Ratio				73:27		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-0.8
Whole Mud Chlorides (mg/L)				52,000		52,000							Non-Recoverable Vol. (-)		-32.8
Water Phase Salinity (ppm)				260,063		261,733							Seepage Losses		-25.0
Whole Mud Alkalinity, Pom				1.7		2.0	9.95x7.625	3,018'	0.0	lam	9.90		Est. Total on Location		2873.5
Excess Lime (lb/bbl)				2.2 ppb		2.6 ppb	10.27x7.625	5,740'	0.0	lam	9.90		Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				436 v		450 v							**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.04		2.97							Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				6.8%		6.7%							0.00	psi	16 16 16
ppb Low Gravity Solids				56 ppb		55 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	14 14 14
Percent Barite				4.4%		3.7%									14 14 14
ppb Barite				63 ppb		53 ppb	**BIT DATA**		Manuf./Type	ULTERA 613			0 lbs	0	
Estimated Total LCM in System		ppb					Size	Depth In	Hours	Footage	ROP ft/hr		Motor/MWD		Calc. Circ. Pressure
Sample Taken By				R. Bowlin	0	M.Meehan	9 7/8	2,938 ft	96.0	9,047 ft	94.2		psi		

Remarks/Recommendations:

OBM RECEIVED: 2460bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 1725bbls

Rig Activity:

Drilled to intermediate section TD at 11,985'MD. Pumped (2) 30bbl LCM laden sweeps as the clean-up cycle. Pumped slug and TOOH laying down the 5" drill string. RU Express casing crew and ran the 7.625" casing to 5,740'MD at the time of the am report. Reserve OBM 9.5ppg has been ordered and will be received today.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	
$4,411.00	**$86,192.06**

W P Y E C g G H O
1 1 1 1 2 1 1 2 1

INCLUDING 3RD PARTY CHARGES	**$6,885.01**	**$186,071.91**

5/20/2021 **Report 9 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

13.9° **11,747' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**11,985 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**		**Cementing**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**		

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-11	**5-20**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:00		11:00
Sample Location		Suction		suction
Flowline Temperature °F				
Depth (ft)		11,985'		11,985'
Mud Weight (ppg)		9.9		9.8
Funnel Vis (sec/qt)	@ 111 °F	54		50
600 rpm		43		42
300 rpm		26		26
200 rpm		20		19
100 rpm		17		16
6 rpm		6		6
3 rpm		5		5
Plastic Viscosity (cp)	@ 150 °F	17		16
Yield Point (lb/100 ft²)	T0 = 4	9		10
Gel Strength (lb/100 ft²)	10 sec / 10 min	6/9		6/9
Gel Strength (lb/100 ft2)	30 min	11		12
HTHP Filtrate (cm/30 min)	@ 300 °F	8.0		8.0
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		13.3%		13%
Corrected Solids (vol%)		11.2%		11%
Retort Oil Content		63.5%		64%
Retort Water Content		23.2%		23%
O/W Ratio		73:27		74:26
Whole Mud Chlorides (mg/L)		52,000		52,000
Water Phase Salinity (ppm)		260,063		261,733
Whole Mud Alkalinity, Pom		1.7		1.7
Excess Lime (lb/bbl)		2.2 ppb		2.2 ppb
Electrical Stability (volts)		436 v		424 v
Average Specific Gravity of Solids		3.04		2.98
Percent Low Gravity Solids		6.8%		7%
ppb Low Gravity Solids		56 ppb		57 ppb
Percent Barite		4.4%		4%
ppb Barite		63 ppb		57 ppb
Estimated Total LCM in System				
Sample Taken By		R. Bowlin		M.Meehan

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	630 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	1083 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1711 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	1095 bbl	stk/min		stk/min		stk/min	
Tot. on Location	2808 bbl	gal/min		gal/min		gal/min	

Mud Wt. = 9.9 PV=17 YP=9 **CIRCULATION DATA** n = 0.726 K = 143.5

Bit Depth = 11,974 ' | Washout = 4% | Pump Efficiency = 95%

Drill String Disp.	Volume to Bit	549.8 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	531.6 bbl	BottomsUp Stks	BottomsUp Time
126.5 bbl	TotalCirc.Vol.	1711.5 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Casing	7.625	6.875	11,974'	
				11,974'
				11,974'
				11,974'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4	9.950	3,018'	
Int. Csg.				
Washout 1				
Washout 2				
Open Hole Size	10.270		11,985'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
9.95x7.625	3,018'		lam	9.90
10.27x7.625	11,974'		lam	9.90

BIT DATA Manuf./Type ULTERA 613

Size	Depth In	Hours	Footage	ROP ft/hr
9 7/8	2,938 ft	96.0	9,047 ft	94.2

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2873.5
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Non-Recoverable Vol. (-)	
Seepage Losses	-65.9
Est. Total on Location	2807.6
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
		16	16	16
Bit Impact Force	Nozzle Velocity (ft/sec)	14	14	14
		14	14	14

Motor/MWD	Calc. Circ. Pressure
	211 psi

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

Afternoon Rig Activity:

Ran casing to bottom. Circulated the casing. Rigged up cementers. Cementing in casing. Receiving OBM from the Madisonville warehouse. Received mud chemicals for the next hole section. Reduced pump liners to 4.75. Changed shale shaker screens to 200 mesh.

05/21/21 **Report #10**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

8.0° **2,987' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**11,985 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**Pick Up DP**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**0 gpm**	

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-11	**5-20**	**8-12**	**>400**	**±250K**	**<10 <15**	**<8**
				5/21/21		5/20/21
Time Sample Taken				2:30		11:00
Sample Location				Suction		suction
Flowline Temperature °F						
Depth (ft)				11,985'		11,985'
Mud Weight (ppg)				10.0		9.8
Funnel Vis (sec/qt)			@ 104 °F	60		50
600 rpm				48		42
300 rpm				29		26
200 rpm				21		19
100 rpm				18		16
6 rpm				7		6
3 rpm				6		5
Plastic Viscosity (cp)			@ 150 °F	19		16
Yield Point (lb/100 ft²)			T0 = 5	10		10
Gel Strength (lb/100 ft²)			10 sec/10 min	7/10		6/9
Gel Strength (lb/100 ft^2)			30 min	13		12
HTHP Filtrate (cm/30 min)			@ 300 °F	8.0		8.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				13.8%		13%
Corrected Solids (vol%)				11.7%		11%
Retort Oil Content				62.7%		64%
Retort Water Content				23.5%		23%
O/W Ratio				73:27		74:26
Whole Mud Chlorides (mg/L)				53,000		52,000
Water Phase Salinity (ppm)				261,258		261,733
Whole Mud Alkalinity, Pom				1.6		1.7
Excess Lime (lb/bbl)				2.1 ppb		2.2 ppb
Electrical Stability (volts)				408 v		424 v
Average Specific Gravity of Solids				3.04		2.98
Percent Low Gravity Solids				7.1%		7%
ppb Low Gravity Solids				58 ppb		57 ppb
Percent Barite				4.6%		4%
ppb Barite				66 ppb		57 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin	0	M.Meehan

MUD VOLUME (BBL)

In Pits	784 bbl
In Hole	531 bbl
Active	904 bbl
Storage	1874 bbl
Tot. on Location	3189 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

CIRCULATION DATA

PHHP = 0 n = 0.727 K = 158.853

Bit Depth = 3,030 ' Washout = 2% Pump Efficiency = 95%

Drill String Disp.				
19.3 bbl	Volume to Bit	41.5 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	78.3 bbl	BottomsUp Stks	BottomsUp Time
	TotalCirc.Vol.	903.5 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	2,844'	0'
Agitator	5.250	2.250	46'	2,844'
Collars	5.250	2.750	92'	2,890'
Dir. BHA	5.000	2.000	48'	2,982'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Washout 1				
Washout 2				
Open Hole Size		6.885	11,985'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	2,844'	0.0	lam	10.00
6.875x5.25	2,890'	0.0	lam	10.00
6.875x5.25	2,982'	0.0	lam	10.00
6.875x5	3,030'	0.0	lam	10.00

BIT DATA Manuf./Type SEC 64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	11,985 ft			

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	12.0
Shaker 2	200	12.0
Shaker 3	200	12.0
NOV Dryers	170	12.0
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2873.5
Transferred In(+)/Out(-)	407.0
Oil Added (+)	4.0
Barite Added (+)	0.0
Other Product Usage (+)	0.0
Water Added (+)	
Left on Cuttings (-)	0.0
Non-Recoverable Vol. (-)	-22.1
Seepage Losses	-72.5
Est. Total on Location	3189.9
Est. Losses/Gains (-)/(+)	-1.2

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.00	psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
0 lbs	0			

Motor/MWD	Calc. Circ. Pressure
psi	

Remarks/Recommendations:

OBM RECEIVED: 3046bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2655bbls

Rig Activity:

Ran casing to bottom without issue, no tight hole or drag observed, wash the landing joint setting the shoe at 11,974'MD. RU Nine while circ the casing vol to ensure the well was free of solids. Cemented with full returns, observed 40bbls of spacer and 39bbls of cement back to surface. Redressed the rig shakers with API-200's. PU the 6.75" directional BHA, began to pick up the 4.5" drill string and run in the hole. Running in the hole at 3,030'MD at RPT time. Received 407bbls of 9.5ppg as res vol for the lateral section. Any adjustments to the MW will be made while circulating. Chemical treatments will be made to maintain the drilling fluid while circ.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W P Y E C g G H O
1 1 1 1 2 1 1 2 1

	Daily Total	Cumulative Cost
	$9,149.64	**$95,341.70**
INCLUDING 3RD PARTY CHARGES	**$9,540.03**	**$195,611.94**

05/22/21 **Report #11**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

33.1° **12,217' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**538 ft**	**12,523 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**141 ft/hr**	**Drilling Curve**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**404 gpm**	**5,586 psi**

MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	845 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-11	**5-20**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**	In Hole	504 bbl	Stroke	12	Stroke	12	Stroke	12
				5/22/21		5/21/21	Active	1349 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				1:30		11:00	Storage	1874 bbl	stk/min	77	stk/min	77	stk/min	
Sample Location				Suction		suction	Tot. on Location	3223 bbl	gal/min	202	gal/min	202	gal/min	0

Flowline Temperature °F				170 °F			PHHP = 1317		**CIRCULATION DATA**						n = 0.692	K = 177.275
Depth (ft)				12,350'		11,985'	Bit Depth = 12,523 '			Washout = 2%			Pump Efficiency = 95%			
Mud Weight (ppg)				9.7		10.0	Drill String Disp.	Volume to Bit	176.5 bbl	Strokes To Bit	2,826		Time To Bit	18 min		
Funnel Vis (sec/qt)			@ 152 °F	52		57		Bottoms Up Vol.	327.5 bbl	BottomsUp Stks	5,243		BottomsUp Time	34 min		
600 rpm				42		46	71.0 bbl	TotalCirc.Vol.	1349.4 bbl	TotalCirc.Stks	21,603		Total Circ. Time	140 min		
300 rpm				26		28	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**			
200 rpm				18		20	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours	
100 rpm				13		16	Drill Pipe	4.500	3.826	12,337'	0'		Shaker 1	200	13.0	
6 rpm				6		6	Agitator	5.250	2.250	46'	12,337'		Shaker 2	200	13.0	
3 rpm				5		5	Collars	5.250	2.750	92'	12,383'		Shaker 3	200	13.0	
Plastic Viscosity (cp)			@ 150 °F	16		18	Dir. BHA	5.000	2.000	48'	12,475'		NOV Dryers	170	13.0	
Yield Point (lb/100 ft²)			T0 = 4	10		10	**CASING & HOLE DATA**									
Gel Strength (lb/100 ft²)			10 sec/10 min	6/9		7/10	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		3.0	
Gel Strength (lb/100 ft^2)			30 min	11		13	Riser						**VOLUME ACCOUNTING (bbls)**			
HTHP Filtrate (cm/30 min)			@ 300 °F	6.8		7.2	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3189.9	
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)			
Retort Solids Content				12.3%		13.5%	Washout 1						Oil Added (+)		78.0	
Corrected Solids (vol%)				10%		11.4%	Washout 2						Barite Added (+)		0.0	
Retort Oil Content				62.3%		63%	Open Hole Size		6.885	12,523'			Other Product Usage (+)		15.1	
Retort Water Content				25.4%		23.5%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)			
O/W Ratio				71:29		73:27	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-24.8	
Whole Mud Chlorides (mg/L)				57,000		53,000							Non-Recoverable Vol. (-)		-34.9	
Water Phase Salinity (ppm)				260,296		261,258										
Whole Mud Alkalinity, Pom				1.6		1.7	6.875x4.5	11,974'	366.6	turb	10.82		Est. Total on Location		3223.4	
Excess Lime (lb/bbl)				2.1 ppb		2.2 ppb	6.885x4.5	12,337'	364.7	turb	10.98		Est. Losses/Gains (-)/(+)		0.0	
Electrical Stability (volts)				365 v		425 v	6.885x5.25	12,383'	499.1	turb	11.13		**BIT HYDRAULICS DATA**			
Average Specific Gravity of Solids				2.96		3.09	6.885x5.25	12,475'	499.1	turb	11.28		Bit H.S.I.	Bit ΔP	Nozzles (32nds)	
Percent Low Gravity Solids				6.5%		6.6%	6.885x5	12,523'	442.0	turb	11.42		0.43	66 psi	18 18 18	
ppb Low Gravity Solids				53 ppb		54 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18	
Percent Barite				3.5%		4.8%										
ppb Barite				50 ppb		69 ppb	**BIT DATA**		Manuf./Type		SEC 64M		176 lbs	87		
Estimated Total LCM in System			ppb				Size	Depth In	Hours	Footage	ROP ft/hr		Motor/MWD		Calc. Circ. Pressure	
Sample Taken By				R. Bowlin	0	M.Meehan	6 3/4	11,878 ft	13.0	645 ft	49.6		3,500 psi		5,539 psi	

Remarks/Recommendations:

OBM RECEIVED: 3046bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2719bbls

MWD Temp: 275 Degrees

Rig Activity:

PU up the 4.5" DP running in the hole, tag float at 11,878'MD, drilled the shoe track plus 10' of new formation. Perf a FIT to 12.6ppg EMW with 9.9ppg MW at 1,660PSI. Drilled the build section to 12523MD at the time of the am report. Made the necessary chemical additions to the drilling fluid reconditioning to within the recommended lateral parameters. No LCM laden sweeps while drilling the build section, planned sweeps to resume once landed at 10bbls every other stand. Making additions of CaCl2 to increase the WPS, no H2O additions currently due to increased H2O % from incorporated H2O from the cement job. MW at 9.65ppg Increasing to 9.8ppg due to 10bbl influx

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	
					$4,494.28	**$99,835.98**

W P Y E C g G H O
1 1 1 0 0 1 1 2 1

INCLUDING 3RD PARTY CHARGES	$11,722.91	$207,334.85

5/22/2021 **Report 11 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

33.1° **12,231' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**17 ft**	**12,540 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**		**Circulate**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**391 gpm**	**4,406 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-11	**5-20**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**

MUD PROPERTIES				
Time Sample Taken		1:30		13:00
Sample Location		Suction		suction
Flowline Temperature °F		170 °F		170 °F
Depth (ft)		12,350'		12,540'
Mud Weight (ppg)		9.7		11.0
Funnel Vis (sec/qt)	@ 152 °F	52		53
600 rpm		42		50
300 rpm		26		30
200 rpm		18		22
100 rpm		13		17
6 rpm		6		7
3 rpm		5		6
Plastic Viscosity (cp)	@ 150 °F	16		20
Yield Point (lb/100 ft²)	T0 = 4	10		10
Gel Strength (lb/100 ft²)	10 sec / 10 min	6/9		7/10
Gel Strength (lb/100 ft2)	30 min	11		13
HTHP Filtrate (cm/30 min)	@ 300 °F	6.8		6.8
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		12.3%		17%
Corrected Solids (vol%)		10%		14.8%
Retort Oil Content		62.3%		58%
Retort Water Content		25.4%		25%
O/W Ratio		71:29		70:30
Whole Mud Chlorides (mg/L)		57,000		57,000
Water Phase Salinity (ppm)		260,296		263,364
Whole Mud Alkalinity, Pom		1.6		1.7
Excess Lime (lb/bbl)		2.1 ppb		2.2 ppb
Electrical Stability (volts)		365 v		402 v
Average Specific Gravity of Solids		2.96		3.35
Percent Low Gravity Solids		6.5%		6.4%
ppb Low Gravity Solids		53 ppb		52 ppb
Percent Barite		3.5%		8.4%
ppb Barite		50 ppb		120 ppb
Estimated Total LCM in System				
Sample Taken By		R. Bowlin		M.Meehan

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	831 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	505 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1336 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	1874 bbl	stk/min	72	stk/min	77	stk/min	
Tot. on Location	3210 bbl	gal/min	189	gal/min	202	gal/min	

Mud Wt. = 9.7 PV=16 YP=10 **CIRCULATION DATA** n = 0.692 K = 177.3

Bit Depth = 12,540 ' Washout = 2% Pump Efficiency = 95%

Drill String Disp.							
71.1 bbl	Volume to Bit	176.8 bbl	Strokes To Bit	2,830	Time To Bit	19 min
	Bottoms Up Vol.	328.0 bbl	BottomsUp Stks	5,250	BottomsUp Time	35 min
	TotalCirc.Vol.	1335.7 bbl	TotalCirc.Stks	21,383	Total Circ. Time	144 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	12,354'	
Agitator	5.250	2.250	46'	12,354'
Collars	5.250	2.750	92'	12,400'
Dir. BHA	5.000	2.000	48'	12,492'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.885		12,540'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,974'	354.7	turb	10.63
6.885x4.5	12,354'	352.9	turb	10.65
6.885x5.25	12,400'	482.9	turb	10.66
6.885x5.25	12,492'	482.9	turb	10.67
6.885x5	12,540'	427.7	turb	10.67

BIT DATA Manuf./Type SEC 64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	11,878 ft	25.0	662 ft	26.5

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3223.4
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	86.8
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	-0.8
Non-Recoverable Vol. (-)	
Lost Returns (-)	-99.8
Est. Total on Location	3209.7
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.39	61 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
165 lbs	84			

Motor/MWD	Calc. Circ. Pressure
2,500 psi	4,426 psi

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

Afternoon Rig Activity:

Continue circulating and weighting up the mud in increments from 9.6ppg to 11.0 ppg. Pullled up to the shoe. Circulating and mixing the mud cap to spot at the shoe prior to POOH to change the assembly.

05/23/21 **Report #12**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

8.5° **2,912' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**17 ft**	**12,540 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**TOOH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**0 gpm**	**psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-11	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**
				5/23/21		5/22/21
Time Sample Taken				1:00		13:00
Sample Location				Suction		suction
Flowline Temperature °F						170 °F
Depth (ft)				12,540'		12,540'
Mud Weight (ppg)				11.0		11.0
Funnel Vis (sec/qt)			@ 118 °F	56		53
600 rpm				53		50
300 rpm				32		30
200 rpm				24		22
100 rpm				16		17
6 rpm				6		7
3 rpm				5		6
Plastic Viscosity (cp)			@ 150 °F	21		20
Yield Point (lb/100 ft²)			T0 = 4	11		10
Gel Strength (lb/100 ft²)			10 sec/10 min	6/9		7/10
Gel Strength (lb/100 ft^2)			30 min	12		13
HTHP Filtrate (cm/30 min)			@ 300 °F	6.4		6.8
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				16.9%		17%
Corrected Solids (vol%)				14.7%		14.8%
Retort Oil Content				58.2%		58%
Retort Water Content				24.9%		25%
O/W Ratio				70:30		70:30
Whole Mud Chlorides (mg/L)				55,000		57,000
Water Phase Salinity (ppm)				257,259		263,364
Whole Mud Alkalinity, Pom				1.0		1.7
Excess Lime (lb/bbl)				1.3 ppb		2.2 ppb
Electrical Stability (volts)				358 v		402 v
Average Specific Gravity of Solids				3.37		3.35
Percent Low Gravity Solids				6.1%		6.4%
ppb Low Gravity Solids				50 ppb		52 ppb
Percent Barite				8.6%		8.4%
ppb Barite				123 ppb		120 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				R. Bowlin	0	M.Meehan

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	720 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	557 bbl	Stroke	12	Stroke	12	Stroke	12
Active	837 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	2014 bbl	stk/min	0	stk/min	0	stk/min	
Tot. on Location	3291 bbl	gal/min	0	gal/min	0	gal/min	0

CIRCULATION DATA					
PHHP = 0					n = 0.728 K = 174.263
Bit Depth = 2,955 '			Washout = 2%		Pump Efficiency = 95%
Drill String Disp.	Volume to Bit	40.5 bbl	Strokes To Bit		Time To Bit
	Bottoms Up Vol.	76.3 bbl	BottomsUp Stks		BottomsUp Time
18.9 bbl	TotalCirc.Vol.	836.8 bbl	TotalCirc.Stks		Total Circ. Time

DRILLING ASSEMBLY DATA				
Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	2,769'	0'
Agitator	5.250	2.250	46'	2,769'
Collars	5.250	2.750	92'	2,815'
Dir. BHA	5.000	2.000	48'	2,907'

CASING & HOLE DATA				
Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Washout 1				
Washout 2				
Open Hole Size		6.885	12,540'	

ANNULAR GEOMETRY & RHEOLOGY				
annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	2,769'	0.0	lam	11.00
6.875x5.25	2,815'	0.0	lam	11.00
6.875x5.25	2,907'	0.0	lam	11.00
6.875x5	2,955'	0.0	lam	11.00

BIT DATA						
	Manuf./Type		SEC 64M			
Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
6 3/4	11,878 ft	14.0	662 ft	47.3	psi	

SOLIDS CONTROL		
Unit	Screens	Hours
Shaker 1	200	24.0
Shaker 2	200	24.0
Shaker 3	200	24.0
NOV Dryers	170	24.0
Centrifuge 1		2.0

VOLUME ACCOUNTING (bbls)	
Prev. Total on Location	3223.4
Transferred In(+)/Out(-)	
Oil Added (+)	17.5
Barite Added (+)	141.6
Other Product Usage (+)	4.8
Water Added (+)	
Left on Cuttings (-)	-0.8
Non-Recoverable Vol. (-)	-27.5
Seepage	-68.2
Est. Total on Location	3291.0
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA					
Bit H.S.I.	Bit ΔP	Nozzles (32nds)			
0.00	psi	18	18	18	
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18	
0 lbs	0				

Remarks/Recommendations:

OBM RECEIVED: 3046bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2734bbls

Max Drill Gas 2766 units

Last Recorded MWD Temp: 275 Degrees

Rig Activity:

Circ out the influx increasing the MW to 10.3-10.5-10.7ppg a final MW @ 11.0ppg to control the formation pressures. The decision was made to make a BHA trip due to current BHA not yielding the necessary build rates, projections would have placed lateral positioning 40' below targeted landing. Stripped out of the hole to 11,700'MD and spotted 143bbls of 16.5ppg kill mud. Stripped out of the hole to 8,590'MD, performed a flow check, no flow pumped the slug. TOOH to 7,160'MD the hole was indicating flow not taking fill. Stripped back in the hole to 8,537', circ out kill/slug. Lost 32bbls while circulating the kill mud out, diverted 99.6bbls to the open tops 11.4-13.1ppg. Building 18.0ppg kill.

Eng. 1:	Matt Meehan	Eng. 2:	Rob Bowlin	WH 1:	MIDLAND	WH 2:	WH #2	Rig Phone:
Phone:		Phone:	956-821-9994	Phone:	432-686-7361	Phone:	-	

W	P	Y	E	C	g	G	H	O
1	1	1	0	0	1	1	2	1

	Daily Total	Cumulative Cost
	$17,811.63	**$117,647.61**
INCLUDING 3RD PARTY CHARGES	**$19,270.21**	**$226,605.06**

5/24/2021 **Report 12 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

7.4° **952' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**12,540 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H	**248**	**TEXAS**	**05/13/21**		**M/U BHA**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**		

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-11	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**

MUD PROPERTIES				
Time Sample Taken		1:00		11:00
Sample Location		Suction		suction
Flowline Temperature °F				
Depth (ft)		12,540'		12,540'
Mud Weight (ppg)		11.0		11.0
Funnel Vis (sec/qt)	@ 118 °F	56		55
600 rpm		53		53
300 rpm		32		32
200 rpm		24		23
100 rpm		16		16
6 rpm		6		6
3 rpm		5		5
Plastic Viscosity (cp)	@ 150 °F	21		21
Yield Point (lb/100 ft²)	T0 = 4	11		11
Gel Strength (lb/100 ft²)	10 sec / 10 min	6/9		7/10
Gel Strength (lb/100 ft2)	30 min	12		13
HTHP Filtrate (cm/30 min)	@ 300 °F	6.4		6.4
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		16.9%		17%
Corrected Solids (vol%)		14.7%		14.8%
Retort Oil Content		58.2%		58%
Retort Water Content		24.9%		25%
O/W Ratio		70:30		70:30
Whole Mud Chlorides (mg/L)		55,000		57,000
Water Phase Salinity (ppm)		257,259		263,364
Whole Mud Alkalinity, Pom		1.0		2.5
Excess Lime (lb/bbl)		1.3 ppb		3.3 ppb
Electrical Stability (volts)		358 v		397 v
Average Specific Gravity of Solids		3.37		3.35
Percent Low Gravity Solids		6.1%		6.4%
ppb Low Gravity Solids		50 ppb		52 ppb
Percent Barite		8.6%		8.4%
ppb Barite		123 ppb		120 ppb
Estimated Total LCM in System				
Sample Taken By		R. Bowlin		M.Meehan

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	699 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	568 bbl	Stroke	12	Stroke	12	Stroke	12
Active	735 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	2014 bbl	stk/min		stk/min		stk/min	
Tot. on Location	3281 bbl	gal/min		gal/min		gal/min	

Mud Wt. = 11.0 PV=21 YP=11 **CIRCULATION DATA** n = 0.728 K = 174.3

Bit Depth = 953 ' | Washout = 2% | Pump Efficiency = 95%

Drill String Disp.	Volume to Bit	12.0 bbl	Strokes To Bit		Time To Bit	
	Bottoms Up Vol.	23.8 bbl	BottomsUp Stks		BottomsUp Time	
8.0 bbl	TotalCirc.Vol.	734.8 bbl	TotalCirc.Stks		Total Circ. Time	

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	767'	
Agitator	5.250	2.250	46'	767'
Collars	5.250	2.750	92'	813'
Dir. BHA	5.000	2.000	48'	905'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.885		12,540'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	767'		lam	11.00
6.875x5.25	813'		lam	11.00
6.875x5.25	905'		lam	11.00
6.875x5	953'		lam	11.00

BIT DATA Manuf./Type SEC 64M

Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
6 3/4	12,540 ft					24 psi

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3291.0
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Non-Recoverable Vol. (-)	-10.1
Seepage	
Est. Total on Location	3280.9
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
		18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

Afternoon Rig Activity:

Continue to POOH. Laid down BHA. The bit was left downhole. Making up sidetrack assembly to sidetrack the well. Mixed kill mud and transferred it to frac tanks for later use. Treated the system with Optimul and Lime to increase the emulsion and alkalinity.

05/24/21 **Report #13**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

9.7° **11,932' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**7 ft**	**11,997 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**3 ft/hr**	**Troughing**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**247 gpm**	**2,798 psi**

MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	641 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-11	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**	In Hole	483 bbl	Stroke	12	Stroke	12	Stroke	12
				5/24/21		5/23/21	Active	1123 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				2:00		11:00	Storage	2271 bbl	stk/min	47	stk/min	47	stk/min	
Sample Location				Suction		suction	Tot. on Location	3394 bbl	gal/min	123	gal/min	123	gal/min	0
Flowline Temperature °F				149 °F			PHHP = 403		**CIRCULATION DATA**				n = 0.737	K = 154.411
Depth (ft)				11,994'		12,540'	Bit Depth = 11,997 '		Washout = 2%				Pump Efficiency = 95%	
Mud Weight (ppg)				11.0		11.0	Drill String Disp.	Volume to Bit 169.0 bbl	Strokes To Bit	2,706			Time To Bit	29 min
Funnel Vis (sec/qt)		@ 126 °F		50		55		Bottoms Up Vol. 313.6 bbl	BottomsUp Stks	5,021			BottomsUp Time	53 min
600 rpm				50		53	68.2 bbl	TotalCirc.Vol. 1123.4 bbl	TotalCirc.Stks	17,984			Total Circ. Time	191 min
300 rpm				30		32	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**	
200 rpm				21		23	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours
100 rpm				13		16	Drill Pipe	4.500	3.826	11,811'	0'		Shaker 1	200	20.0
6 rpm				6		6	Agitator	5.250	2.250	46'	11,811'		Shaker 2	200	20.0
3 rpm				5		5	Collars	5.250	2.750	92'	11,857'		Shaker 3	200	20.0
Plastic Viscosity (cp)		@ 150 °F		20		21	Dir. BHA	5.000	2.000	48'	11,949'		NOV Dryers	170	20.0
Yield Point (lb/100 ft²)		T0 = 4		10		11	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		5/9		7/10	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		1.0
Gel Strength (lb/100 ft^2)		30 min		11		13	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)		@ 300 °F		6.0		6.4	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3291.0
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		
Retort Solids Content				17.3%		17%	Washout 1						Oil Added (+)		101.1
Corrected Solids (vol%)				15.1%		14.8%	Washout 2						Barite Added (+)		58.9
Retort Oil Content				60.4%		58%	Open Hole Size	6.885	11,997'				Other Product Usage (+)		11.5
Retort Water Content				22.3%		25%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		
O/W Ratio				73:27		70:30	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-0.3
Whole Mud Chlorides (mg/L)				54,000		57,000							Non-Recoverable Vol. (-)		-15.4
Water Phase Salinity (ppm)				275,213		263,364							Seepage		-52.3
Whole Mud Alkalinity, Pom				2.3		2.5	6.875x4.5	11,811'	223.7	lam	11.55		Est. Total on Location		3394.4
Excess Lime (lb/bbl)				3 ppb		3.3 ppb	6.875x5.25	11,857'	306.8	turb	11.55		Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				402 v		397 v	6.875x5.25	11,949'	306.8	turb	11.56		**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.34		3.35	6.875x5	11,974'	271.5	turb	11.56		Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				6.6%		6.4%	6.885x5	11,997'	269.8	turb	11.56		0.11	28 psi	18 18 18
ppb Low Gravity Solids				54 ppb		52 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18
Percent Barite				8.6%		8.4%									
ppb Barite				123 ppb		120 ppb	**BIT DATA**		Manuf./Type		SEC 64M		75 lbs	53	
Estimated Total LCM in System		ppb					Size	Depth In	Hours	Footage	ROP ft/hr		Motor/MWD		Calc. Circ. Pressure
Sample Taken By				R. Bowlin	0	M.Meehan	6 3/4	11,990 ft	6.0	7 ft	1.2		1,500 psi		2,496 psi

Remarks/Recommendations:

OBM RECEIVED: 3046bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2911bbls

Began Drill H2O at 1.97bbls 04:00hrs

MWD Temp: 250 Degrees

Rig Activity:

Tripped out of the hole, once at surface realized that the mud motor had parted at the power section leaving +/- 15' of the motor and the bit down hole. PU the 2.0 sidetrack assembly and TIH to 8,700'MD and circulated out a portion of the mud cap. Diverted 70bbls of 11.3-13.3ppg and transferred the same to frac storage for reuse. Stripped in the hole to 12,000'MD and circulated out the remaining mud cap, lost 28bbls while bring the same to surface. Diverted 144.7bbls of 11.8-14.8ppg to frac storage for reuse. Began troughing from 11,974'MD to 11,990'MD and began sidetracking the well at 1' per hour. Currently time drilling at 3'hr at 11,997'MD Active density maintained at 11.0ppg

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	
W P Y E C g G H O 1 1 1 1 1 1 1 2 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.				**$8,784.50**	**$126,432.11**
					INCLUDING 3RD PARTY CHARGES	**$18,551.86**	**$245,156.92**

5/25/2021 **Report 13 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

10.8° **12,015' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**23 ft**	**12,020 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**18 ft/hr**	**Side Tracking**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**247 gpm**	**2,748 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-11.3	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**

MUD PROPERTIES

Time Sample Taken	2:00		12:00
Sample Location	Suction		suction
Flowline Temperature °F	149 °F		150 °F
Depth (ft)	11,994'		12,020'
Mud Weight (ppg)	11.0		11.3
Funnel Vis (sec/qt) @ 126 °F	50		47
600 rpm	50		52
300 rpm	30		31
200 rpm	21		21
100 rpm	13		14
6 rpm	6		6
3 rpm	5		5
Plastic Viscosity (cp) @ 150 °F	20		21
Yield Point (lb/100 ft²) T0 = 4	10		10
Gel Strength (lb/100 ft²) 10 sec / 10 min	5/9		6/9
Gel Strength (lb/100 ft2) 30 min	11		11
HTHP Filtrate (cm/30 min) @ 300 °F	6.0		6.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	17.3%		18.3%
Corrected Solids (vol%)	15.1%		16.1%
Retort Oil Content	60.4%		59.7%
Retort Water Content	22.3%		22%
O/W Ratio	73:27		73:27
Whole Mud Chlorides (mg/L)	54,000		55,000
Water Phase Salinity (ppm)	275,213		281,620
Whole Mud Alkalinity, Pom	2.3		2.7
Excess Lime (lb/bbl)	3 ppb		3.5 ppb
Electrical Stability (volts)	402 v		396 v
Average Specific Gravity of Solids	3.34		3.41
Percent Low Gravity Solids	6.6%		6.4%
ppb Low Gravity Solids	54 ppb		52 ppb
Percent Barite	8.6%		9.7%
ppb Barite	123 ppb		140 ppb
Estimated Total LCM in System			
Sample Taken By	R. Bowlin		M.Meehan

MUD VOLUME (BBL)

In Pits	663 bbl
In Hole	484 bbl
Active	1147 bbl
Storage	2271 bbl
Tot. on Location	3418 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	47
gal/min	123

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	123

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

Mud Wt. = 11.0 PV=20 YP=10 **CIRCULATION DATA** n = 0.737 K = 154.4

Bit Depth = 12,020 ' | Washout = 2% | Pump Efficiency = 95%

Drill String Disp.							
68.3 bbl	Volume to Bit	169.4 bbl	Strokes To Bit	2,711	Time To Bit	29 min
	Bottoms Up Vol.	314.3 bbl	BottomsUp Stks	5,031	BottomsUp Time	54 min
	TotalCirc.Vol.	1146.6 bbl	TotalCirc.Stks	18,356	Total Circ. Time	195 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	11,834'	
Agitator	5.250	2.250	46'	11,834'
Collars	5.250	2.750	92'	11,880'
Dir. BHA	5.000	2.000	48'	11,972'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.885		12,020'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,834'	223.7	lam	11.57
6.875x5.25	11,880'	306.8	turb	11.60
6.875x5.25	11,972'	306.8	turb	11.62
6.875x5	11,974'	271.5	turb	11.65
6.885x5	12,020'	269.8	turb	11.67

BIT DATA Manuf./Type SEC 64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	11,990 ft	16.0	30 ft	1.9

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	12.0
Shaker 2	200	12.0
Shaker 3	200	12.0
NOV Dryers	170	12.0
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3394.4
Transferred In(+)/Out(-)	
Oil Added (+)	34.3
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	-1.1
Non-Recoverable Vol. (-)	-10.0
Seepage	
Est. Total on Location	3417.6
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.11	28 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
75 lbs	53			

Motor/MWD 1,750 psi | Calc. Circ. Pressure 2,748 psi

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

Afternoon Rig Activity:

Continue to side track the well. Raised the mud wt.to 11.3 ppg. Adding increased amounts of Lime to maintain the alkalinity, Raised the chlorides to 280k with CaCL2.

05/25/21 **Report #14**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

10.8° **12,015' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**30 ft**	**12,231 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**1 ft/hr**	**Side Tracking**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**247 gpm**	**2,631 psi**

MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	800 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**	In Hole	492 bbl	Stroke	12	Stroke	12	Stroke	12
				5/25/21		5/24/21	Active	1292 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				1:40		12:00	Storage	2271 bbl	stk/min	47	stk/min	47	stk/min	
Sample Location				Suction		suction	Tot. on Location	3563 bbl	gal/min	123	gal/min	123	gal/min	0

Flowline Temperature °F				155 °F		150 °F	PHHP = 379		**CIRCULATION DATA**						n = 0.708	K = 185.191
Depth (ft)				12,231'		12,020'	Bit Depth = 12,231 '				Washout = 2%				Pump Efficiency = 95%	
Mud Weight (ppg)				11.8		11.3	Drill String Disp.	Volume to Bit	172.4 bbl		Strokes To Bit	2,759			Time To Bit	29 min
Funnel Vis (sec/qt)			@ 140 °F	53		47		Bottoms Up Vol.	319.8 bbl		BottomsUp Stks	5,120			BottomsUp Time	54 min
600 rpm				49		52	69.4 bbl	TotalCirc.Vol.	1292.2 bbl		TotalCirc.Stks	20,686			Total Circ. Time	220 min
300 rpm				30		31	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**			
200 rpm				21		21	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours	
100 rpm				14		14	Drill Pipe	4.500	3.826	12,045'	0'		Shaker 1	200	24.0	
6 rpm				6		6	Agitator	5.250	2.250	46'	12,045'		Shaker 2	200	24.0	
3 rpm				5		5	Collars	5.250	2.750	92'	12,091'		Shaker 3	200	24.0	
Plastic Viscosity (cp)			@ 150 °F	19		21	Dir. BHA	5.000	2.000	48'	12,183'		NOV Dryers	170	24.0	
Yield Point (lb/100 ft²)			T0 = 4	11		10	**CASING & HOLE DATA**									
Gel Strength (lb/100 ft²)			10 sec/10 min	5/9		6/9	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		2.0	
Gel Strength (lb/100 ft²)			30 min	12		11	Riser						**VOLUME ACCOUNTING (bbls)**			
HTHP Filtrate (cm/30 min)			@ 300 °F	6.4		6.0	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3394.4	
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)			
Retort Solids Content				20.2%		18.3%	Washout 1						Oil Added (+)		95.3	
Corrected Solids (vol%)				18%		16.1%	Washout 2						Barite Added (+)		61.8	
Retort Oil Content				57.8%		59.7%	Open Hole Size		6.885	12,231'			Other Product Usage (+)		10.2	
Retort Water Content				22%		22%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		58.0	
O/W Ratio				72:28		73:27	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-1.4	
Whole Mud Chlorides (mg/L)				54,000		55,000							Non-Recoverable Vol. (-)		-41.2	
Water Phase Salinity (ppm)				277,923		281,620							Seepage		-13.9	
Whole Mud Alkalinity, Pom				2.5		2.7	6.875x4.5	11,974'	223.7	lam	12.36		Est. Total on Location		3563.2	
Excess Lime (lb/bbl)				3.3 ppb		3.5 ppb	6.885x4.5	12,045'	222.6	lam	12.36		Est. Losses/Gains (-)/(+)		0.0	
Electrical Stability (volts)				382 v		396 v	6.885x5.25	12,091'	304.7	turb	12.36		**BIT HYDRAULICS DATA**			
Average Specific Gravity of Solids				3.47		3.41	6.885x5.25	12,183'	304.7	turb	12.39		Bit H.S.I.	Bit ΔP	Nozzles (32nds)	
Percent Low Gravity Solids				6.4%		6.4%	6.885x5	12,231'	269.8	turb	12.39		0.12	30 psi	18 18 18	
ppb Low Gravity Solids				53 ppb		52 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18	
Percent Barite				11.6%		9.7%										
ppb Barite				166 ppb		140 ppb	**BIT DATA**		Manuf./Type		SEC 64M		80 lbs	53		
Estimated Total LCM in System			ppb				Size	Depth In	Hours	Footage	ROP ft/hr		Motor/MWD		Calc. Circ. Pressure	
Sample Taken By				R. Bowlin	0	M.Meehan	6 3/4	11,990 ft	28.0	30 ft	1.1		1,750 psi		2,806 psi	

Remarks/Recommendations:

OBM RECEIVED: 3046bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 3071bbls

MWD Temp: 243 Degrees

Rig Activity:

Unsuccessful in the first attempt to sidetrack the well bore, second attempt began troughing at 12,195'MD to 12,225'MD. At the time of the morning report time drilling at 12,231'MD. Continued diesel and drill H2O dilutions to maintain volume, cool the drilling fluid and maintain drill solids. Gradually increased the active density from 11.0-11.8ppg throughout the day tour. Minimal chemical treatments have been made to maintain the drilling fluid within the recommended parameters. LCM laden sweeps will resume once the build section has been landed.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W P Y E C g G H O
1 1 1 0 1 1 1 2 1

	Daily Total	Cumulative Cost
	$2,193.71	**$128,625.82**
INCLUDING 3RD PARTY CHARGES	**$11,518.37**	**$256,675.29**

5/26/2021 **Report 14 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

10.8° **12,015' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**19 ft**	**12,250 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**3 ft/hr**	**Side Tracking**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**247 gpm**	**2,842 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**

MUD PROPERTIES				
Time Sample Taken		1:40		11:00
Sample Location		Suction		suction
Flowline Temperature °F		155 °F		158 °F
Depth (ft)		12,231'		12,250'
Mud Weight (ppg)		11.8		11.8
Funnel Vis (sec/qt)	@ 140 °F	53		55
600 rpm		49		52
300 rpm		30		31
200 rpm		21		21
100 rpm		14		14
6 rpm		6		6
3 rpm		5		5
Plastic Viscosity (cp)	@ 150 °F	19		21
Yield Point (lb/100 ft²)	T0 = 4	11		10
Gel Strength (lb/100 ft²)	10 sec / 10 min	5/9		6/9
Gel Strength (lb/100 ft2)	30 min	12		12
HTHP Filtrate (cm/30 min)	@ 300 °F	6.4		6.4
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		20.2%		20%
Corrected Solids (vol%)		18%		17.8%
Retort Oil Content		57.8%		58%
Retort Water Content		22%		22%
O/W Ratio		72:28		73:27
Whole Mud Chlorides (mg/L)		54,000		55,000
Water Phase Salinity (ppm)		277,923		281,620
Whole Mud Alkalinity, Pom		2.5		2.5
Excess Lime (lb/bbl)		3.3 ppb		3.3 ppb
Electrical Stability (volts)		382 v		408 v
Average Specific Gravity of Solids		3.47		3.50
Percent Low Gravity Solids		6.4%		6.1%
ppb Low Gravity Solids		53 ppb		50 ppb
Percent Barite		11.6%		11.7%
ppb Barite		166 ppb		168 ppb
Estimated Total LCM in System				
Sample Taken By		R. Bowlin		M.Meehan

MUD VOLUME (BBL)

In Pits	812 bbl
In Hole	493 bbl
Active	1305 bbl
Storage	2271 bbl
Tot. on Location	3576 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	47
gal/min	123

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	123

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

Mud Wt. = 11.8 PV=19 YP=11 **CIRCULATION DATA** n = 0.708 K = 185.2

Bit Depth = 12,250 ' | Washout = 2% | Pump Efficiency = 95%

Drill String Disp.							
69.5 bbl	Volume to Bit	172.6 bbl	Strokes To Bit	2,764	Time To Bit	29 min
	Bottoms Up Vol.	320.3 bbl	BottomsUp Stks	5,128	BottomsUp Time	55 min
	TotalCirc.Vol.	1305.0 bbl	TotalCirc.Stks	20,891	Total Circ. Time	222 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	12,064'	
Agitator	5.250	2.250	46'	12,064'
Collars	5.250	2.750	92'	12,110'
Dir. BHA	5.000	2.000	48'	12,202'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.885		12,250'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,974'	223.7	lam	12.36
6.885x4.5	12,064'	222.6	lam	12.36
6.885x5.25	12,110'	304.7	turb	12.37
6.885x5.25	12,202'	304.7	turb	12.40
6.885x5	12,250'	269.8	turb	12.40

BIT DATA Manuf./Type SEC 64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	11,990 ft	48.0	49 ft	1.0

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	12.0
Shaker 2	200	12.0
Shaker 3	200	12.0
NOV Dryers	170	12.0
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3563.2
Transferred In(+)/Out(-)	
Oil Added (+)	23.9
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	-0.9
Non-Recoverable Vol. (-)	-10.2
Seepage	
Est. Total on Location	3576.0
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.12	30 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
80 lbs	53			

Motor/MWD	Calc. Circ. Pressure
1,750 psi	2,807 psi

Afternoon Remarks/Recommendations:

Pump a 10 bbl sweep every 300 ft. Sweep Contains:

10 ppb NewCarb, 10 ppb Newphalt and 10 ppb Magnafiber fine

Afternoon Rig Activity:

Continue to side track the well. Maintain the mud wt.at 11.8 ppg. Maintain the chlorides at 280k with CaCL2. Added Optimul to increase the electrical stability and emulsion.

05/26/21 **Report #15**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

5.6° **828' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**74 ft**	**12,305 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**PU BHA**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ 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	804 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**	In Hole	558 bbl	Stroke	12	Stroke	12	Stroke	12
				5/26/21		5/25/21	Active	836 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				1:00		11:00	Storage	2232 bbl	stk/min		stk/min		stk/min	
Sample Location				Suction		suction	Tot. on Location	3595 bbl	gal/min	0	gal/min	0	gal/min	0
Flowline Temperature °F						158 °F	PHHP = 0		**CIRCULATION DATA**				n = 0.700	K = 206.840
Depth (ft)				12,305'		12,250'	Bit Depth = 829 '		Washout = 2%				Pump Efficiency = 95%	
Mud Weight (ppg)				11.8		11.8	Drill String Disp.	Volume to Bit 10.5 bbl	Strokes To Bit		Time To Bit			
Funnel Vis (sec/qt)		@ 121 °F		55		55		Bottoms Up Vol. 20.7 bbl	BottomsUp Stks		BottomsUp Time			
600 rpm				52		52	6.9 bbl	TotalCirc.Vol. 835.6 bbl	TotalCirc.Stks		Total Circ. Time			
300 rpm				32		31	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**	
200 rpm				21		21	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours
100 rpm				15		14	Drill Pipe	4.500	3.826	667'	0'		Shaker 1	200	24.0
6 rpm				6		6	Agitator	5.250	2.250	24'	667'		Shaker 2	200	24.0
3 rpm				5		5	Collars	5.250	2.750	106'	691'		Shaker 3	200	24.0
Plastic Viscosity (cp)		@ 150 °F		20		21	Dir. BHA	5.000	2.000	32'	797'		NOV Dryers	170	24.0
Yield Point (lb/100 ft²)		T0 = 4		12		10	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		6/9		6/9	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		2.0
Gel Strength (lb/100 ft^2)		30 min		12		12	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)		@ 300 °F		6.4		6.4	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3563.2
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		
Retort Solids Content				20%		20%	Washout 1						Oil Added (+)		25.2
Corrected Solids (vol%)				17.8%		17.8%	Washout 2						Barite Added (+)		20.5
Retort Oil Content				58%		58%	Open Hole Size	6.885	12,305'				Other Product Usage (+)		3.2
Retort Water Content				22%		22%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		9.0
O/W Ratio				73:27		73:27	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-3.4
Whole Mud Chlorides (mg/L)				54,500		55,000							Non-Recoverable Vol. (-)		-23.0
Water Phase Salinity (ppm)				279,776		281,620									
Whole Mud Alkalinity, Pom				2.3		2.5	6.875x4.5	667'	0.0	lam	11.80		Est. Total on Location		3594.6
Excess Lime (lb/bbl)				3 ppb		3.3 ppb	6.875x5.25	691'	0.0	lam	11.80		Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				415 v		408 v	6.875x5.25	797'	0.0	lam	11.80		**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.50		3.50	6.875x5	829'	0.0	lam	11.80		Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				6%		6.1%							0.00	psi	18 18 18
ppb Low Gravity Solids				50 ppb		50 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18
Percent Barite				11.7%		11.7%									
ppb Barite				168 ppb		168 ppb	**BIT DATA**		Manuf./Type		SEC 64M		0 lbs	0	
Estimated Total LCM in System		ppb					Size	Depth In	Hours	Footage	ROP ft/hr		Motor/MWD		Calc. Circ. Pressure
Sample Taken By				R. Bowlin	0	M.Meehan	6 3/4	12,305 ft							

Remarks/Recommendations:

OBM RECEIVED: 3046bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 3036bbls

Rig Activity:

Drilled sidetrack to 12,305'MD, stripped out to 11,983'MD circulated a bottoms up and recorded SICP at 298PSI. Spotted 77bbls of 18.0ppg kill mud, zero casing pressure observed, strip out to the top of the mud cap at 10,308'MD, flow check, SICP Zero and pumped slug 40bbls/ 14.8ppg. Trip out conventionally without issue. At the time of the morning report swap out the 2.5 deg motor for a 2.25 deg motor and bit.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	2	1

	Daily Total	Cumulative Cost
	$5,403.68	**$134,029.50**
INCLUDING 3RD PARTY CHARGES	**$7,738.34**	**$264,413.63**

5/26/2021

Report 15 pm

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**12,305 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**Circulate**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Brandon Parks/ Bobby Gwin	**Tool Pusher**	**GIDDINGS**	**OBM**	**344 gpm**	**4,247 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±275K**	**<10 <15**	**<6**

MUD PROPERTIES				
Time Sample Taken		1:00		14:30
Sample Location		Suction		shaker
Flowline Temperature °F				151 °F
Depth (ft)		12,305'		12,305'
Mud Weight (ppg)		11.8		11.8
Funnel Vis (sec/qt)	@ 110 °F	55		56
600 rpm		52		51
300 rpm		32		31
200 rpm		21		22
100 rpm		15		14
6 rpm		6		6
3 rpm		5		5
Plastic Viscosity (cp)	@ 150 °F	20		20
Yield Point (lb/100 ft²)	T0 = 4	12		11
Gel Strength (lb/100 ft²)	10 sec / 10 min	6/9		6/10
Gel Strength (lb/100 ft2)	30 min	12		12
HTHP Filtrate (cm/30 min)	@ 300 °F	6.4		6.2
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		20%		20.5%
Corrected Solids (vol%)		17.8%		18.4%
Retort Oil Content		58%		58.5%
Retort Water Content		22%		21%
O/W Ratio		73:27		74:26
Whole Mud Chlorides (mg/L)		54,500		53,000
Water Phase Salinity (ppm)		279,776		283,542
Whole Mud Alkalinity, Pom		2.3		3.0
Excess Lime (lb/bbl)		3 ppb		3.9 ppb
Electrical Stability (volts)		415 v		457 v
Average Specific Gravity of Solids		3.50		3.44
Percent Low Gravity Solids		6%		6.9%
ppb Low Gravity Solids		50 ppb		57 ppb
Percent Barite		11.7%		11.4%
ppb Barite		168 ppb		164 ppb
Estimated Total LCM in System				
Sample Taken By		R. Bowlin		M.Meehan

MUD VOLUME (BBL)

In Pits	804 bbl
In Hole	496 bbl
Active	1300 bbl
Storage	2232 bbl
Tot. on Location	3532 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	64
gal/min	168

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	67
gal/min	176

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

Mud Wt. = 11.8 PV=20 YP=12 **CIRCULATION DATA** n = 0.700 K = 206.8

Bit Depth = 12,303 ' | Washout = 2% | Pump Efficiency = 95%

Drill String Disp.							
69.4 bbl	Volume to Bit	173.7 bbl	Strokes To Bit	2,780	Time To Bit	21 min
	Bottoms Up Vol.	321.9 bbl	BottomsUp Stks	5,152	BottomsUp Time	39 min
	TotalCirc.Vol.	1299.9 bbl	TotalCirc.Stks	20,810	Total Circ. Time	159 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	12,141'	
Agitator	5.250	2.250	24'	12,141'
Collars	5.250	2.750	106'	12,165'
Dir. BHA	5.000	2.000	32'	12,271'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.885		12,305'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,974'	311.8	turb	
6.885x4.5	12,141'	310.2	turb	
6.885x5.25	12,165'	424.6	turb	
6.885x5.25	12,271'	424.6	turb	
6.885x5	12,303'	376.0	turb	

BIT DATA Manuf./Type SEC 64M

Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
6 3/4	12,305 ft					1,809 psi

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3594.6
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Non-Recoverable Vol. (-)	
Est. Total on Location	3594.6
Est. Losses/Gains (-)/(+)	-62.5

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.32	58 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
155 lbs	74			

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Trip in hole with directional BHA #5 to 11906, circulate out 77 bbls of 18.0# mud cap. Capture 143 bbls of 12.7# to 15.5# and transfer same to storage frac tanks for re-use. Currently circulating at 12303 before continuing to drill sidetrack / curve section. Maintain mud wt. at 11.8, will resume LCM sweep program when curve is landed.

05/27/21 **Report #16**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

11.9° **12,100' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**420 ft**	**12,725 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**44 ft/hr**	**POOH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**341 gpm**	**4,247 psi**

MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	753 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**	In Hole	515 bbl	Stroke	12	Stroke	12	Stroke	12
				5/27/21		5/26/21	Active	1236 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				2:00		14:30	Storage	2187 bbl	stk/min	65	stk/min	65	stk/min	
Sample Location				Suction		shaker	Tot. on Location	3455 bbl	gal/min	171	gal/min	171	gal/min	0
Flowline Temperature °F				150 °F		151 °F	PHHP = 845		**CIRCULATION DATA**				n = 0.708	K = 185.191
Depth (ft)				12,725'		12,305'	Bit Depth = 12,000 '		Washout = 0%				Pump Efficiency = 95%	
Mud Weight (ppg)				11.9		11.8	Drill String Disp.	Volume to Bit 169.4 bbl	Strokes To Bit	2,711			Time To Bit	21 min
Funnel Vis (sec/qt)		@ 130 °F		47		56		Bottoms Up Vol. 313.8 bbl	BottomsUp Stks	5,024			BottomsUp Time	39 min
600 rpm				49		51	67.8 bbl	TotalCirc.Vol. 1236.2 bbl	TotalCirc.Stks	19,790			Total Circ. Time	152 min
300 rpm				30		31	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**	
200 rpm				22		22	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours
100 rpm				15		14	Drill Pipe	4.500	3.826	11,838'	0'		Shaker 1	200	24.0
6 rpm				7		6	Agitator	5.250	2.250	24'	11,838'		Shaker 2	200	24.0
3 rpm				5		5	Collars	5.250	2.750	106'	11,862'		Shaker 3	200	24.0
Plastic Viscosity (cp)		@ 150 °F		19		20	Dir. BHA	5.000	2.000	32'	11,968'		NOV Dryers	170	24.0
Yield Point (lb/100 ft²)		T0 = 3		11		11	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		6/11		6/10	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		4.0
Gel Strength (lb/100 ft^2)		30 min		14		12	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)		@ 300 °F		6.0		6.2	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3594.6
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		
Retort Solids Content				21%		20.5%	Washout 1						Oil Added (+)		11.2
Corrected Solids (vol%)				18.8%		18.4%	Washout 2						Barite Added (+)		13.8
Retort Oil Content				59%		58.5%	Open Hole Size	6.750	12,725'				Other Product Usage (+)		0.7
Retort Water Content				20%		21%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		0.0
O/W Ratio				75:25		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-18.6
Whole Mud Chlorides (mg/L)				54,000		53,000							Non-Recoverable Vol. (-)		-96.4
Water Phase Salinity (ppm)				297,448		283,542							Cent/Evap/Trip		-50.0
Whole Mud Alkalinity, Pom				3.0		3.0	6.875x4.5	11,838'	309.4	turb	12.85		Est. Total on Location		3455.2
Excess Lime (lb/bbl)				3.9 ppb		3.9 ppb	6.875x5.25	11,862'	424.3	turb	12.89		Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				490 v		457 v	6.875x5.25	11,968'	424.3	turb	12.92		**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.45		3.44	6.875x5	11,974'	375.4	turb	12.96		Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				7%		6.9%	6.75x5	12,000'	406.5	turb	13.00		0.32	57 psi	18 18 18
ppb Low Gravity Solids				57 ppb		57 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18
Percent Barite				11.8%		11.4%									
ppb Barite				169 ppb		164 ppb	**BIT DATA**		Manuf./Type		SEC 64M		154 lbs	73	
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.Meehan	6 3/4	12,305 ft							1,736 psi

Remarks/Recommendations:

OBM RECEIVED: 3046bbls @ $65.00_665bbls @ $10.00

OBM on surface/ storage 2940bbls

Rig Activity:

Drilled sidetrack to 12,725'MD, 12,306'TVD. 70deg. Circulate BU and stripped out to 11,981'MD circulated a bottoms up with Zero casing pressure. Spotted 50bbls of 18.0ppg kill mud out the bit and start POOH conventionally. zero casing pressure observed, while POOH. Trip out conventionally without issue. At the time of the morning report continue Pulling Out of the Hole passing 10,400'.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Matt Meehan	Rob Bowlin	MIDLAND	WH #2	
Phone:	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -		**$5,187.52**	**$139,217.02**

W P Y E C g G H O
1 1 1 1 1 1 1 1 1

INCLUDING 3RD PARTY CHARGES	**$6,282.62**	**$270,696.25**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/27/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #16

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	168		168			616	$8,821.12
LIME (50)	50# sk	$5.00	200		200			440	$2,200.00
OPTI - G	50# sk	$30.59	106		106			154	$4,710.86
BENTONE 38 (50)	50# sk	$163.94	30		22	8	$1,311.52	43	$7,049.42
BENTONE 910 (50)	50# sk	$59.40	15		15				
BENTONE 990 (50)	50# sk	$83.59	20		20			54	$4,513.86
OPTI - MUL	gal	$10.75	165		165			440	$4,730.00
OPTI - WET	gal	$8.34	385		385			385	$3,210.90
NEW PHALT	50# sk	$38.72	55		55			65	$2,516.80
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	111		111			99	$519.75
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	86		86			58	$1,626.90
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1248		1050	198	$1,386.00	5036	$35,252.00
OPTI DRILL (OBM)	bbl	$65.00	2994		2994			52	$3,380.00
DISCOUNTED OBM	bbl	$15.00	600		600			65	$975.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	40	$39,600.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	40	$1,200.00
ENGINEERING (MILES)	each	$1.00				450	$450.00	1049	$1,049.00
SCALE TICKET	EACH	$15.00						12	$180.00
TRUCKING (cwt)	each	$1.98						6927	$13,715.38
TRUCKING (min)	each	$650.00						2	$1,300.00
PALLETS (ea)	each	$12.00						44	$528.00
SHRINK WRAP (ea)	each	$12.00						42	$504.00
		Daily Sub-Total $5,187.52			**Cumulative Total $139,217.02**			**$139,217.02**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/27/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #16

DAILY USAGE & COST — **CUMULATIVE**

Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	332		332			68	$2,839.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33	2470		2000	470	$1,095.10	12403	$28,898.99
OBM-D 5/24/21	gal	$2.24	7202		7202				

Daily Sub-Total $1,095.10 — **$131,479.23**

Cumulative Total AES & 3rd Party $270,696.25

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

Grand Totals		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4							
	Starting Depth	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725						
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725							
13,160	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	-	-	-	-	-	-
1,182	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	-	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,455	3,455	3,455	3,455	3,455	3,455
115	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1							
1,332	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11							
351	Barite Increase		13	13	19		3	6			142	59	62	21	14							
1,186	Weighted Mud Added			300		479			407						-							
-	Slurry Added														-							
317	Water Added		60		70	83	37						58	9	-							
8	Added for Washout						8								-							
3,309	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	-	-	-	-	-	-	-
503	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-							
665	Formation Loss			50	83	92	134	25	73		68	28	14		99							
865	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19							
218	Unrecoverable Volume		17	40	35		45	22	10			24			25							
128	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25							
2,379	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	-	-	-	-	-	-	-
-	Mud Transferred Out																					
3,455	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,455	3,455	3,455	3,455	3,455	3,455	3,455
-	Mud Recovered																					

3,711

Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	

5/27/2021 **Report 16 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

4.0° **734' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**12,725 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**TIH w/ BHA #6**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**		

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:00		14:30
Sample Location		Suction		suction
Flowline Temperature °F		150 °F		
Depth (ft)		12,725'		12,725'
Mud Weight (ppg)		11.9		11.9
Funnel Vis (sec/qt)	@ 122 °F	47		49
600 rpm		49		50
300 rpm		30		31
200 rpm		22		21
100 rpm		15		15
6 rpm		7		7
3 rpm		5		6
Plastic Viscosity (cp)	@ 150 °F	19		19
Yield Point (lb/100 ft²)	T0 = 3	11		12
Gel Strength (lb/100 ft²)	10 sec / 10 min	6/11		6/11
Gel Strength (lb/100 ft2)	30 min	14		13
HTHP Filtrate (cm/30 min)	@ 300 °F	6.0		6.0
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		21%		21%
Corrected Solids (vol%)		18.8%		18.9%
Retort Oil Content		59%		58%
Retort Water Content		20%		21%
O/W Ratio		75:25		73:27
Whole Mud Chlorides (mg/L)		54,000		53,000
Water Phase Salinity (ppm)		297,448		283,542
Whole Mud Alkalinity, Pom		3.0		3.0
Excess Lime (lb/bbl)		3.9 ppb		3.9 ppb
Electrical Stability (volts)		490 v		495 v
Average Specific Gravity of Solids		3.45		3.43
Percent Low Gravity Solids		7%		7.2%
ppb Low Gravity Solids		57 ppb		59 ppb
Percent Barite		11.8%		11.7%
ppb Barite		169 ppb		168 ppb
Estimated Total LCM in System				
Sample Taken By		A.ROMAN		M Washburn

MUD VOLUME (BBL)

In Pits	753 bbl
In Hole	577 bbl
Active	780 bbl
Storage	2187 bbl
Tot. on Location	3517 bbl

PUMP #1		PUMP #2		RISER BOOSTER	
Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
Stroke	12	Stroke	12	Stroke	12
bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
stk/min		stk/min		stk/min	
gal/min		gal/min		gal/min	

Mud Wt. = 11.9 PV=19 YP=11 **CIRCULATION DATA** n = 0.708 K = 185.2

Bit Depth = 734 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.	Volume to Bit	9.2 bbl	Strokes To Bit		Time To Bit	
	Bottoms Up Vol.	18.2 bbl	BottomsUp Stks		BottomsUp Time	
6.3 bbl	TotalCirc.Vol.	780.4 bbl	TotalCirc.Stks		Total Circ. Time	

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	572'	
Agitator	5.250	2.250	24'	572'
Collars	5.250	2.750	106'	596'
Dir. BHA	5.000	2.000	32'	702'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.750		12,725'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	572'		lam	11.90
6.875x5.25	596'		lam	11.90
6.875x5.25	702'		lam	11.90
6.875x5	734'		lam	11.90

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	12,275 ft			

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3455.3
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	3455.3
Est. Losses/Gains (-)/(+)	61.4

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
		18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18

Motor/MWD	Calc. Circ. Pressure
	19 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Continue pull out of hole for BHA change using trip tank for hole fill, at 8970 not taking propper mud displacement. Pump 89 bbls of 11.9# drill string capacity then pump 30 bbls of 18.0# slug down DP. Flow check, no flow. Strip out of hole from 8970 to 6492 filling annulus with 18.0# at calculated displacement. Flow check - negative, continue pull out of hole, lay out BHA #5 and make up BHA #6. Trip depth at time of report is 734, Receiving 17.0# kill mud from Madisonville WH.

05/28/21 **Report #17**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

73.0° **12,315' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**12,725 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**TIH w/ BHA #6**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**341 gpm**	**4,800 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**
				5/28/21		5/27/21
Time Sample Taken				2:00		14:30
Sample Location				Suction		suction
Flowline Temperature °F				125 °F		
Depth (ft)				12,725'		12,725'
Mud Weight (ppg)				11.9		11.9
Funnel Vis (sec/qt)			@ 100 °F	59		49
600 rpm				51		50
300 rpm				31		31
200 rpm				22		21
100 rpm				15		15
6 rpm				7		7
3 rpm				6		6
Plastic Viscosity (cp)			@ 150 °F	20		19
Yield Point (lb/100 ft²)			T0 = 5	11		12
Gel Strength (lb/100 ft²)			10 sec/10 min	7/14		6/11
Gel Strength (lb/100 ft^2)			30 min	18		13
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				21%		21%
Corrected Solids (vol%)				18.9%		18.9%
Retort Oil Content				59%		58%
Retort Water Content				20%		21%
O/W Ratio				75:25		73:27
Whole Mud Chlorides (mg/L)				52,000		53,000
Water Phase Salinity (ppm)				289,622		283,542
Whole Mud Alkalinity, Pom				2.5		3.0
Excess Lime (lb/bbl)				3.3 ppb		3.9 ppb
Electrical Stability (volts)				485 v		495 v
Average Specific Gravity of Solids				3.45		3.43
Percent Low Gravity Solids				7%		7.2%
ppb Low Gravity Solids				58 ppb		59 ppb
Percent Barite				11.9%		11.7%
ppb Barite				170 ppb		168 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)

In Pits	627 bbl
In Hole	512 bbl
Active	1136 bbl
Storage	2505 bbl
Tot. on Location	3644 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	65
gal/min	171

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	65
gal/min	171

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

PHHP = 955 **CIRCULATION DATA** n = 0.718 K = 179.335

Bit Depth = 12,655 ' Washout = 0% Pump Efficiency = 95%

Drill String Disp.							
71.3 bbl	Volume to Bit	178.7 bbl	Strokes To Bit	2,860	Time To Bit	22 min
	Bottoms Up Vol.	329.9 bbl	BottomsUp Stks	5,282	BottomsUp Time	41 min
	TotalCirc.Vol.	1135.6 bbl	TotalCirc.Stks	18,179	Total Circ. Time	140 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	12,493'	0'
Agitator	5.250	2.250	24'	12,493'
Collars	5.250	2.750	106'	12,517'
Dir. BHA	5.000	2.000	32'	12,623'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Washout 1				
Washout 2				
Open Hole Size		6.750	12,725'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,974'	309.4	turb	12.80
6.75x4.5	12,493'	330.2	turb	12.83
6.75x5.25	12,517'	464.4	turb	12.83
6.75x5.25	12,623'	464.4	turb	12.86
6.75x5	12,655'	406.5	turb	12.86

BIT DATA

Size	Depth In	Manuf./Type	Hours	Footage	ROP ft/hr
6 3/4	12,275 ft	GTD64M			

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	12.0
Shaker 2	200	12.0
Shaker 3	200	12.0
NOV Dryers	170	12.0
Centrifuge 1		2.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3455.3
Transferred In(+)/Out(-)	250.0
Oil Added (+)	3.0
Barite Added (+)	7.2
Other Product Usage (+)	0.0
Water Added (+)	
Left on Cuttings (-)	0.0
Lost to Formation	-50.0
Cent/Evap/Trip	-21.7
Est. Total on Location	3643.7
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.32	57 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
154 lbs	73			

Motor/MWD	Calc. Circ. Pressure
1,250 psi	3,106 psi

Remarks/Recommendations:

OBM RECEIVED: 250bbls @ $65.00 /

OBM on surface/ storage 3132bbls

Rig Activity:

Finish POOH and change out BHA. TIH to 6400', perform Rig Service and slip and cut Drill line. Continue TIH down to 11,964' and set circulation. Circulate BU at this point, Capture Heavy OBM from well in the trip tanks and transfer same to storage, heaviest mud returned 14.5ppg. Losses calculated at 61bbls while TIH and circulation of heavy mud out of the hole, resume TIH to Side track starting depth, orient directional tools and start Washing and Reaming down to 12725'. Maintain MW in the active system at 11.9ppg with Diesel and Centrifuge applications. At the time of report: Bit passing 12630'. Zero casing pressure observed, while making connection.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

	Daily Total	Cumulative Cost
	$7,538.94	**$146,755.96**
INCLUDING 3RD PARTY CHARGES	**$7,827.86**	**$278,524.11**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/28/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #17

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	168		168			616	$8,821.12
LIME (50)	50# sk	$5.00	200		200			440	$2,200.00
OPTI - G	50# sk	$30.59	106		106			154	$4,710.86
BENTONE 38 (50)	50# sk	$163.94	22		22			43	$7,049.42
BENTONE 910 (50)	50# sk	$59.40	15		15				
BENTONE 990 (50)	50# sk	$83.59	20		20			54	$4,513.86
OPTI - MUL	gal	$10.75	165		165			440	$4,730.00
OPTI - WET	gal	$8.34	385		385			385	$3,210.90
NEW PHALT	50# sk	$38.72	55		55			65	$2,516.80
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	111		111			99	$519.75
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	86		86			58	$1,626.90
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1050	403	1350	103	$721.00	5139	$35,973.00
OPTI DRILL (OBM)	bbl	$65.00	2994	250	3183	61	$3,965.00	113	$7,345.00
DISCOUNTED OBM	bbl	$15.00	600		600			65	$975.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	42	$41,580.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	42	$1,260.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00				1	$15.00	13	$195.00
TRUCKING (cwt)	each	$1.98				403	$797.94	7330	$14,513.32
TRUCKING (min)	each	$650.00						2	$1,300.00
PALLETS (ea)	each	$12.00						44	$528.00
SHRINK WRAP (ea)	each	$12.00						42	$504.00
		Daily Sub-Total $7,538.94			**Cumulative Total $146,755.96**			**$146,755.96**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/28/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #17

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	332		332			68	$2,839.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33	2000		1876	124	$288.92	12527	$29,187.91
OBM-D 5/24/21	gal	$2.24	7202		7202				
Mud Diesel 5/27/21	gal	$2.25		7200	7200				
							Daily Sub-Total $288.92		$131,768.15

Cumulative Total AES & 3rd Party $278,524.11

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4							
Grand Totals	Starting Depth	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725						
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725							
13,160	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	-	-	-	-	-	-	-
1,182	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	-	-	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,644	3,644	3,644	3,644	3,644	3,644
115	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-							
1,335	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3							
358	Barite Increase		13	13	19		3	6			142	59	62	21	14	7							
1,436	Weighted Mud Added			300		479			407						-	250							
-	Slurry Added														-	-							
317	Water Added		60		70	83	37						58	9	-	-							
8	Added for Washout						8								-	-							
3,570	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	-	-	-	-	-	-	-
503	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-							
715	Formation Loss			50	83	92	134	25	73		68	28	14		99	50							
865	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-							
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-							
150	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22							
2,451	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	-	-	-	-	-	-	-
-	Mud Transferred Out																						
3,644	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,644	3,644	3,644	3,644	3,644	3,644	3,644
-	Mud Recovered																						

3,961

Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	

5/28/2021 **Report 17 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

87.0° **12,393' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**13,338 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**175 ft/hr**	**DRLG LATERAL**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**404 gpm**	**6,099 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:00		14:30
Sample Location		Suction		suction
Flowline Temperature °F		125 °F		155 °F
Depth (ft)		12,725'		13,340'
Mud Weight (ppg)		11.9		11.5
Funnel Vis (sec/qt)	@ 135 °F	59		51
600 rpm		51		43
300 rpm		31		27
200 rpm		22		17
100 rpm		15		13
6 rpm		7		6
3 rpm		6		5
Plastic Viscosity (cp)	@ 150 °F	20		16
Yield Point (lb/100 ft²)	T0 = 5	11		11
Gel Strength (lb/100 ft²)	10 sec / 10 min	7/14		5/9
Gel Strength (lb/100 ft2)	30 min	18		12
HTHP Filtrate (cm/30 min)	@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		21%		19.5%
Corrected Solids (vol%)		18.9%		17.2%
Retort Oil Content		59%		59.5%
Retort Water Content		20%		21%
O/W Ratio		75:25		74:26
Whole Mud Chlorides (mg/L)		52,000		56,000
Water Phase Salinity (ppm)		289,622		294,859
Whole Mud Alkalinity, Pom		2.5		3.0
Excess Lime (lb/bbl)		3.3 ppb		3.9 ppb
Electrical Stability (volts)		485 v		550 v
Average Specific Gravity of Solids		3.45		3.38
Percent Low Gravity Solids		7%		7.1%
ppb Low Gravity Solids		58 ppb		58 ppb
Percent Barite		11.9%		10.2%
ppb Barite		170 ppb		146 ppb
Estimated Total LCM in System				
Sample Taken By		A.ROMAN		M Washburn

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	627 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	535 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1162 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	2505 bbl	stk/min	77	stk/min	77	stk/min	
Tot. on Location	3667 bbl	gal/min	202	gal/min	202	gal/min	

Mud Wt. = 11.9 PV=20 YP=11 **CIRCULATION DATA** n = 0.718 K = 179.3

Bit Depth = 13,338 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.					
75.1 bbl	Volume to Bit	188.4 bbl	Strokes To Bit	3,016	Time To Bit 20 min
	Bottoms Up Vol.	346.7 bbl	BottomsUp Stks	5,550	BottomsUp Time 36 min
	TotalCirc.Vol.	1162.1 bbl	TotalCirc.Stks	18,604	Total Circ. Time 121 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	13,176'	
Agitator	5.250	2.250	24'	13,176'
Collars	5.250	2.750	106'	13,200'
Dir. BHA	5.000	2.000	32'	13,306'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.750		13,338'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,974'	366.6	turb	13.24
6.75x4.5	13,176'	391.2	turb	13.48
6.75x5.25	13,200'	550.1	turb	13.62
6.75x5.25	13,306'	550.1	turb	13.79
6.75x5	13,338'	481.6	turb	13.93

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	12,725 ft			

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3643.7
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Lost to Formation	
Cent/Evap/Trip	
Est. Total on Location	3643.7
Est. Losses/Gains (-)/(+)	23.4

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.53	80 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
217 lbs	87			

Motor/MWD	Calc. Circ. Pressure
1,250 psi	3,880 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Finish trip in hole with BHA #6, continue drilling curve and landed at 12,962 MD, 12373 TVD and 86.5 deg INCL. Reduce mud wt from 11.9 to 11.5 gradually over several circulations with application of centrifuge, diesel and water additions. BGG while drilling is 200 - 400 units, connection gas 500 - 600 units, no mud cut observed at flow line. Resume pumping 10 bbls LCM sweeps every 300' while drilling in lateral. Samples at 13338 are 100% AC.MWD temp 300 deg F. No downhole mud losses since AM report.

05/29/21 **Report #18**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

88.4° **12,456' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**1,866 ft**	**14,591 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**93 ft/hr**	**DRLG LATERAL**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**346 gpm**	**5,129 psi**

MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	687 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**	In Hole	584 bbl	Stroke	12	Stroke	12	Stroke	12
				5/29/21		5/28/21	Active	1271 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				2:00		14:30	Storage	1867 bbl	stk/min	66	stk/min	66	stk/min	
Sample Location				Suction		suction	Tot. on Location	3138 bbl	gal/min	173	gal/min	173	gal/min	0
Flowline Temperature °F				155 °F		155 °F	PHHP = 1036		**CIRCULATION DATA**				n = 0.670	K = 172.089
Depth (ft)				14,343'		13,340'	Bit Depth = 14,591 '		Washout = 0%				Pump Efficiency = 95%	
Mud Weight (ppg)				10.8		11.5	Drill String Disp.	Volume to Bit 206.2 bbl	Strokes To Bit 3,301				Time To Bit 25 min	
Funnel Vis (sec/qt)		@ 100 °F		11		51		Bottoms Up Vol. 377.5 bbl	BottomsUp Stks 6,044				BottomsUp Time 46 min	
600 rpm				35		43	81.9 bbl	TotalCirc.Vol. 1270.7 bbl	TotalCirc.Stks 20,343				Total Circ. Time 154 min	
300 rpm				22		27	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**	
200 rpm				16		17	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours
100 rpm				10		13	Drill Pipe	4.500	3.826	14,429'	0'		Shaker 1	200	24.0
6 rpm				6		6	Agitator	5.250	2.250	24'	14,429'		Shaker 2	200	24.0
3 rpm				5		5	Collars	5.250	2.750	106'	14,453'		Shaker 3	200	24.0
Plastic Viscosity (cp)		@ 150 °F		13		16	Dir. BHA	5.000	2.000	32'	14,559'		NOV Dryers	170	24.0
Yield Point (lb/100 ft²)		T0 = 4		9		11	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		6/10		5/9	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		8.0
Gel Strength (lb/100 ft^2)		30 min		15		12	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)		@ 250 °F		6.0		6.0	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3643.7
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		
Retort Solids Content				18%		19.5%	Washout 1						Oil Added (+)		168.5
Corrected Solids (vol%)				15.9%		17.2%	Washout 2						Barite Added (+)		0.0
Retort Oil Content				62%		59.5%	Open Hole Size	6.750	14,591'				Other Product Usage (+)		12.5
Retort Water Content				20%		21%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		
O/W Ratio				76:24		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-82.6
Whole Mud Chlorides (mg/L)				51,000		56,000							Lost to Formation		-554.4
Water Phase Salinity (ppm)				285,644		294,859							Cent/Evap/Trip		-50.0
Whole Mud Alkalinity, Pom				4.5		3.0	6.875x4.5	11,974'	314.2	turb	11.71		Est. Total on Location		3137.7
Excess Lime (lb/bbl)				5.9 ppb		3.9 ppb	6.75x4.5	14,429'	335.3	turb	11.96		Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				566 v		550 v	6.75x5.25	14,453'	471.6	turb	12.05		**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.14		3.38	6.75x5.25	14,559'	471.6	turb	12.17		Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				8.7%		7.1%	6.75x5	14,591'	412.8	turb	12.27		0.30	54 psi	18 18 18
ppb Low Gravity Solids				72 ppb		58 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18
Percent Barite				7.2%		10.2%									
ppb Barite				103 ppb		146 ppb	**BIT DATA**		Manuf./Type		GTD64M		145 lbs	75	
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	12,725 ft	20.0	1,866 ft	93.3		1,250 psi		3,087 psi

Remarks/Recommendations:

OBM RECEIVED: 250bbls @ $65.00 /

OBM on surface/ storage 2554bbls

Rig Activity:

In the past 24hrs: Continue drilling ahead on lateral section with 11.8ppg OBM; @13693' well start taking mud, decrease density to 11.5ppg and continue decreasing to 10.6ppg. Increase and Continue with Sweep program and start pumping 1sweep every stand (20bbls LCM) transfer OBM as needed to maintain volume in the active system. Losses decreasd @14366' to 21bbls/hr. Diesel and Centrifuge applications used to cut MW back while drilling, Intruduction of lighter mud from storage to maintain volume and lower MW as needed. Additions of chemicals to maintain properties. At the time of report: Bit passing 14,638'. Zero casing pressure.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	
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.				**$44,536.16**	**$191,292.12**
					INCLUDING 3RD PARTY CHARGES	**$61,812.22**	**$340,336.33**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/29/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #18

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	168		140	28	$400.96	644	$9,222.08
LIME (50)	50# sk	$5.00	200		150	50	$250.00	490	$2,450.00
OPTI - G	50# sk	$30.59	106		80	26	$795.34	180	$5,506.20
BENTONE 38 (50)	50# sk	$163.94	22		20	2	$327.88	45	$7,377.30
BENTONE 910 (50)	50# sk	$59.40	15		15				
BENTONE 990 (50)	50# sk	$83.59	20		18	2	$167.18	56	$4,681.04
OPTI - MUL	gal	$10.75	165		165			440	$4,730.00
OPTI - WET	gal	$8.34	385		385			385	$3,210.90
NEW PHALT	50# sk	$38.72	55		40	15	$580.80	80	$3,097.60
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	111		81	30	$157.50	129	$677.25
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	86		56	30	$841.50	88	$2,468.40
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1350		1350			5139	$35,973.00
OPTI DRILL (OBM)	bbl	$65.00	3183		2597	586	$38,090.00	699	$45,435.00
DISCOUNTED OBM	bbl	$15.00	600		541	59	$885.00	124	$1,860.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	44	$43,560.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	44	$1,320.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						13	$195.00
TRUCKING (cwt)	each	$1.98						7330	$14,513.32
TRUCKING (min)	each	$650.00						2	$1,300.00
PALLETS (ea)	each	$12.00						44	$528.00
SHRINK WRAP (ea)	each	$12.00						42	$504.00
		Daily Sub-Total $44,536.16			**Cumulative Total $191,292.12**			**$191,292.12**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/29/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #18

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	332		302	30	$1,252.50	98	$4,091.50
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33	1876			1876	$4,371.08	14403	$33,558.99
OBM-D 5/24/21	gal	$2.24	7202		2000	5202	$11,652.48	5202	$11,652.48
Mud Diesel 5/27/21	gal	$2.25	7200		7200				

Daily Sub-Total $17,276.06

$149,044.21

Cumulative Total AES & 3rd Party $340,336.33

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4						
Grand Totals	Starting Depth	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591				
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591					
15,026	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	-	-	-	-	-
1,264	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,138	3,138	3,138	3,138
127	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13					
1,504	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169					
358	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-					
1,436	Weighted Mud Added			300		479			407						-	250	-					
-	Slurry Added														-	-	-					
317	Water Added		60		70	83	37						58	9	-	-	-					
8	Added for Washout						8								-	-	-					
3,751	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	-	-	-	-	-
503	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-					
1,270	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554					
947	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83					
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-					
200	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50					
3,138	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	-	-	-	-	-
-	Mud Transferred Out																					
3,138	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,138	3,138	3,138	3,138	3,138
-	Mud Recovered																					

	Comments:		Comments:		Comments:	
	5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.
3,961	5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'
	5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	
	5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	
	5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	
	5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	
	5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	

5/29/2021 **Report 18 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

88.0° **12,477' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**15,494 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**POOH**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**378 gpm**	**4,457 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:00		14:30
Sample Location		Suction		suction
Flowline Temperature °F		155 °F		
Depth (ft)		14,343'		15,479'
Mud Weight (ppg)		10.8		10.4
Funnel Vis (sec/qt)	@ 100 °F	41		44
600 rpm		35		34
300 rpm		22		22
200 rpm		16		15
100 rpm		10		11
6 rpm		6		6
3 rpm		5		5
Plastic Viscosity (cp)	@ 150 °F	13		12
Yield Point (lb/100 ft²)	T0 = 4	9		10
Gel Strength (lb/100 ft²)	10 sec / 10 min	6/10		5/9
Gel Strength (lb/100 ft2)	30 min	15		13
HTHP Filtrate (cm/30 min)	@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		18%		15%
Corrected Solids (vol%)		15.9%		12.9%
Retort Oil Content		62%		63%
Retort Water Content		20%		22%
O/W Ratio		76:24		74:26
Whole Mud Chlorides (mg/L)		51,000		53,000
Water Phase Salinity (ppm)		285,644		274,187
Whole Mud Alkalinity, Pom		4.5		2.6
Excess Lime (lb/bbl)		5.9 ppb		3.4 ppb
Electrical Stability (volts)		566 v		580 v
Average Specific Gravity of Solids		3.14		3.23
Percent Low Gravity Solids		8.7%		6.4%
ppb Low Gravity Solids		72 ppb		53 ppb
Percent Barite		7.2%		6.5%
ppb Barite		103 ppb		93 ppb
Estimated Total LCM in System				
Sample Taken By		A.ROMAN		M Washburn

MUD VOLUME (BBL)

In Pits	687 bbl
In Hole	620 bbl
Active	1294 bbl
Storage	1867 bbl
Tot. on Location	3174 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	72
gal/min	189

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	72
gal/min	189

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

Mud Wt. = 10.8 PV=13 YP=9 **CIRCULATION DATA** n = 0.670 K = 172.1

Bit Depth = 15,191 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.							
85.2 bbl	Volume to Bit	214.7 bbl	Strokes To Bit	3,438	Time To Bit	24 min
	Bottoms Up Vol.	392.3 bbl	BottomsUp Stks	6,280	BottomsUp Time	44 min
	TotalCirc.Vol.	1294.0 bbl	TotalCirc.Stks	20,716	Total Circ. Time	144 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	15,029'	
Agitator	5.250	2.250	24'	15,029'
Collars	5.250	2.750	106'	15,053'
Dir. BHA	5.000	2.000	32'	15,159'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.750		15,494'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,974'	342.8	turb	11.74
6.75x4.5	15,029'	365.8	turb	11.97
6.75x5.25	15,053'	514.4	turb	11.98
6.75x5.25	15,159'	514.4	turb	12.01
6.75x5	15,191'	450.3	turb	12.01

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	12,725 ft	20.0	1,866 ft	93.3

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3137.7
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Lost to Formation	
Cent/Evap/Trip	
Est. Total on Location	3137.7
Est. Losses/Gains (-)/(+)	36.7

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.39	64 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
172 lbs	81			

Motor/MWD	Calc. Circ. Pressure
1,250 psi	3,476 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Drill 6-3/4" lateral hole section to 15494 when ROP was reduced from 170 FPH to less than 20 FPH, samples at 15494 contained 4% calcite, 96% AC and trace amounts of pyrite. While drilling mud losses were up to 40 bbls/hr, reduce mud wt from 10.6# to 10.4# losses were less than 10 bbls/hr. While drilling adding First Response at 12 sacks / hr, and pump 20 bbls LCM sweeps every 100' (20 PPB LCM) reduce sweep volume to 10 bbls every 100' after losses were controlled. Blending reserve mud volume with diesel to replace downhole losses. Ordered 120 bbls 8.2# OBM slurry from Newpark Madisonville.

05/30/21 **Report #19**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.6° **500' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**903 ft**	**15,494 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**100 ft/hr**	**TIH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**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	465 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**	In Hole	701 bbl	Stroke	12	Stroke	12	Stroke	12
				5/30/21		5/29/21	Active	483 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				2:00		14:30	Storage	1845 bbl	stk/min	0	stk/min	0	stk/min	
Sample Location				Suction		suction	Tot. on Location	3011 bbl	gal/min	0	gal/min	0	gal/min	0
Flowline Temperature °F							PHHP = 0		**CIRCULATION DATA**				n = 0.632	K = 197.766
Depth (ft)				15,494'		15,479'	Bit Depth = 500 '		Washout = 0%				Pump Efficiency = 95%	
Mud Weight (ppg)				10.5		10.4	Drill String Disp.	Volume to Bit 5.8 bbl	Strokes To Bit				Time To Bit	
Funnel Vis (sec/qt)		@ 90 °F		48		44		Bottoms Up Vol. 12.1 bbl	BottomsUp Stks				BottomsUp Time	
600 rpm				31		34	5.1 bbl	TotalCirc.Vol. 482.9 bbl	TotalCirc.Stks				Total Circ. Time	
300 rpm				20		22	**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	338'	0'		Shaker 1	200	24.0
6 rpm				6		6	Agitator	5.250	2.250	24'	338'		Shaker 2	200	24.0
3 rpm				5		5	Collars	5.250	2.750	106'	362'		Shaker 3	200	24.0
Plastic Viscosity (cp)		@ 150 °F		11		12	Dir. BHA	5.000	2.000	32'	468'		NOV Dryers	170	24.0
Yield Point (lb/100 ft²)		T0 = 4		9		10	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		6/9		5/9	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		4.0
Gel Strength (lb/100 ft²)		30 min		14		13	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)		@ 250 °F		6.0		6.0	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3137.7
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		127.0
Retort Solids Content				16%		15%	Washout 1						Oil Added (+)		228.6
Corrected Solids (vol%)				13.9%		12.9%	Washout 2						Barite Added (+)		10.4
Retort Oil Content				63%		63%	Open Hole Size		6.750	15,494'			Other Product Usage (+)		5.9
Retort Water Content				21%		22%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		
O/W Ratio				75:25		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-40.0
Whole Mud Chlorides (mg/L)				52,000		53,000							Lost to Formation		-384.0
Water Phase Salinity (ppm)				279,688		274,187							Cent/Evap/Trip		-75.2
Whole Mud Alkalinity, Pom				3.0		2.6	6.875x4.5	338'	0.0	lam	10.50		Est. Total on Location		3010.5
Excess Lime (lb/bbl)				3.9 ppb		3.4 ppb	6.875x5.25	362'	0.0	lam	10.50		Est. Losses Gains (-)/(+)		0.0
Electrical Stability (volts)				565 v		580 v	6.875x5.25	468'	0.0	lam	10.50		**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.16		3.23	6.875x5	500'	0.0	lam	10.50		Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				7.4%		6.4%							0.00	psi	18 18 18
ppb Low Gravity Solids				61 ppb		53 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18
Percent Barite				6.4%		6.5%									
ppb Barite				92 ppb		93 ppb	**BIT DATA**		Manuf./Type	GTD64M			0 lbs	0	
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	12,725 ft	29.0	2,769 ft	95.5		1,250 psi		

Remarks/Recommendations:

OBM RECEIVED: 127bbls @ $65.00 /

OBM on surface/ storage 2554bbls

Rig Activity:

In the past 24hrs: Continue drilling ahead on lateral section with 10.6ppg OBM; Hole continues to take mud into formation, decrease density to 10.4ppg and continue drilling. Increase Sweeps to 10bbls every 30' and maintain 12sxs/hr of First response into active system, with 10.4ppg losses to formation reduced to 10-15bbls/hr. ROP droped from 170FPH to 20fph. Decision made to POOH and change out BHA. Circulate BU and start to Back ream up to the shoe. At the shoe, circulated BU and Pump 30bbls 15.8ppg Slug and start POOH in normal fashion, fill up on back side with 18ppg Kill mud. Well in static conditions, Zero Casing pressure. Additions of chemicals to maintain properties while drilling. At the time of report: Lay down BHA

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

Daily Total	Cumulative Cost
$21,290.37	**$212,582.49**
INCLUDING 3RD PARTY CHARGES	**$47,370.37**	**$387,706.70**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/30/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #19

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	140		112	28	$400.96	672	$9,623.04
LIME (50)	50# sk	$5.00	150		125	25	$125.00	515	$2,575.00
OPTI - G	50# sk	$30.59	80		80			180	$5,506.20
BENTONE 38 (50)	50# sk	$163.94	20		18	2	$327.88	47	$7,705.18
BENTONE 910 (50)	50# sk	$59.40	15		15				
BENTONE 990 (50)	50# sk	$83.59	18		16	2	$167.18	58	$4,848.22
OPTI - MUL	gal	$10.75	165		165			440	$4,730.00
OPTI - WET	gal	$8.34	385		385			385	$3,210.90
NEW PHALT	50# sk	$38.72	40		30	10	$387.20	90	$3,484.80
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	81		70	11	$57.75	140	$735.00
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	56		48	8	$224.40	96	$2,692.80
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1350		1200	150	$1,050.00	5289	$37,023.00
OPTI DRILL (OBM)	bbl	$65.00	2597	127	2470	254	$16,510.00	953	$61,945.00
DISCOUNTED OBM	bbl	$15.00	541		541			124	$1,860.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	46	$45,540.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	46	$1,380.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						13	$195.00
TRUCKING (cwt)	each	$1.98						7330	$14,513.32
TRUCKING (min)	each	$650.00						2	$1,300.00
PALLETS (ea)	each	$12.00						44	$528.00
SHRINK WRAP (ea)	each	$12.00						42	$504.00
		Daily Sub-Total $21,290.37			**Cumulative Total $212,582.49**			**$212,582.49**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/30/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #19**

DAILY USAGE & COST								**CUMULATIVE**	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	302		302			98	$4,091.50
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24	2000			2000	$4,480.00	7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25	7200			7200	$16,200.00	7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25		7200	4800	2400	$5,400.00	2400	$5,400.00
Diesel Received 5/29/21	gal	$2.25		7200	7200				
							Daily Sub-Total	**$26,080.00**	**$175,124.21**

Cumulative Total AES & 3rd Party $387,706.70

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

Grand Totals		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494			
15,929	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494				
1,304	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	-	-	-	-
	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,011	3,011	3,011
133	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6				
1,732	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229				
369	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10				
1,563	Weighted Mud Added			300		479			407						-	250	-	127				
-	Slurry Added														-	-	-	-				
317	Water Added		60		70	83	37						58	9	-	-	-	-				
8	Added for Washout						8								-	-	-	-				
4,123	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	-	-	-	-
528	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25				
1,654	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384				
987	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40				
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-				
250	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50				
3,637	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	-	-	-	-
-	Mud Transferred Out																					
3,011	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,011	3,011	3,011	3,011
-	Mud Recovered																					

4,088

Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	

5/30/2021 **Report 19 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

2.4° **11,269' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**15,494 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**STAGE IN HOLE**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**		

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD PROPERTIES

Time Sample Taken	2:00		14:30
Sample Location	Suction		suction
Flowline Temperature °F			
Depth (ft)	15,494'		15,494'
Mud Weight (ppg)	10.5		10.4
Funnel Vis (sec/qt) @ 90 °F	48		42
600 rpm	31		29
300 rpm	20		19
200 rpm	14		14
100 rpm	10		9
6 rpm	6		5
3 rpm	5		4
Plastic Viscosity (cp) @ 150 °F	11		10
Yield Point (lb/100 ft²) T0 = 4	9		9
Gel Strength (lb/100 ft²) 10 sec / 10 min	6/9		5/8
Gel Strength (lb/100 ft2) 30 min	14		12
HTHP Filtrate (cm/30 min) @ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	16%		15%
Corrected Solids (vol%)	13.9%		12.9%
Retort Oil Content	63%		63%
Retort Water Content	21%		22%
O/W Ratio	75:25		74:26
Whole Mud Chlorides (mg/L)	52,000		53,000
Water Phase Salinity (ppm)	279,688		274,187
Whole Mud Alkalinity, Pom	3.0		2.5
Excess Lime (lb/bbl)	3.9 ppb		3.3 ppb
Electrical Stability (volts)	565 v		595 v
Average Specific Gravity of Solids	3.16		3.23
Percent Low Gravity Solids	7.4%		6.4%
ppb Low Gravity Solids	61 ppb		53 ppb
Percent Barite	6.4%		6.5%
ppb Barite	92 ppb		93 ppb
Estimated Total LCM in System			
Sample Taken By	A.ROMAN		M Washburn

MUD VOLUME (BBL)

In Pits	465 bbl
In Hole	643 bbl
Active	929 bbl
Storage	1845 bbl
Tot. on Location	2953 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

Mud Wt. = 10.5 PV=11 YP=9 **CIRCULATION DATA** n = 0.632 K = 197.8

Bit Depth = 11,457 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.	Volume to Bit	Strokes To Bit	Time To Bit
62.5 bbl	162.9 bbl		
	Bottoms Up Vol. 300.7 bbl	BottomsUp Stks	BottomsUp Time
	TotalCirc.Vol. 928.6 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	11,457'	
Agi/DP/Agi	4.500	3.826		11,457'
P/Ream/DP	4.500	3.826		11,457'
Dir. BHA	5.000	2.000		11,457'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.750		15,494'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,457'		lam	10.50

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	15,494 ft		2,769 ft	#DIV/0!

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3012.9
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Lost to Formation	
Cent/Evap/Trip	
Est. Total on Location	3012.9
Est. Losses/Gains (-)/(+)	-59.7

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
		18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18

Motor/MWD	Calc. Circ. Pressure
1,250 psi	1,467 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Trip in hole with BHA #7 to 2822, pick up agitator, fill pipe, test MWD and circ. B/U with full returns, trip in hole to 6000, pick up 2'nd agitator, trip in hole to 10289, pump 90 bbls of 9.8# mud down DP, circulate B/U and capture 70 bbls of 12.5# to 14.5# heavy mud cap and divert to storage for future use, currently trip in hole to 12000' to circulate, bit at 11900'. Receiving 270 bbls of 8.2 OBM slurry from Newpark. Madisonville.

05/31/21 **Report #20**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

2.4° **11,269' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**725 ft**	**16,219 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**81 ft/hr**	**Drilling Lateral**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**370 gpm**	**5,060 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**
				5/31/21		5/30/21
Time Sample Taken				2:00		14:30
Sample Location				Suction		suction
Flowline Temperature °F				150 °F		
Depth (ft)				16,150'		15,494'
Mud Weight (ppg)				10.1		10.4
Funnel Vis (sec/qt)			@ 90 °F	40		42
600 rpm				27		29
300 rpm				18		19
200 rpm				12		14
100 rpm				9		9
6 rpm				6		5
3 rpm				4		4
Plastic Viscosity (cp)			@ 150 °F	9		10
Yield Point (lb/100 ft²)			T0 = 2	9		9
Gel Strength (lb/100 ft²)			10 sec/10 min	6/9		5/8
Gel Strength (lb/100 ft^2)			30 min	12		12
HTHP Filtrate (cm/30 min)			@ 250 °F	7.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				14%		15%
Corrected Solids (vol%)				12%		12.9%
Retort Oil Content				66%		63%
Retort Water Content				20%		22%
O/W Ratio				77:23		74:26
Whole Mud Chlorides (mg/L)				50,000		53,000
Water Phase Salinity (ppm)				281,620		274,187
Whole Mud Alkalinity, Pom				1.8		2.5
Excess Lime (lb/bbl)				2.3 ppb		3.3 ppb
Electrical Stability (volts)				586 v		595 v
Average Specific Gravity of Solids				3.17		3.23
Percent Low Gravity Solids				6.4%		6.4%
ppb Low Gravity Solids				52 ppb		53 ppb
Percent Barite				5.6%		6.5%
ppb Barite				80 ppb		93 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)

In Pits	632 bbl
In Hole	673 bbl
Active	1093 bbl
Storage	1873 bbl
Tot. on Location	3178 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	69
gal/min	181

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	72
gal/min	189

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

PHHP = 1092 **CIRCULATION DATA** n = 0.585 K = 239.066

Bit Depth = 11,457 ' Washout = 0% Pump Efficiency = 95%

Drill String Disp.							
64.5 bbl	Volume to Bit	161.5 bbl	Strokes To Bit	2,585	Time To Bit	18 min
	Bottoms Up Vol.	300.0 bbl	BottomsUp Stks	4,803	BottomsUp Time	34 min
	TotalCirc.Vol.	1093.5 bbl	TotalCirc.Stks	17,506	Total Circ. Time	124 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	5,485'	0'
Agi/DP/Agi	4.500	3.826	3,183'	5,485'
DP/Ream/DP	4.500	3.826	2,649'	8,668'
Dir. BHA	5.000	2.000	140'	11,317'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Washout 1				
Washout 2				
Open Hole Size		6.750	16,219'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	5,485'	335.6	turb	10.95
6.875x4.5	8,668'	335.6	turb	11.04
6.875x4.5	11,317'	335.6	turb	11.11
6.875x5	11,457'	407.2	turb	11.19

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	24.0
Shaker 2	200	24.0
Shaker 3	200	24.0
NOV Dryers	170	24.0
Centrifuge 1		12.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3012.9
Transferred In(+)/Out(-)	788.0
Oil Added (+)	190.5
Barite Added (+)	0.0
Other Product Usage (+)	10.5
Water Added (+)	
Left on Cuttings (-)	-32.1
Lost to Formation	-691.0
Cent/Evap/Trip	-100.6
Est. Total on Location	3178.1
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.35	57 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
154 lbs	80			

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
6 3/4	15,494 ft	9.0	725 ft	80.6	1,100 psi	2,606 psi

Remarks/Recommendations:

OBM RECEIVED: 788bbls @ $65.00 /

OBM on surface/ storage 2205bbls

Rig Activity:

In the past 24hrs: Reach bottom with new BHA, and resume drilling on lateral section with 10.4ppg OBM; While staging in the hole, recover heavy mud from well and transfer same to storage for re-use. Well taking mud 100-120bbls/hr. Pump light mud (9.8ppg) as sweeps and start decreasing MW to 10.3ppg and continue to 10.1ppg. With 10.1ppg losses decreased to normal 11-12bbl/hr. 370' drilled at 340gpm. Pump rate increased to 370gpm Formation losses increased to 30bbl/hr. Continue to pump 20bbls (15ppb LCM) sweeps every connection. Agressive diesel additions to reduce MW and use of centrifuge to assist. Continue with additions of chemicals to maintain properties At the time of report: Drilling 16221' ROP=200ft/hr--Rotation / 20-35ft/hr--Slide.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

	Daily Total	Cumulative Cost
	$46,286.66	**$258,869.15**
INCLUDING 3RD PARTY CHARGES	**$66,457.66**	**$454,164.36**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/31/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #20

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	112		112			672	$9,623.04
LIME (50)	50# sk	$5.00	125		100	25	$125.00	540	$2,700.00
OPTI - G	50# sk	$30.59	80		60	20	$611.80	200	$6,118.00
BENTONE 38 (50)	50# sk	$163.94	18		15	3	$491.82	50	$8,197.00
BENTONE 910 (50)	50# sk	$59.40	15		10	5	$297.00	5	$297.00
BENTONE 990 (50)	50# sk	$83.59	16		10	6	$501.54	64	$5,349.76
OPTI - MUL	gal	$10.75	165		165			440	$4,730.00
OPTI - WET	gal	$8.34	385		385			385	$3,210.90
NEW PHALT	50# sk	$38.72	30			30	$1,161.60	120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	70		40	30	$157.50	170	$892.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		20	28	$785.40	124	$3,478.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1200		1200			5289	$37,023.00
OPTI DRILL (OBM)	bbl	$65.00	2470	788	2642	616	$40,040.00	1569	$101,985.00
DISCOUNTED OBM	bbl	$15.00	541		536	5	$75.00	129	$1,935.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	48	$47,520.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	48	$1,440.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						13	$195.00
TRUCKING (cwt)	each	$1.98						7330	$14,513.32
TRUCKING (min)	each	$650.00						2	$1,300.00
PALLETS (ea)	each	$12.00						44	$528.00
SHRINK WRAP (ea)	each	$12.00						42	$504.00
		Daily Sub-Total $46,286.66			**Cumulative Total $258,869.15**			**$258,869.15**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
05/31/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #20**

DAILY USAGE & COST								**CUMULATIVE**	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	302		250	52	$2,171.00	150	$6,262.50
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25	4800			4800	$10,800.00	7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25	7200		4000	3200	$7,200.00	3200	$7,200.00

						Daily Sub-Total	**$20,171.00**	**$195,295.21**	

Cumulative Total AES & 3rd Party $454,164.36

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4			
Grand Totals	Starting Depth	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219		
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219			
16,654	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	-	-	-
1,337	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,178	3,178
145	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12			
1,923	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191			
369	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-			
2,351	Weighted Mud Added			300		479			407						-	250	-	127	788			
-	Slurry Added														-	-	-	-	-			
317	Water Added		60		70	83	37						58	9	-	-	-	-	-			
8	Added for Washout						8								-	-	-	-	-			
5,113	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	-	-	-
553	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25			
2,345	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691			
1,019	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32			
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-			
325	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75			
4,460	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	-	-	-
-	Mud Transferred Out																					
3,178	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,178	3,178	3,178
-	Mud Recovered																					

	Comments:		Comments:		Comments:	
4,876	5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.
	5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'
	5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.
	5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.
	5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	
	5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	
	5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	

5/31/2021 **Report 20 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

88.6° **12,526' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**16,989 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**132 ft/hr**	**DRILLING**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**378 gpm**	**5,161 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:00		14:30
Sample Location		Suction		shaker
Flowline Temperature °F		150 °F		150 °F
Depth (ft)		16,150'		16,989'
Mud Weight (ppg)		10.1		10.0
Funnel Vis (sec/qt)	@ 90 °F	40		44
600 rpm		27		30
300 rpm		18		20
200 rpm		12		13
100 rpm		9		9
6 rpm		6		6
3 rpm		4		5
Plastic Viscosity (cp)	@ 150 °F	9		10
Yield Point (lb/100 ft²)	T0 = 2	9		10
Gel Strength (lb/100 ft²)	10 sec / 10 min	6/9		5/8
Gel Strength (lb/100 ft2)	30 min	12		11
HTHP Filtrate (cm/30 min)	@ 250 °F	7.0		6.5
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		14%		14%
Corrected Solids (vol%)		12%		11.8%
Retort Oil Content		66%		64%
Retort Water Content		20%		22%
O/W Ratio		77:23		74:26
Whole Mud Chlorides (mg/L)		50,000		55,000
Water Phase Salinity (ppm)		281,620		281,620
Whole Mud Alkalinity, Pom		1.8		2.6
Excess Lime (lb/bbl)		2.3 ppb		3.4 ppb
Electrical Stability (volts)		586 v		610 v
Average Specific Gravity of Solids		3.17		3.02
Percent Low Gravity Solids		6.4%		7.3%
ppb Low Gravity Solids		52 ppb		60 ppb
Percent Barite		5.6%		4.5%
ppb Barite		80 ppb		65 ppb
Estimated Total LCM in System				
Sample Taken By		A.ROMAN		M Washburn

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	658 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	677 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1335 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	1873 bbl	stk/min	72	stk/min	72	stk/min	
Tot. on Location	3208 bbl	gal/min	189	gal/min	189	gal/min	

Mud Wt. = 10.1 PV=9 YP=9 **CIRCULATION DATA** n = 0.585 K = 239.1

Bit Depth = 16,989 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.					
94.7 bbl	Volume to Bit	240.1 bbl	Strokes To Bit	3,844	Time To Bit 27 min
	Bottoms Up Vol.	436.9 bbl	BottomsUp Stks	6,994	BottomsUp Time 49 min
	TotalCirc.Vol.	1335.0 bbl	TotalCirc.Stks	21,372	Total Circ. Time 148 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	11,017'	
Agi/DP/Agi	4.500	3.826	3,183'	11,017'
P/Ream/DP	4.500	3.826	2,649'	14,200'
Dir. BHA	5.000	2.000	140'	16,849'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.750		16,989'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,017'	342.8	turb	11.02
6.875x4.5	11,974'	342.8	turb	11.13
6.75x4.5	14,200'	365.8	turb	11.43
6.75x4.5	16,849'	365.8	turb	11.78
6.75x5	16,989'	450.3	turb	11.94

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	15,494 ft	9.0	725 ft	80.6

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3178.2
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Lost to Formation	
Cent/Evap/Trip	
Est. Total on Location	3178.2
Est. Losses/Gains (-)/(+)	29.9

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.37	60 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
161 lbs	81			

Motor/MWD	Calc. Circ. Pressure
1,100 psi	3,342 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Drilling 6-3/4" hole section, reduce mud wt. from 10.1# to 10.0# since AM report. Currently mud losses are stabalized with less than 10 bbls / hr, samples are 100% AC. From 16100 - 16350 samples contained up to 20% Eagleford Shale. Continue to pump 20 bbls LCM sweep every stand (15 ppb LCM). Adding diesel and using centrifuge to control mud density. Continue with additions of chemicals to maintain properties. Receiving additional OBM from Newpark Madisonville.

06/01/21 **Report #21**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

92.2° **12,509' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**1,447 ft**	**17,666 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**72 ft/hr**	**DRILLING**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**373 gpm**	**5,211 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**
				6/1/21		5/31/21
Time Sample Taken				2:00		14:30
Sample Location				Suction		shaker
Flowline Temperature °F				150 °F		150 °F
Depth (ft)				17,540'		16,989'
Mud Weight (ppg)				10.2		10.0
Funnel Vis (sec/qt)			@ 70 °F	48		44
600 rpm				32		30
300 rpm				21		20
200 rpm				15		13
100 rpm				10		9
6 rpm				7		6
3 rpm				5		5
Plastic Viscosity (cp)			@ 150 °F	11		10
Yield Point (lb/100 ft²)			T0 = 3	10		10
Gel Strength (lb/100 ft²)			10 sec/10 min	6/10		5/8
Gel Strength (lb/100 ft^2)			30 min	13		11
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.5
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				15%		14%
Corrected Solids (vol%)				12.8%		11.8%
Retort Oil Content				64%		64%
Retort Water Content				21%		22%
O/W Ratio				75:25		74:26
Whole Mud Chlorides (mg/L)				54,000		55,000
Water Phase Salinity (ppm)				287,354		281,620
Whole Mud Alkalinity, Pom				2.5		2.6
Excess Lime (lb/bbl)				3.3 ppb		3.4 ppb
Electrical Stability (volts)				599 v		610 v
Average Specific Gravity of Solids				3.06		3.02
Percent Low Gravity Solids				7.6%		7.3%
ppb Low Gravity Solids				62 ppb		60 ppb
Percent Barite				5.2%		4.5%
ppb Barite				75 ppb		65 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)

In Pits	498 bbl
In Hole	703 bbl
Active	1201 bbl
Storage	2411 bbl
Tot. on Location	3612 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	71
gal/min	186

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	71
gal/min	186

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

PHHP = 1133 **CIRCULATION DATA** n = 0.608 K = 242.063

Bit Depth = 17,666 ' | Washout = 0% | Pump Efficiency = 95%

Drill String Disp.							
98.4 bbl	Volume to Bit	249.8 bbl	Strokes To Bit	3,998	Time To Bit	28 min
	Bottoms Up Vol.	453.6 bbl	BottomsUp Stks	7,261	BottomsUp Time	51 min
	TotalCirc.Vol.	1201.3 bbl	TotalCirc.Stks	19,232	Total Circ. Time	135 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	11,694'	0'
Agi/DP/Agi	4.500	3.826	3,183'	11,694'
DP/Ream/DP	4.500	3.826	2,649'	14,877'
Dir. BHA	5.000	2.000	140'	17,526'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Washout 1				
Washout 2				
Open Hole Size		6.750	17,666'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,694'	338.0	turb	11.09
6.875x4.5	11,974'	338.0	turb	11.15
6.75x4.5	14,877'	360.7	turb	11.45
6.75x4.5	17,526'	360.7	turb	11.75
6.75x5	17,666'	444.1	turb	11.85

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
6 3/4	15,494 ft	29.0	2,172 ft	74.9	1,100 psi	3,500 psi

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	24.0
Shaker 2	200	24.0
Shaker 3	200	24.0
NOV Dryers	170	24.0
Centrifuge 1		5.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3178.2
Transferred In(+)/Out(-)	804.0
Oil Added (+)	95.2
Barite Added (+)	20.9
Other Product Usage (+)	9.6
Water Added (+)	30.0
Left on Cuttings (-)	-64.0
Lost to Formation	-386.0
Cent/Evap/Trip	-75.5
Est. Total on Location	3612.3
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.36	59 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
158 lbs	80			

Remarks/Recommendations:

OBM RECEIVED: 804bbls @ $65.00 /

OBM on surface/ storage 2909bbls

Rig Activity:

In the past 24hrs: Drilling on lateral section with 10.1ppg OBM; Well taking mud 30bbls/hr. Reduce density to 10ppg, With 10.ppg losses decreased to normal 11-12bbl/hr. Pump Rate 370gpm. Continue to pump 20bbls (15ppb LCM) sweeps every connection. Increased Gas on returns, close well in and circulate BU, while increasing Density to 10.2ppg. With 10.2ppg in and out, losses maintained around 12-20bph while continue drilling ahead. Diesel and water additions for dilution. Use of Centrifuge to assit on same. Change out Shakers screens, due to wear and tear. Continue with additions of chemicals to maintain properties At the time of report: Drilling 17,666' ROP=125ft/hr--Rotation / 10-30ft/hr--Slide. MWD Temp: 334 F*

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

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.

	Daily Total	Cumulative Cost
	$30,144.69	**$289,013.84**
INCLUDING 3RD PARTY CHARGES	**$40,814.69**	**$494,979.05**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/01/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #21

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	112		80	32	$458.24	704	$10,081.28
LIME (50)	50# sk	$5.00	100		50	50	$250.00	590	$2,950.00
OPTI - G	50# sk	$30.59	60		40	20	$611.80	220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	15		10	5	$819.70	55	$9,016.70
BENTONE 910 (50)	50# sk	$59.40	10		10			5	$297.00
BENTONE 990 (50)	50# sk	$83.59	10		5	5	$417.95	69	$5,767.71
OPTI - MUL	gal	$10.75	165		165			440	$4,730.00
OPTI - WET	gal	$8.34	385		385			385	$3,210.90
NEW PHALT	50# sk	$38.72						120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	40		20	20	$105.00	190	$997.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	20		20			124	$3,478.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1200	400	1300	300	$2,100.00	5589	$39,123.00
OPTI DRILL (OBM)	bbl	$65.00	2642	804	3106	340	$22,100.00	1909	$124,085.00
DISCOUNTED OBM	bbl	$15.00	536		506	30	$450.00	159	$2,385.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	50	$49,500.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	50	$1,500.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						13	$195.00
TRUCKING (cwt)	each	$1.98				400	$792.00	7730	$15,305.32
TRUCKING (min)	each	$650.00						2	$1,300.00
PALLETS (ea)	each	$12.00						44	$528.00
SHRINK WRAP (ea)	each	$12.00						42	$504.00

Daily Sub-Total $30,144.69	Cumulative Total $289,013.84	$289,013.84

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/01/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #21**

DAILY USAGE & COST								**CUMULATIVE**	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	250		210	40	$1,670.00	190	$7,932.50
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25	4000			4000	$9,000.00	7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25		14409	14409				
							Daily Sub-Total $10,670.00		**$205,965.21**

Cumulative Total AES & 3rd Party $494,979.05

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4		
Grand Totals	Starting Depth	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666		
18,101	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	-	-
1,401	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,612
155	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10		
2,018	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95		
390	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21		
3,155	Weighted Mud Added			300		479			407						-	250	-	127	788	804		
-	Slurry Added														-	-	-	-	-	-		
347	Water Added		60		70	83	37						58	9	-	-	-	-	-	30		
8	Added for Washout						8								-	-	-	-	-	-		
6,073	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	-	-
553	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-		
2,731	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386		
1,083	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64		
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-		
400	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76		
4,985	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	-	-
-	Mud Transferred Out																					
3,612	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,612	3,612
-	Mud Recovered																					

5,680

Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	

6/1/2021 **Report 21 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

86.3° **12,527' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**17,937 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**17 ft/hr**	**Drilling**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**370 gpm**	**5,794 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±290K**	**<10 <15**	**<8**

MUD PROPERTIES			
Time Sample Taken	2:00		14:30
Sample Location	Suction		shaker
Flowline Temperature °F	150 °F		99 °F
Depth (ft)	17,540'		17,900'
Mud Weight (ppg)	10.2		10.7
Funnel Vis (sec/qt) @ 70 °F	48		44
600 rpm	32		29
300 rpm	21		20
200 rpm	15		16
100 rpm	10		11
6 rpm	7		6
3 rpm	5		5
Plastic Viscosity (cp) @ 150 °F	11		9
Yield Point (lb/100 ft²) T0 = 3	10		11
Gel Strength (lb/100 ft²) 10 sec / 10 min	6/10		5/9
Gel Strength (lb/100 ft2) 30 min	13		12
HTHP Filtrate (cm/30 min) @ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	15%		16%
Corrected Solids (vol%)	12.8%		13.8%
Retort Oil Content	64%		62%
Retort Water Content	21%		22%
O/W Ratio	75:25		74:26
Whole Mud Chlorides (mg/L)	54,000		56,000
Water Phase Salinity (ppm)	287,354		285,280
Whole Mud Alkalinity, Pom	2.5		1.7
Excess Lime (lb/bbl)	3.3 ppb		2.2 ppb
Electrical Stability (volts)	599 v		505 v
Average Specific Gravity of Solids	3.06		3.31
Percent Low Gravity Solids	7.6%		6.2%
ppb Low Gravity Solids	62 ppb		51 ppb
Percent Barite	5.2%		7.6%
ppb Barite	75 ppb		109 ppb
Estimated Total LCM in System			
Sample Taken By	A.ROMAN		M Washburn

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	498 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	714 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1212 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	2411 bbl	stk/min	71	stk/min	70	stk/min	
Tot. on Location	3623 bbl	gal/min	186	gal/min	184	gal/min	

Mud Wt. = 10.2 PV=11 YP=10 **CIRCULATION DATA** n = 0.608 K = 242.1

Bit Depth = 17,937 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.					
99.9 bbl	Volume to Bit	253.6 bbl	Strokes To Bit	4,060	Time To Bit 29 min
	Bottoms Up Vol.	460.2 bbl	BottomsUp Stks	7,368	BottomsUp Time 52 min
	TotalCirc.Vol.	1211.8 bbl	TotalCirc.Stks	19,400	Total Circ. Time 138 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	11,965'	
Agi/DP/Agi	4.500	3.826	3,183'	11,965'
P/Ream/DP	4.500	3.826	2,649'	15,148'
Dir. BHA	5.000	2.000	140'	17,797'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.750		17,937'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	11,965'	335.6	turb	11.01
6.875x4.5	11,974'	335.6	turb	11.03
6.75x4.5	15,148'	358.2	turb	11.30
6.75x4.5	17,797'	358.2	turb	11.55
6.75x5	17,937'	440.9	turb	11.59

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	15,494 ft	29.0	2,172 ft	74.9

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3612.3
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Lost to Formation	
Cent/Evap/Trip	
Est. Total on Location	3612.3
Est. Losses/Gains (-)/(+)	10.5

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.35	58 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
156 lbs	80			

Motor/MWD	Calc. Circ. Pressure
1,100 psi	3,505 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Drill 6-3/4" lateral hole section to 17816, ROP decreased, eratic gamma readings, increase in gas influx, cuttings samples at this depth were 81% AC, 10% EF, 5% ash, and 4% calcite. Increase mud wt gradually from 10.2 to 10.7. Mud losses to formation were initially 20 bbls/hr increased to 60 bbls/hr with 10.7 circulated around. Continue rotate and sliding, depth at time of report 17940, last samples were 100% AC. MWD temperature 334 deg. F.

06/02/21 **Report #22**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

86.0° **12,545' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**774 ft**	**18,440 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**39 ft/hr**	**Drilling**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**325 gpm**	**5,794 psi**

MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	922 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**	In Hole	733 bbl	Stroke	12	Stroke	12	Stroke	12
				6/2/21		6/1/21	Active	1655 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				2:00		14:30	Storage	1786 bbl	stk/min	63	stk/min	61	stk/min	
Sample Location				Suction		shaker	Tot. on Location	3441 bbl	gal/min	165	gal/min	160	gal/min	0
Flowline Temperature °F				150 °F		99 °F	PHHP = 1100		**CIRCULATION DATA**				n = 0.632	K = 197.766
Depth (ft)				18,383'		17,900'	Bit Depth = 18,440 '		Washout = 0%				Pump Efficiency = 95%	
Mud Weight (ppg)				10.7		10.7	Drill String Disp.	Volume to Bit 260.8 bbl	Strokes To Bit	4,175			Time To Bit	34 min
Funnel Vis (sec/qt)		@ 70 °F		45		44		Bottoms Up Vol. 472.6 bbl	BottomsUp Stks	7,566			BottomsUp Time	61 min
600 rpm				31		29	102.6 bbl	TotalCirc.Vol. 1655.4 bbl	TotalCirc.Stks	26,500			Total Circ. Time	214 min
300 rpm				20		20	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**	
200 rpm				15		16	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours
100 rpm				9		11	Drill Pipe	4.500	3.826	12,468'	0'		Shaker 1	200	24.0
6 rpm				6		6	Agi/DP/Agi	4.500	3.826	3,183'	12,468'		Shaker 2	200	24.0
3 rpm				4		5	DP/Ream/DP	4.500	3.826	2,649'	15,651'		Shaker 3	200	24.0
Plastic Viscosity (cp)		@ 150 °F		11		9	Dir. BHA	5.000	2.000	140'	18,300'		NOV Dryers	170	24.0
Yield Point (lb/100 ft²)		T0 = 2		9		11	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		6/10		5/9	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		2.0
Gel Strength (lb/100 ft²)		30 min		12		12	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)		@ 250 °F		6.0		6.0	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3612.3
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		52.0
Retort Solids Content				16.5%		16%	Washout 1						Oil Added (+)		86.4
Corrected Solids (vol%)				14.5%		13.8%	Washout 2						Barite Added (+)		27.9
Retort Oil Content				63.5%		62%	Open Hole Size	6.750	18,440'				Other Product Usage (+)		13.4
Retort Water Content				20%		22%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		50.0
O/W Ratio				76:24		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-34.3
Whole Mud Chlorides (mg/L)				50,000		56,000							Lost to Formation		-316.4
Water Phase Salinity (ppm)				281,620		285,280							Cent/Evap/Trip		-50.0
Whole Mud Alkalinity, Pom				2.0		1.7	6.875x4.5	11,974'	295.1	turb	11.44		Est. Total on Location		3441.4
Excess Lime (lb/bbl)				2.6 ppb		2.2 ppb	6.75x4.5	12,468'	315.0	turb	11.50		Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				575 v		505 v	6.75x4.5	15,651'	315.0	turb	11.77		**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.30		3.31	6.75x4.5	18,300'	315.0	turb	12.00		Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				6.6%		6.2%	6.75x5	18,440'	387.8	turb	12.06		0.25	47 psi	18 18 18
ppb Low Gravity Solids				55 ppb		51 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18
Percent Barite				7.8%		7.6%									
ppb Barite				112 ppb		109 ppb	**BIT DATA**		Manuf./Type		GTD64M		127 lbs	70	
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	15,494 ft	49.0	2,946 ft	60.1		1,100 psi		3,148 psi

Remarks/Recommendations:

OBM RECEIVED: 52bbls @ $65.00 /

OBM on surface/ storage 2708bbls

Rig Activity:

In the past 24hrs: Drilling on lateral section with 10.1ppg OBM; Gas influx the well, start well control operations. Increase MW to 10.4ppg and continue drilling increasing MW up to 10.7ppg with fresh barite and heavy mud from storage. Continue to pump 20bbls (15ppb LCM) sweeps every connection. While continue drilling ahead, passing 18380, influx from down hole noted on Volume increase. (60bbls), set well control and circulate kick out. Mud Cut noted 10.4ppg. Maintain Diesel and water additions for dilution. Use of Centrifuge to process recovered mud from shakers. Continue with additions of chemicals to maintain properties At the time of report: Drilling 18,442' ROP=55ft/hr--Rotation / 10ft/hr--Slide. / Torque: 16-25k MWD Temp: 344 F*

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2			
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -		**$24,038.43**	**$313,052.27**

W 1 P 1 Y 1 E 1 C 1 g 1 G 1 H 1 O 1

INCLUDING 3RD PARTY CHARGES **$34,708.68** **$529,687.73**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/02/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #22

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	80		56	24	$343.68	728	$10,424.96
LIME (50)	50# sk	$5.00	50	200	100	150	$750.00	740	$3,700.00
OPTI - G	50# sk	$30.59	40	80	120			220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	10	40	40	10	$1,639.40	65	$10,656.10
BENTONE 910 (50)	50# sk	$59.40	10		5	5	$297.00	10	$594.00
BENTONE 990 (50)	50# sk	$83.59	5	40	40	5	$417.95	74	$6,185.66
OPTI - MUL	gal	$10.75	165		165			440	$4,730.00
OPTI - WET	gal	$8.34	385		385			385	$3,210.90
NEW PHALT	50# sk	$38.72		40	40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	20	60	70	10	$52.50	200	$1,050.00
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	20	48	58	10	$280.50	134	$3,758.70
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1300	801	1700	401	$2,808.40	5990	$41,931.40
OPTI DRILL (OBM)	bbl	$65.00	3106	52	2935	223	$14,495.00	2132	$138,580.00
DISCOUNTED OBM	bbl	$15.00	506		506			159	$2,385.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	52	$51,480.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	52	$1,560.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						13	$195.00
TRUCKING (cwt)	each	$1.98						7730	$15,305.32
TRUCKING (min)	each	$650.00				1	$650.00	3	$1,950.00
PALLETS (ea)	each	$12.00				11	$132.00	55	$660.00
SHRINK WRAP (ea)	each	$12.00				11	$132.00	53	$636.00
		Daily Sub-Total $24,038.43			**Cumulative Total $313,052.27**			**$313,052.27**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/02/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #22

DAILY USAGE & COST									CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost		Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	210		150	60	$2,505.00		250	$10,437.50
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196					
OBM-D 5_12_21	gal	$2.31							14004	$32,349.24
OBM-D 5_15_21	gal	$2.35							7200	$16,920.00
OBM-D 5/16/21	gal	$2.35							14400	$33,840.00
OBM-D 5/17/21	gal	$2.31							7200	$16,632.00
OBM-D 5/19/21	gal	$2.33							14403	$33,558.99
OBM-D 5/24/21	gal	$2.24							7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25							7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25							7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25							7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	14409		10780	3629	$8,165.25		3629	$8,165.25

Daily Sub-Total $10,670.25

$216,635.46

Cumulative Total AES & 3rd Party $529,687.73

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	
Grand Totals	Starting Depth	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	
18,875	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	-
1,435	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441
168	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	
2,104	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	
418	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	
3,207	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	
-	Slurry Added														-	-	-	-	-	-	-	
397	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	
8	Added for Washout						8								-	-	-	-	-	-	-	
6,302	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	-
578	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	
3,047	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	
1,118	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	
425	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	
5,386	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	-
-	Mud Transferred Out																					
3,441	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,441
-	Mud Recovered																					

5,732

Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	

6/2/2021 **Report 22 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

86.6° **12,499' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**Backream / POOH**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**357 gpm**	**4,757 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken	2:00		14:30
Sample Location	Suction		shaker
Flowline Temperature °F	150 °F		100 °F
Depth (ft)	18,383'		18,577'
Mud Weight (ppg)	10.7		11.0
Funnel Vis (sec/qt) @ 70 °F	45		44
600 rpm	31		34
300 rpm	20		22
200 rpm	15		16
100 rpm	9		12
6 rpm	6		6
3 rpm	4		5
Plastic Viscosity (cp) @ 150 °F	11		12
Yield Point (lb/100 ft²) T0 = 2	9		10
Gel Strength (lb/100 ft²) 10 sec / 10 min	6/10		6/9
Gel Strength (lb/100 ft2) 30 min	12		11
HTHP Filtrate (cm/30 min) @ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	16.5%		17.5%
Corrected Solids (vol%)	14.5%		15.3%
Retort Oil Content	63.5%		61.5%
Retort Water Content	20%		21%
O/W Ratio	76:24		75:25
Whole Mud Chlorides (mg/L)	50,000		54,000
Water Phase Salinity (ppm)	281,620		287,354
Whole Mud Alkalinity, Pom	2.0		2.0
Excess Lime (lb/bbl)	2.6 ppb		2.6 ppb
Electrical Stability (volts)	575 v		505 v
Average Specific Gravity of Solids	3.30		3.32
Percent Low Gravity Solids	6.6%		6.8%
ppb Low Gravity Solids	55 ppb		56 ppb
Percent Barite	7.8%		8.5%
ppb Barite	112 ppb		122 ppb
Estimated Total LCM in System			
Sample Taken By	A.ROMAN		M Washburn

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	922 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	754 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1553 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	1786 bbl	stk/min	68	stk/min	68	stk/min	
Tot. on Location	3462 bbl	gal/min	178	gal/min	178	gal/min	

Mud Wt. = 10.7 PV=11 YP=9 **CIRCULATION DATA** n = 0.632 K = 197.8

Bit Depth = 15,806 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.					
88.3 bbl	Volume to Bit	223.3 bbl	Strokes To Bit	3,575	Time To Bit 26 min
	Bottoms Up Vol.	407.8 bbl	BottomsUp Stks	6,529	BottomsUp Time 48 min
	TotalCirc.Vol.	1553.1 bbl	TotalCirc.Stks	24,864	Total Circ. Time 183 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	9,834'	
Agi/DP/Agi	4.500	3.826	3,183'	9,834'
P/Ream/DP	4.500	3.826	2,649'	13,017'
Dir. BHA	5.000	2.000	140'	15,666'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Washout 1				
Washout 2				
Open Hole Size	6.750		18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	9,834'	323.7	turb	11.53
6.875x4.5	11,974'	323.7	turb	11.54
6.75x4.5	13,017'	345.5	turb	11.60
6.75x4.5	15,666'	345.5	turb	11.83
6.75x5	15,806'	425.3	turb	11.85

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	15,494 ft	49.0	2,946 ft	60.1

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3441.4
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Lost to Formation	
Cent/Evap/Trip	
Est. Total on Location	3441.4
Est. Losses/Gains (-)/(+)	20.4

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.33	57 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
152 lbs	77			

Motor/MWD	Calc. Circ. Pressure
1,100 psi	3,185 psi

Afternoon Remarks/Recommendations:

5

Afternoon Rig Activity:

Drill to 18577 increase mud wt. from 10.7 to 11.0 in resonse to gas influx from anticipated fault structures. Samples from 18577 were 100% AC. Experiencing excessive drilling torque while rotating and loss of differential pressure. Wash and ream out of hole depth at time of report is 15807. Forward plans are to pull up to 13000, circulate B/U, then pull or wash up to 12000, spot 17.0# mud cap, pull out of hole pick up packer, set at 2000' then start laying down drillpipe and replacing with stronger schedule pipe due to high torque in lateral.

06/03/21 **Report #23**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

11.7° **8,051' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**137 ft**	**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**27 ft/hr**	**POOH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**0 gpm**	**psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**
				6/3/21		6/2/21
Time Sample Taken				2:00		14:30
Sample Location				Suction		shaker
Flowline Temperature °F						100 °F
Depth (ft)				18,577'		18,577'
Mud Weight (ppg)				11.1		11.0
Funnel Vis (sec/qt)			@ 70 °F	48		44
600 rpm				36		34
300 rpm				23		22
200 rpm				17		16
100 rpm				11		12
6 rpm				6		6
3 rpm				5		5
Plastic Viscosity (cp)			@ 150 °F	13		12
Yield Point (lb/100 ft²)			T0 = 4	10		10
Gel Strength (lb/100 ft²)			10 sec/10 min	7/11		6/9
Gel Strength (lb/100 ft^2)			30 min	14		11
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				18%		17.5%
Corrected Solids (vol%)				15.9%		15.3%
Retort Oil Content				62%		61.5%
Retort Water Content				20%		21%
O/W Ratio				76:24		75:25
Whole Mud Chlorides (mg/L)				51,000		54,000
Water Phase Salinity (ppm)				285,644		287,354
Whole Mud Alkalinity, Pom				1.8		2.0
Excess Lime (lb/bbl)				2.3 ppb		2.6 ppb
Electrical Stability (volts)				550 v		505 v
Average Specific Gravity of Solids				3.37		3.32
Percent Low Gravity Solids				6.7%		6.8%
ppb Low Gravity Solids				55 ppb		56 ppb
Percent Barite				9.3%		8.5%
ppb Barite				133 ppb		122 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)

In Pits	772 bbl
In Hole	795 bbl
Active	1102 bbl
Storage	1653 bbl
Tot. on Location	3220 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	0
gal/min	0

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	0
gal/min	0

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

CIRCULATION DATA

PHHP = 0 n = 0.646 K = 208.293

Bit Depth = 8,200 ' Washout = 0% Pump Efficiency = 95%

Drill String Disp.				
46.8 bbl	Volume to Bit	115.2 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	214.6 bbl	BottomsUp Stks	BottomsUp Time
	TotalCirc.Vol.	1101.7 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	2,228'	0'
Agi/DP/Agi	4.500	3.826	3,183'	2,228'
DP/Ream/DP	4.500	3.826	2,649'	5,411'
Dir. BHA	5.000	2.000	140'	8,060'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Open Hole Size		6.750	18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	2,228'	0.0	lam	11.14
6.875x4.5	5,411'	0.0	lam	11.14
6.875x4.5	8,060'	0.0	lam	11.14
6.875x5	8,200'	0.0	lam	11.14

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	15,494 ft	54.0	3,083 ft	57.1

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	24.0
Shaker 2	200	24.0
Shaker 3	200	24.0
NOV Dryers	170	24.0
Centrifuge 1		2.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3441.4
Transferred In(+)/Out(-)	
Oil Added (+)	23.0
Barite Added (+)	63.3
Other Product Usage (+)	4.3
Water Added (+)	
Left on Cuttings (-)	-6.1
Lost to Formation	-255.6
Cent/Evap/Trip	-50.0
Est. Total on Location	3220.3
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.00	psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
0 lbs	0			

Motor/MWD	Calc. Circ. Pressure
1,100 psi	

Remarks/Recommendations:

OBM RECEIVED: bbls @ $65.00 /

OBM on surface/ storage 2425bbls

Rig Activity:

In the past 24hrs: Drilled lateral section to 18577'; cross fault on formation resulting in gas influx. Max Gas noted 2900units / 10.5ppg Mud cut. Increase density to 11ppg. Resume drilling. Loss of Differential pressure, excessive Torque, and poor ROP, call made to POOH. Circulate BU and start to wash and ream out of lateral seciton up to the shoe. Circulate BU at the shoe and spot 150bbls 17ppg Mud cap. and POOH to top of Mud Cap. Perform flow ck and pump slug. Start to Lay down DP. Will lay down BHA and secure well for upcoming BOP test. At the time of report: Lay down DP passing 8200'. Repairs to ST-80.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

	Daily Total	Cumulative Cost
	$27,607.22	**$340,659.49**
INCLUDING 3RD PARTY CHARGES	**$29,824.72**	**$559,512.45**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/03/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #23

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	56		56			728	$10,424.96
LIME (50)	50# sk	$5.00	100		50	50	$250.00	790	$3,950.00
OPTI - G	50# sk	$30.59	120		120			220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	40		40			65	$10,656.10
BENTONE 910 (50)	50# sk	$59.40	5			5	$297.00	15	$891.00
BENTONE 990 (50)	50# sk	$83.59	40		40			74	$6,185.66
OPTI - MUL	gal	$10.75	165		110	55	$591.25	495	$5,321.25
OPTI - WET	gal	$8.34	385		275	110	$917.40	495	$4,128.30
NEW PHALT	50# sk	$38.72	40		40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	70		60	10	$52.50	210	$1,102.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	58		48	10	$280.50	144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1700	410	1200	910	$6,370.00	6900	$48,301.40
OPTI DRILL (OBM)	bbl	$65.00	2935		2714	221	$14,365.00	2353	$152,945.00
DISCOUNTED OBM	bbl	$15.00	506		506			159	$2,385.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	54	$53,460.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	54	$1,620.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00				3	$45.00	16	$240.00
TRUCKING (cwt)	each	$1.98				1211	$2,398.57	8941	$17,703.89
TRUCKING (min)	each	$650.00						3	$1,950.00
PALLETS (ea)	each	$12.00						55	$660.00
SHRINK WRAP (ea)	each	$12.00						53	$636.00
		Daily Sub-Total $27,607.22			**Cumulative Total $340,659.49**			**$340,659.49**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/03/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #23**

DAILY USAGE & COST								**CUMULATIVE**	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	150		140	10	$417.50	260	$10,855.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	10780		9980	800	$1,800.00	4429	$9,965.25
Diesel Received 6/2/21	gal	$2.38		6400	6400				
							Daily Sub-Total $2,217.50		**$218,852.96**

Cumulative Total AES & 3rd Party $559,512.45

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

		WEEK 1							WEEK 2							WEEK 3						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4
Grand Totals	Starting Depth	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577
19,012	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137
1,441	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441
173	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4
2,127	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23
481	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63
3,207	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-
-	Slurry Added														-	-	-	-	-	-	-	-
397	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-
8	Added for Washout						8								-	-	-	-	-	-	-	-
6,393	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91
603	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25
3,303	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256
1,124	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-
450	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25
5,698	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312
-	Mud Transferred Out																					
3,220	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220
-	Mud Recovered																					

5,732

Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#

6/3/2021 **Report 23 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

10.7° **5,868' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**L/D DRILLPIPE**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**		

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD VOLUME (BBL)

In Pits	772 bbl
In Hole	807 bbl
Active	941 bbl
Storage	1653 bbl
Tot. on Location	3232 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

MUD PROPERTIES

Time Sample Taken	2:00		14:30
Sample Location	Suction		suction
Flowline Temperature °F			
Depth (ft)	18,577'		18,577'
Mud Weight (ppg)	11.1		11.1
Funnel Vis (sec/qt) @ 70 °F	48		47
600 rpm	36		35
300 rpm	23		23
200 rpm	17		17
100 rpm	11		12
6 rpm	6		6
3 rpm	5		5
Plastic Viscosity (cp) @ 150 °F	13		12
Yield Point (lb/100 ft²) T0 = 4	10		11
Gel Strength (lb/100 ft²) 10 sec / 10 min	7/11		6/8
Gel Strength (lb/100 ft2) 30 min	14		12
HTHP Filtrate (cm/30 min) @ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	18%		18%
Corrected Solids (vol%)	15.9%		15.9%
Retort Oil Content	62%		61%
Retort Water Content	20%		21%
O/W Ratio	76:24		74:26
Whole Mud Chlorides (mg/L)	51,000		53,000
Water Phase Salinity (ppm)	285,644		283,542
Whole Mud Alkalinity, Pom	1.8		1.9
Excess Lime (lb/bbl)	2.3 ppb		2.5 ppb
Electrical Stability (volts)	550 v		524 v
Average Specific Gravity of Solids	3.37		3.32
Percent Low Gravity Solids	6.7%		7.1%
ppb Low Gravity Solids	55 ppb		58 ppb
Percent Barite	9.3%		8.8%
ppb Barite	133 ppb		126 ppb
Estimated Total LCM in System			
Sample Taken By	A.ROMAN		M Washburn

CIRCULATION DATA

Mud Wt. = 11.1 PV=13 YP=10 n = 0.646 K = 208.3

Bit Depth = 1,017 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.	Volume to Bit	Strokes To Bit	Time To Bit
	13.0 bbl		
	Bottoms Up Vol. 156.1 bbl	BottomsUp Stks	BottomsUp Time
34.6 bbl	TotalCirc.Vol. 941.1 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	**-4,955'**	
Agi/DP/Agi	4.500	3.826	3,183'	**-4,955'**
P/Ream/DP	4.500	3.826	2,649'	**-1,772'**
Dir. BHA	5.000	2.000	140'	877'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Open Hole Size	6.750		18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	3,183'		lam	11.14
6.875x4.5	5,832'		lam	11.14
6.875x5	5,972'		lam	11.14

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	15,494 ft	54.0	3,083 ft	57.1

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3220.2
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Lost to Formation	
Cent/Evap/Trip	
Est. Total on Location	3220.2
Est. Losses/Gains (-)/(+)	12.1

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
		18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18

Motor/MWD	Calc. Circ. Pressure
1,100 psi	1,227 psi

Afternoon Remarks/Recommendations:

5

Afternoon Rig Activity:

Continue pull out of hole after spotting mud cap at 12000' at 3179 shut in well, casing pressure at 240 PSI, pump 40 bbls 17.0# kill mud down annulus to kill well, check flow, well static. Continue to pull out racking stands in derrick. Ordered an additional 400 bbls kill mud from Newpark Madisonville. Weighting up reserve $10 / bbl, high % LGS discount mud to 17.0# to pump down anulus in the event of casing pressure. Trip depth at time of report is 1017'.

06/04/21 **Report #24**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0° **0' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**L/D DRILLPIPE**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**0 gpm**	**psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**
				6/4/21		6/3/21
Time Sample Taken				2:00		14:30
Sample Location				Suction		suction
Flowline Temperature °F						
Depth (ft)				18,577'		18,577'
Mud Weight (ppg)				11.3		11.1
Funnel Vis (sec/qt)			@ 70 °F	52		47
600 rpm				37		35
300 rpm				24		23
200 rpm				19		17
100 rpm				12		12
6 rpm				7		6
3 rpm				5		5
Plastic Viscosity (cp)			@ 150 °F	13		12
Yield Point (lb/100 ft²)			T0 = 3	11		11
Gel Strength (lb/100 ft²)			10 sec/10 min	7/11		6/8
Gel Strength (lb/100 ft^2)			30 min	14		12
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				19%		18%
Corrected Solids (vol%)				16.9%		15.9%
Retort Oil Content				61%		61%
Retort Water Content				20%		21%
O/W Ratio				75:25		74:26
Whole Mud Chlorides (mg/L)				51,000		53,000
Water Phase Salinity (ppm)				285,644		283,542
Whole Mud Alkalinity, Pom				1.8		1.9
Excess Lime (lb/bbl)				2.3 ppb		2.5 ppb
Electrical Stability (volts)				534 v		524 v
Average Specific Gravity of Solids				3.33		3.32
Percent Low Gravity Solids				7.4%		7.1%
ppb Low Gravity Solids				61 ppb		58 ppb
Percent Barite				9.5%		8.8%
ppb Barite				136 ppb		126 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)

In Pits	702 bbl
In Hole	842 bbl
Active	702 bbl
Storage	1801 bbl
Tot. on Location	3345 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	0
gal/min	0

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	0
gal/min	0

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

CIRCULATION DATA

PHHP = 0 n = 0.624 K = 249.114

Bit Depth = ' Washout = 0% Pump Efficiency = 95%

Drill String Disp.				
0.0 bbl	Volume to Bit	0.0 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	0.0 bbl	BottomsUp Stks	BottomsUp Time
	TotalCirc.Vol.	702.0 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	0'	0'
Agi/DP/Agi	4.500	3.826		0'
DP/Ream/DP	4.500	3.826		0'
Dir. BHA	5.000	2.000		0'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Open Hole Size		6.750	18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	15,494 ft	54.0	3,083 ft	57.1

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	18.0
Shaker 2	200	18.0
Shaker 3	200	18.0
NOV Dryers	170	18.0
Centrifuge 1		0.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3220.2
Transferred In(+)/Out(-)	258.0
Oil Added (+)	18.1
Barite Added (+)	14.0
Other Product Usage (+)	0.0
Water Added (+)	
Left on Cuttings (-)	0.0
Lost to Formation	-140.3
Cent/Evap/Trip	-25.0
Est. Total on Location	3345.0
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.00	psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
0 lbs	0			

Motor/MWD	Calc. Circ. Pressure
1,100 psi	

Remarks/Recommendations:

OBM RECEIVED: 258bbls @ $65.00 /

OBM on surface/ storage 2503bbls

Rig Activity:

In the past 24hrs: POOH, Lay down 8600' of DP & BHA. Pick up bit sub and make up same with previous bit. TIH 30 stands of 4.5DP and make up Storm packer, run packer in the hole and set at 250' below well head. Continue to lay down DP (9977') racked back on the derrick. At the time of report: Well secure, and continue Lay down DP from the derrick in the mouse-hole.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

	Daily Total	Cumulative Cost
	$11,504.39	**$352,163.88**
INCLUDING 3RD PARTY CHARGES	**$13,214.39**	**$572,726.84**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/04/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #24

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	56		56			728	$10,424.96
LIME (50)	50# sk	$5.00	50		50			790	$3,950.00
OPTI - G	50# sk	$30.59	120		120			220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	40		40			65	$10,656.10
BENTONE 910 (50)	50# sk	$59.40						15	$891.00
BENTONE 990 (50)	50# sk	$83.59	40		40			74	$6,185.66
OPTI - MUL	gal	$10.75	110		110			495	$5,321.25
OPTI - WET	gal	$8.34	275		275			495	$4,128.30
NEW PHALT	50# sk	$38.72	40		40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	60		60			210	$1,102.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		48			144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1200	801	1800	201	$1,404.20	7101	$49,705.60
OPTI DRILL (OBM)	bbl	$65.00	2714	258	2883	89	$5,785.00	2442	$158,730.00
DISCOUNTED OBM	bbl	$15.00	506		462	44	$660.00	203	$3,045.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	56	$55,440.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	56	$1,680.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00				2	$30.00	18	$270.00
TRUCKING (cwt)	each	$1.98				801	$1,585.19	9742	$19,289.08
TRUCKING (min)	each	$650.00						3	$1,950.00
PALLETS (ea)	each	$12.00						55	$660.00
SHRINK WRAP (ea)	each	$12.00						53	$636.00
		Daily Sub-Total $11,504.39			**Cumulative Total $352,163.88**			**$352,163.88**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/04/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #24**

DAILY USAGE & COST / **CUMULATIVE**

Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	140		140			260	$10,855.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	9980		9220	760	$1,710.00	5189	$11,675.25
Diesel Received 6/2/21	gal	$2.38	6400		6400				

Daily Sub-Total $1,710.00

$220,562.96

Cumulative Total AES & 3rd Party $572,726.84

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

FLUID VOLUME ACCOUNTING

Grand Totals		WEEK 1							WEEK 2							WEEK 3							WEEK 4						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21	6/4/21	6/5/21	6/6/21	6/7/21	6/8/21	6/9/21	6/10/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577						
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577							
19,012	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137	-	-	-	-	-	-	-
1,441	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6	-	-	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,345	3,345	3,345	3,345	3,345
173	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4	-							
2,146	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23	18							
495	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63	14							
3,465	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-	258							
-	Slurry Added														-	-	-	-	-	-	-	-	-							
397	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-	-							
8	Added for Washout						8								-	-	-	-	-	-	-	-	-							
6,683	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91	290	-	-	-	-	-	-
628	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25	25							
3,443	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256	140							
1,124	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6	-							
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-	-							
450	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25	-							
5,863	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312	165	-	-	-	-	-	-
-	Mud Transferred Out																												
3,345	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,345	3,345	3,345	3,345	3,345	3,345
-	Mud Recovered																												

Comments:		Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.	6/4/21	Lay down DP, Set storm packer 200' below well head, with 30 stnads of DP below. Continue to Lay down DP racked back on the derrick.
5,990							
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'	6/5/21	
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.	6/6/21	
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.	6/7/21	
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.	6/8/21	
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling	6/9/21	
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#	6/10/21	

06/05/21 **Report #25**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.0° **0' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**Testing BOP's**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**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	788 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**	In Hole	842 bbl	Stroke	12	Stroke	12	Stroke	12
				6/5/21		6/3/21	Active	788 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				2:00		14:30	Storage	1801 bbl	stk/min	0	stk/min	0	stk/min	
Sample Location				Suction		suction	Tot. on Location	3431 bbl	gal/min	0	gal/min	0	gal/min	0
Flowline Temperature °F							PHHP = 0		**CIRCULATION DATA**				n = 0.646	K = 208.293
Depth (ft)				18,577'		18,577'	Bit Depth = '		Washout = 0%				Pump Efficiency = 95%	
Mud Weight (ppg)				11.3		11.1	Drill String Disp.	Volume to Bit 0.0 bbl	Strokes To Bit				Time To Bit	
Funnel Vis (sec/qt)			@ 70 °F	51		47		Bottoms Up Vol. 0.0 bbl	BottomsUp Stks				BottomsUp Time	
600 rpm				36		35	0.0 bbl	TotalCirc.Vol. 788.0 bbl	TotalCirc.Stks				Total Circ. Time	
300 rpm				23		23	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**	
200 rpm				19		17	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours
100 rpm				13		12	Drill Pipe	4.500	3.826	0'	0'		Shaker 1	200	0.0
6 rpm				7		6	Agi/DP/Agi	4.500	3.826		0'		Shaker 2	200	0.0
3 rpm				6		5	DP/Ream/DP	4.500	3.826		0'		Shaker 3	200	0.0
Plastic Viscosity (cp)			@ 150 °F	13		12	Dir. BHA	5.000	2.000		0'		NOV Dryers	170	0.0
Yield Point (lb/100 ft²)		T0 =	5	10		11	**CASING & HOLE DATA**								
Gel Strength (lb/100 ft²)		10 sec/10 min		7/11		6/8	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		0.0
Gel Strength (lb/100 ft²)		30 min		12		12	Riser						**VOLUME ACCOUNTING (bbls)**		
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3345.0
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		0.0
Retort Solids Content				19%		18%							Oil Added (+)		0.0
Corrected Solids (vol%)				17%		15.9%							Barite Added (+)		0.0
Retort Oil Content				61%		61%	Open Hole Size	6.750	18,577'				Other Product Usage (+)		0.0
Retort Water Content				20%		21%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		
O/W Ratio				75:25		74:26	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		0.0
Whole Mud Chlorides (mg/L)				50,000		53,000							OBM Recover		86.0
Water Phase Salinity (ppm)				281,620		283,542							Cent/Evap/Trip		
Whole Mud Alkalinity, Pom				1.5		1.9							Est. Total on Location		3431.0
Excess Lime (lb/bbl)				2 ppb		2.5 ppb							Est. Losses/Gains (-)/(+)		0.0
Electrical Stability (volts)				530 v		524 v							**BIT HYDRAULICS DATA**		
Average Specific Gravity of Solids				3.33		3.32							Bit H.S.I.	Bit ΔP	Nozzles (32nds)
Percent Low Gravity Solids				7.5%		7.1%							0.00	psi	18 18 18
ppb Low Gravity Solids				61 ppb		58 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18
Percent Barite				9.5%		8.8%									
ppb Barite				136 ppb		126 ppb	**BIT DATA**		Manuf./Type		GTD64M		0 lbs	0	
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	15,494 ft	54.0	3,083 ft	57.1		1,100 psi		

Remarks/Recommendations:

OBM RECEIVED: bbls @ $65.00 /

OBM on surface/ storage 2589bbls

Rig Activity:

In the past 24hrs: Finish lay down of DP from the derrick. Make preparations to test BOP's. Change out Saver subs for new threads on CET-43 DP. While testing upper and lower ram's, test fail. Wait on new rams to arrive on location. Replace Rams and resume testing BOP's. At the time of report: Well secure, and continue to test BOP's. Recover 86bbls of OBM from Mud Cooling unit. Transfer same back to Active system.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W P Y E C g G H O
1 1 1 1 1 1 1 1 1

	Daily Total	Cumulative Cost
	$2,040.00	**$354,203.88**
INCLUDING 3RD PARTY CHARGES	**$2,040.00**	**$574,766.84**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/05/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #25

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	56		56			728	$10,424.96
LIME (50)	50# sk	$5.00	50		50			790	$3,950.00
OPTI - G	50# sk	$30.59	120		120			220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	40		40			65	$10,656.10
BENTONE 910 (50)	50# sk	$59.40						15	$891.00
BENTONE 990 (50)	50# sk	$83.59	40		40			74	$6,185.66
OPTI - MUL	gal	$10.75	110		110			495	$5,321.25
OPTI - WET	gal	$8.34	275		275			495	$4,128.30
NEW PHALT	50# sk	$38.72	40		40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	60		60			210	$1,102.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		48			144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1800		1800			7101	$49,705.60
OPTI DRILL (OBM)	bbl	$65.00	2883		2883			2442	$158,730.00
DISCOUNTED OBM	bbl	$15.00	462		462			203	$3,045.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	58	$57,420.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	58	$1,740.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						18	$270.00
TRUCKING (cwt)	each	$1.98						9742	$19,289.08
TRUCKING (min)	each	$650.00						3	$1,950.00
PALLETS (ea)	each	$12.00						55	$660.00
SHRINK WRAP (ea)	each	$12.00						53	$636.00
		Daily Sub-Total $2,040.00			**Cumulative Total $354,203.88**			**$354,203.88**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/05/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #25**

DAILY USAGE & COST								**CUMULATIVE**	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	140		140			260	$10,855.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	9220		9220			5189	$11,675.25
Diesel Received 6/2/21	gal	$2.38	6400		6400				
									$220,562.96

Cumulative Total AES & 3rd Party $574,766.84

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

FLUID VOLUME ACCOUNTING F W

Grand Totals		WEEK 1							WEEK 2							WEEK 3							WEEK 4						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21	6/4/21	6/5/21	6/6/21	6/7/21	6/8/21	6/9/21	6/10/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577				
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577					
19,012	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137	-	-	-	-	-	-	-
1,441	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6	-	-	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,431	3,431	3,431	3,431
173	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4	-	-					
2,146	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23	18	-					
495	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63	14	-					
3,551	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-	258	86					
-	Slurry Added														-	-	-	-	-	-	-	-	-	-					
397	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-	-	-					
8	Added for Washout						8								-	-	-	-	-	-	-	-	-	-					
6,769	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91	290	86	-	-	-	-	-
628	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25	25	-					
3,443	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256	140	-					
1,124	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6	-	-					
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-	-	-					
450	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25	-	-					
5,863	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312	165	-	-	-	-	-	-
-	Mud Transferred Out																												
3,431	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,431	3,431	3,431	3,431	3,431
-	Mud Recovered																												

6,076

Comments:		Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.	6/4/21	Lay down DP, Set storm packer 200' below well head, with 30 stnads of DP below. Continue to Lay down DP racked back on the derrick.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'	6/5/21	Finish lay down DP. Start on testing BOP's. Recover 86bbls of OBM from Mud Cooler, transfer same to Active system.
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.	6/6/21	
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.	6/7/21	
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.	6/8/21	
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling	6/9/21	
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#	6/10/21	

06/06/21 **Report #26**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.3° **200' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**TIH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**0 gpm**	**psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**
				6/6/21		6/5/21
Time Sample Taken				2:00		13:00
Sample Location				Suction		suction
Flowline Temperature °F						
Depth (ft)				18,577'		18,577'
Mud Weight (ppg)				11.3		11.3
Funnel Vis (sec/qt)			@ 75 °F	51		49
600 rpm				36		37
300 rpm				23		24
200 rpm				19		17
100 rpm				13		13
6 rpm				7		7
3 rpm				6		6
Plastic Viscosity (cp)			@ 150 °F	13		13
Yield Point (lb/100 ft²)			T0 = 5	10		11
Gel Strength (lb/100 ft²)			10 sec/10 min	7/11		7/10
Gel Strength (lb/100 ft²)			30 min	12		11
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				19%		19%
Corrected Solids (vol%)				16.9%		17%
Retort Oil Content				60%		61%
Retort Water Content				21%		20%
O/W Ratio				74:26		75:25
Whole Mud Chlorides (mg/L)				51,000		51,000
Water Phase Salinity (ppm)				275,793		285,644
Whole Mud Alkalinity, Pom				1.5		1.9
Excess Lime (lb/bbl)				2 ppb		2.5 ppb
Electrical Stability (volts)				485 v		543 v
Average Specific Gravity of Solids				3.35		3.33
Percent Low Gravity Solids				7.3%		7.5%
ppb Low Gravity Solids				60 ppb		62 ppb
Percent Barite				9.6%		9.5%
ppb Barite				138 ppb		136 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	775 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	839 bbl	Stroke	12	Stroke	12	Stroke	12
Active	781 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	1742 bbl	stk/min	0	stk/min	0	stk/min	
Tot. on Location	3356 bbl	gal/min	0	gal/min	0	gal/min	0

CIRCULATION DATA — PHHP = 0 — n = 0.646 K = 208.293

Bit Depth = 200 ' | Washout = 0% | Pump Efficiency = 95%

Drill String Disp.				
3.2 bbl	Volume to Bit	1.4 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	4.6 bbl	BottomsUp Stks	BottomsUp Time
	TotalCirc.Vol.	781.0 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	59'	0'
HWDP	4.500	3.000		59'
DP/Ream/Ag	4.500	3.826		59'
Dir. BHA	5.000	2.000	141'	59'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Open Hole Size		6.750	18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	59'	0.0	lam	11.34
6.875x5	200'	0.0	lam	11.34

BIT DATA

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	18,577 ft	0.0	0 ft	#DIV/0!

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	4.0
Shaker 2	200	4.0
Shaker 3	200	4.0
NOV Dryers	170	4.0
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3431.0
Transferred In(+)/Out(-)	
Oil Added (+)	0.0
Barite Added (+)	0.0
Other Product Usage (+)	0.0
Water Added (+)	
Left on Cuttings (-)	0.0
Hole Losses	-50.0
Cent/Evap/Trip	-25.2
Est. Total on Location	3355.8
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.00	psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
0 lbs	0			

Manuf./Type	Motor/MWD	Calc. Circ. Pressure
GTD64M	psi	

Remarks/Recommendations:

OBM RECEIVED: bbls @ $65.00 /

OBM on surface/ storage 2589bbls

Rig Activity:

In the past 24hrs: Pick up CET-43 DP 3000' and rack back on derrick. Make up BHA Test same on surface and rack back on derrick. Pick up 2 stands, TIH to retrieve Storm Packer, relese same, attempeted to pump on back side. Valves closed, trapping pressure on BOP's Kill line vale and Check Valve. Inside vale broke stem off while attempting to release pressure. Technician arrive on location to release pressure through grease fitting. Replace valve and re-test. TIH, latch on Packer, release same and Circulate BU. POOH with packer and 30stands. Casing pressure150psi Bullhead 30bbls 17ppg. Casng press. Zero. Latch on New BHA and start to TIH. At the time of report: Trip in the hole passing 200'.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

Daily Total	Cumulative Cost
$2,040.00	**$356,243.88**
INCLUDING 3RD PARTY CHARGES	
$2,040.00	**$576,806.84**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/06/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #26

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	56		56			728	$10,424.96
LIME (50)	50# sk	$5.00	50		50			790	$3,950.00
OPTI - G	50# sk	$30.59	120		120			220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	40		40			65	$10,656.10
BENTONE 910 (50)	50# sk	$59.40						15	$891.00
BENTONE 990 (50)	50# sk	$83.59	40		40			74	$6,185.66
OPTI - MUL	gal	$10.75	110		110			495	$5,321.25
OPTI - WET	gal	$8.34	275		275			495	$4,128.30
NEW PHALT	50# sk	$38.72	40		40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	60		60			210	$1,102.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		48			144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1800		1800			7101	$49,705.60
OPTI DRILL (OBM)	bbl	$65.00	2883		2883			2442	$158,730.00
DISCOUNTED OBM	bbl	$15.00	462		462			203	$3,045.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	60	$59,400.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	60	$1,800.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						18	$270.00
TRUCKING (cwt)	each	$1.98						9742	$19,289.08
TRUCKING (min)	each	$650.00						3	$1,950.00
PALLETS (ea)	each	$12.00						55	$660.00
SHRINK WRAP (ea)	each	$12.00						53	$636.00
		Daily Sub-Total $2,040.00			**Cumulative Total $356,243.88**			**$356,243.88**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/06/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #26

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	140		140			260	$10,855.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	9220		9220			5189	$11,675.25
Diesel Received 6/2/21	gal	$2.38	6400		6400				
									$220,562.96

Cumulative Total AES & 3rd Party $576,806.84

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

FLUID VOLUME ACCOUNTING F W

Grand Totals		WEEK 1							WEEK 2							WEEK 3							WEEK 4						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21	6/4/21	6/5/21	6/6/21	6/7/21	6/8/21	6/9/21	6/10/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577			
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577				
19,012	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137	-	-	-	-	-	-	-
1,441	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6	-	-	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,356	3,356	3,356
173	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4	-	-	-				
2,146	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23	18	-	-				
495	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63	14	-	-				
3,551	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-	258	86	-				
-	Slurry Added														-	-	-	-	-	-	-	-	-	-	-				
397	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-	-	-	-				
8	Added for Washout						8								-	-	-	-	-	-	-	-	-	-	-				
6,769	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91	290	86	-	-	-	-	-
653	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25	25	-	25				
3,493	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256	140	-	50				
1,124	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6	-	-	-				
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-	-	-	-				
450	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25	-	-	-				
5,938	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312	165	-	75	-	-	-	-
-	Mud Transferred Out																												
3,356	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,356	3,356	3,356	3,356
-	Mud Recovered																												

	Comments:		Comments:		Comments:		Comments:
6,076	5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.	6/4/21	Lay down DP, Set storm packer 200' below well head, with 30 stnads of DP below. Continue to Lay down DP racked back on the derrick.
	5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'	6/5/21	Finish lay down DP. Start on testing BOP's. Recover 86bbls of OBM from Mud Cooler, transfer same to Active system.
	5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.	6/6/21	Pull Storm packer, Casing press 150psi. Bullhead 30bbls down hole, Casing prss Zero. Start TIH with new BHA and new DP.
	5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.	6/7/21	
	5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.	6/8/21	
	5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling	6/9/21	
	5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#	6/10/21	

06/06/21 **Report #26**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

0.3° **200' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**TIH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**0 gpm**	**psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**
				6/6/21		6/5/21
Time Sample Taken				2:00		13:00
Sample Location				Suction		suction
Flowline Temperature °F						
Depth (ft)				18,577'		18,577'
Mud Weight (ppg)				11.3		11.3
Funnel Vis (sec/qt)			@ 75 °F	51		49
600 rpm				36		37
300 rpm				23		24
200 rpm				19		17
100 rpm				13		13
6 rpm				7		7
3 rpm				6		6
Plastic Viscosity (cp)			@ 150 °F	13		13
Yield Point (lb/100 ft²)			T0 = 5	10		11
Gel Strength (lb/100 ft²)			10 sec/10 min	7/11		7/10
Gel Strength (lb/100 ft²)			30 min	12		11
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				19%		19%
Corrected Solids (vol%)				16.9%		17%
Retort Oil Content				60%		61%
Retort Water Content				21%		20%
O/W Ratio				74:26		75:25
Whole Mud Chlorides (mg/L)				51,000		51,000
Water Phase Salinity (ppm)				275,793		285,644
Whole Mud Alkalinity, Pom				1.5		1.9
Excess Lime (lb/bbl)				2 ppb		2.5 ppb
Electrical Stability (volts)				485 v		543 v
Average Specific Gravity of Solids				3.35		3.33
Percent Low Gravity Solids				7.3%		7.5%
ppb Low Gravity Solids				60 ppb		62 ppb
Percent Barite				9.6%		9.5%
ppb Barite				138 ppb		136 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	775 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	839 bbl	Stroke	12	Stroke	12	Stroke	12
Active	781 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	1742 bbl	stk/min	0	stk/min	0	stk/min	
Tot. on Location	3356 bbl	gal/min	0	gal/min	0	gal/min	0

CIRCULATION DATA — PHHP = 0 — n = 0.646 K = 208.293

Bit Depth = 200 ' | Washout = 0% | Pump Efficiency = 95%

Drill String Disp.				
3.2 bbl	Volume to Bit	1.4 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	4.6 bbl	BottomsUp Stks	BottomsUp Time
	TotalCirc.Vol.	781.0 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	59'	0'
HWDP	4.500	3.000		59'
DP/Ream/Ag	4.500	3.826		59'
Dir. BHA	5.000	2.000	141'	59'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Open Hole Size		6.750	18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	59'	0.0	lam	11.34
6.875x5	200'	0.0	lam	11.34

BIT DATA

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	18,577 ft	0.0	0 ft	#DIV/0!

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	4.0
Shaker 2	200	4.0
Shaker 3	200	4.0
NOV Dryers	170	4.0
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3431.0
Transferred In(+)/Out(-)	
Oil Added (+)	0.0
Barite Added (+)	0.0
Other Product Usage (+)	0.0
Water Added (+)	
Left on Cuttings (-)	0.0
Hole Losses	-50.0
Cent/Evap/Trip	-25.2
Est. Total on Location	3355.8
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.00	psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
0 lbs	0			

Manuf./Type	Motor/MWD	Calc. Circ. Pressure
GTD64M	psi	

Remarks/Recommendations:

OBM RECEIVED: bbls @ $65.00 /

OBM on surface/ storage 2589bbls

Rig Activity:

In the past 24hrs: Pick up CET-43 DP 3000' and rack back on derrick. Make up BHA Test same on surface and rack back on derrick. Pick up 2 stands, TIH to retrieve Storm Packer, relese same, attempeted to pump on back side. Valves closed, trapping pressure on BOP's Kill line vale and Check Valve. Inside vale broke stem off while attempting to release pressure. Technician arrive on location to release pressure through grease fitting. Replace valve and re-test. TIH, latch on Packer, release same and Circulate BU. POOH with packer and 30stands. Casing pressure150psi Bullhead 30bbls 17ppg. Casng press. Zero. Latch on New BHA and start to TIH. At the time of report: Trip in the hole passing 200'.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

Daily Total	Cumulative Cost
$2,040.00	**$356,243.88**
INCLUDING 3RD PARTY CHARGES	
$2,040.00	**$576,806.84**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/06/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #26

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	56		56			728	$10,424.96
LIME (50)	50# sk	$5.00	50		50			790	$3,950.00
OPTI - G	50# sk	$30.59	120		120			220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	40		40			65	$10,656.10
BENTONE 910 (50)	50# sk	$59.40						15	$891.00
BENTONE 990 (50)	50# sk	$83.59	40		40			74	$6,185.66
OPTI - MUL	gal	$10.75	110		110			495	$5,321.25
OPTI - WET	gal	$8.34	275		275			495	$4,128.30
NEW PHALT	50# sk	$38.72	40		40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	60		60			210	$1,102.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		48			144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1800		1800			7101	$49,705.60
OPTI DRILL (OBM)	bbl	$65.00	2883		2883			2442	$158,730.00
DISCOUNTED OBM	bbl	$15.00	462		462			203	$3,045.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	60	$59,400.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	60	$1,800.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						18	$270.00
TRUCKING (cwt)	each	$1.98						9742	$19,289.08
TRUCKING (min)	each	$650.00						3	$1,950.00
PALLETS (ea)	each	$12.00						55	$660.00
SHRINK WRAP (ea)	each	$12.00						53	$636.00
		Daily Sub-Total $2,040.00			**Cumulative Total $356,243.88**			**$356,243.88**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/06/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #26**

DAILY USAGE & COST								**CUMULATIVE**	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	140		140			260	$10,855.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	9220		9220			5189	$11,675.25
Diesel Received 6/2/21	gal	$2.38	6400		6400				
									$220,562.96

Cumulative Total AES & 3rd Party $576,806.84

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

FLUID VOLUME ACCOUNTING F W

Grand Totals		WEEK 1							WEEK 2							WEEK 3							WEEK 4						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21	6/4/21	6/5/21	6/6/21	6/7/21	6/8/21	6/9/21	6/10/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577			
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577				
19,012	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137	-	-	-	-	-	-	-
1,441	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6	-	-	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,356	3,356	3,356
173	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4	-	-	-				
2,146	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23	18	-	-				
495	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63	14	-	-				
3,551	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-	258	86	-				
-	Slurry Added														-	-	-	-	-	-	-	-	-	-	-				
397	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-	-	-	-				
8	Added for Washout						8								-	-	-	-	-	-	-	-	-	-	-				
6,769	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91	290	86	-	-	-	-	-
653	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25	25	-	25				
3,493	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256	140	-	50				
1,124	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6	-	-	-				
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-	-	-	-				
450	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25	-	-	-				
5,938	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312	165	-	75	-	-	-	-
-	Mud Transferred Out																												
3,356	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,356	3,356	3,356	3,356
-	Mud Recovered																												

	Comments:		Comments:		Comments:		Comments:
6,076	5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.	6/4/21	Lay down DP, Set storm packer 200' below well head, with 30 stnads of DP below. Continue to Lay down DP racked back on the derrick.
	5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'	6/5/21	Finish lay down DP. Start on testing BOP's. Recover 86bbls of OBM from Mud Cooler, transfer same to Active system.
	5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.	6/6/21	Pull Storm packer, Casing press 150psi. Bullhead 30bbls down hole, Casing prss Zero. Start TIH with new BHA and new DP.
	5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.	6/7/21	
	5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.	6/8/21	
	5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling	6/9/21	
	5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#	6/10/21	

6/6/2021 **Report 26 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

4.2° **10,714' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**P/U new DP**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**		

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:00		15:00
Sample Location		Suction		suction
Flowline Temperature °F				
Depth (ft)		18,577'		18,577'
Mud Weight (ppg)		11.3		11.0
Funnel Vis (sec/qt)	@ 75 °F	51		49
600 rpm		36		35
300 rpm		23		22
200 rpm		19		18
100 rpm		13		13
6 rpm		7		6
3 rpm		6		5
Plastic Viscosity (cp)	@ 150 °F	13		13
Yield Point (lb/100 ft²)	T0 = 5	10		9
Gel Strength (lb/100 ft²)	10 sec / 10 min	7/11		5/9
Gel Strength (lb/100 ft2)	30 min	12		11
HTHP Filtrate (cm/30 min)	@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		19%		17.5%
Corrected Solids (vol%)		16.9%		15.3%
Retort Oil Content		60%		59.5%
Retort Water Content		21%		23%
O/W Ratio		74:26		72:28
Whole Mud Chlorides (mg/L)		51,000		55,000
Water Phase Salinity (ppm)		275,793		272,715
Whole Mud Alkalinity, Pom		1.5		2.0
Excess Lime (lb/bbl)		2 ppb		2.6 ppb
Electrical Stability (volts)		485 v		495 v
Average Specific Gravity of Solids		3.35		3.29
Percent Low Gravity Solids		7.3%		7.1%
ppb Low Gravity Solids		60 ppb		58 ppb
Percent Barite		9.6%		8.2%
ppb Barite		138 ppb		118 ppb
Estimated Total LCM in System				
Sample Taken By		A.ROMAN		M Washburn

MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
In Pits	775 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
In Hole	775 bbl	Stroke	12	Stroke	12	Stroke	12
Active	1208 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Storage	1742 bbl	stk/min		stk/min		stk/min	
Tot. on Location	3292 bbl	gal/min		gal/min		gal/min	

Mud Wt. = 11.3 PV=13 YP=10 **CIRCULATION DATA** n = 0.646 K = 208.3

Bit Depth = 10,901 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.	Volume to Bit	148.0 bbl	Strokes To Bit	Time To Bit
	Bottoms Up Vol.	285.4 bbl	BottomsUp Stks	BottomsUp Time
67.0 bbl	TotalCirc.Vol.	1208.5 bbl	TotalCirc.Stks	Total Circ. Time

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	932'	
HWDP	4.500	3.000	1,006'	932'
P/Ream/Ag	4.500	3.826	8,822'	1,938'
Dir. BHA	5.000	2.000	141'	10,760'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Open Hole Size	6.750		18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	932'		lam	11.34
6.875x4.5	1,938'		lam	11.34
6.875x4.5	10,760'		lam	11.34
6.875x5	10,901'		lam	11.34

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	18,577 ft			#DIV/0!

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3355.8
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Hole Losses	
Cent/Evap/Trip	
Est. Total on Location	3355.8
Est. Losses/Gains (-)/(+)	-63.8

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
		18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18

Motor/MWD | Calc. Circ. Pressure 230 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

TIH with new BHA, surface test MWD, pick up CET 43 4-1/2" DP and trip in hole to 5990, pick up agitator, circulate, pump 25 bbls with no returns. Continue to pick up DP and run in hole to 8701, pump 86 bbls 10.2# mud from reserve rig pit, last 2 bbls established circulation. Continue to pick up DP and run in hole. Blend $10 / bbl discounted OBM with lighter reserve mud to maintain active volume. Maintain 135 bbls 17.0# kill mud in rig pits for well control.

06/07/21 **Report #27**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

94.6° **12,518' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**0 ft**	**18,577 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**0 ft/hr**	**TIH**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**289 gpm**	**3,500 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**
				6/7/21		6/6/21
Time Sample Taken				2:00		15:00
Sample Location				Suction		suction
Flowline Temperature °F				115 °F		
Depth (ft)				18,577'		18,577'
Mud Weight (ppg)				11.2		11.0
Funnel Vis (sec/qt)			@ 100 °F	44		49
600 rpm				36		35
300 rpm				22		22
200 rpm				16		18
100 rpm				12		13
6 rpm				6		6
3 rpm				4		5
Plastic Viscosity (cp)			@ 150 °F	14		13
Yield Point (lb/100 ft²)			T0 = 2	8		9
Gel Strength (lb/100 ft²)			10 sec/10 min	6/10		5/9
Gel Strength (lb/100 ft^2)			30 min	12		11
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				19%		17.5%
Corrected Solids (vol%)				16.8%		15.3%
Retort Oil Content				59%		59.5%
Retort Water Content				22%		23%
O/W Ratio				73:27		72:28
Whole Mud Chlorides (mg/L)				54,000		55,000
Water Phase Salinity (ppm)				277,923		272,715
Whole Mud Alkalinity, Pom				1.4		2.0
Excess Lime (lb/bbl)				1.8 ppb		2.6 ppb
Electrical Stability (volts)				476 v		495 v
Average Specific Gravity of Solids				3.26		3.29
Percent Low Gravity Solids				8%		7.1%
ppb Low Gravity Solids				66 ppb		58 ppb
Percent Barite				8.8%		8.2%
ppb Barite				126 ppb		118 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)

In Pits	740 bbl
In Hole	739 bbl
Active	1431 bbl
Storage	1613 bbl
Tot. on Location	3092 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	55
gal/min	144

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	55
gal/min	144

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	0

PHHP = 589 **CIRCULATION DATA** n = 0.710 K = 133.560

Bit Depth = 17,500 ' Washout = 0% Pump Efficiency = 95%

Drill String Disp.					
103.0 bbl	Volume to Bit	241.9 bbl	Strokes To Bit	3,872	Time To Bit 35 min
	Bottoms Up Vol.	449.5 bbl	BottomsUp Stks	7,195	BottomsUp Time 65 min
	TotalCirc.Vol.	1431.3 bbl	TotalCirc.Stks	22,914	Total Circ. Time 208 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	7,531'	0'
HWDP	4.500	3.000	1,006'	7,531'
DP/Ream/Ag	4.500	3.826	8,822'	8,537'
Dir. BHA	5.000	2.000	141'	17,359'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Open Hole Size		6.750	18,577'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	7,531'	261.8	turb	11.84
6.875x4.5	8,537'	261.8	turb	11.85
6.875x4.5	11,974'	261.8	turb	11.86
6.75x4.5	17,359'	279.4	turb	12.19
6.75x5	17,500'	344.0	turb	12.21

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	18,577 ft	0.0	0 ft	#DIV/0!

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	24.0
Shaker 2	200	24.0
Shaker 3	200	24.0
NOV Dryers	170	24.0
Centrifuge 1		4.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3355.8
Transferred In(+)/Out(-)	
Oil Added (+)	14.6
Barite Added (+)	0.0
Other Product Usage (+)	0.0
Water Added (+)	
Left on Cuttings (-)	0.0
Hole Losses	-228.4
Cent/Evap/Trip	-50.0
Est. Total on Location	3092.0
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.18	39 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
104 lbs	62			

Motor/MWD	Calc. Circ. Pressure
psi	1,840 psi

Remarks/Recommendations:

OBM RECEIVED: bbls @ $65.00 /

OBM on surface/ storage 2589bbls

Rig Activity:

In the past 24hrs: Continue to Pick up CET-43 DP from the ground. Circulate BU at the Casing shoe and at 13600'. Recover heavy OBM (13.8ppg Max) Max gas 3000units. Hole losses noted while circulating and TIH. Finish circulation and continue to pick up DP and TIH. Fill up every 3000', Monitor Casing press. whle TIH, steady at 260psi and dropping. Maintain MW in the active system at 11.1+ppg, with additions of Diesel and Centrifuge application, Heavy mud cross to active increaseing density up to 11.5ppg. Increasing our LGS in the system, will treat accordingly. Maintain 17ppg OBM in slug tanks as contingency for well control. Will transfer same to storage once Drilling resumed. At the time of report: Trip in the hole passing 17500'.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

	Daily Total	Cumulative Cost
	$2,040.00	**$358,283.88**
INCLUDING 3RD PARTY CHARGES	**$3,417.00**	**$580,223.84**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/07/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #27

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	56		56			728	$10,424.96
LIME (50)	50# sk	$5.00	50		50			790	$3,950.00
OPTI - G	50# sk	$30.59	120		120			220	$6,729.80
BENTONE 38 (50)	50# sk	$163.94	40		40			65	$10,656.10
BENTONE 910 (50)	50# sk	$59.40						15	$891.00
BENTONE 990 (50)	50# sk	$83.59	40		40			74	$6,185.66
OPTI - MUL	gal	$10.75	110		110			495	$5,321.25
OPTI - WET	gal	$8.34	275		275			495	$4,128.30
NEW PHALT	50# sk	$38.72	40		40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19		19			21	$99.75
NEW CARB (M)	50# sk	$5.25	60		60			210	$1,102.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		48			144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		80				
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1800		1800			7101	$49,705.60
OPTI DRILL (OBM)	bbl	$65.00	2883		2883			2442	$158,730.00
DISCOUNTED OBM	bbl	$15.00	462		462			203	$3,045.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	62	$61,380.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	62	$1,860.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						18	$270.00
TRUCKING (cwt)	each	$1.98						9742	$19,289.08
TRUCKING (min)	each	$650.00						3	$1,950.00
PALLETS (ea)	each	$12.00						55	$660.00
SHRINK WRAP (ea)	each	$12.00						53	$636.00
		Daily Sub-Total $2,040.00			**Cumulative Total $358,283.88**			**$358,283.88**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/07/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #27

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	140		140			260	$10,855.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	9220		8608	612	$1,377.00	5801	$13,052.25
Diesel Received 6/2/21	gal	$2.38	6400		6400				
						Daily Sub-Total	$1,377.00		$221,939.96

Cumulative Total AES & 3rd Party $580,223.84

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

FLUID VOLUME ACCOUNTING

Grand Totals		WEEK 1							WEEK 2							WEEK 3							WEEK 4						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21	6/4/21	6/5/21	6/6/21	6/7/21	6/8/21	6/9/21	6/10/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577	18,577		
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577				
19,012	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137	-	-	-	-	-	-	-
1,441	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6	-	-	-	-	-	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,092	3,092	3,092
173	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4	-	-	-	-			
2,160	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23	18	-	-	14			
495	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63	14	-	-	-			
3,551	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-	258	86	-	-			
-	Slurry Added														-	-	-	-	-	-	-	-	-	-	-	-			
397	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-	-	-	-	-			
8	Added for Washout						8								-	-	-	-	-	-	-	-	-	-	-	-			
6,783	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91	290	86	-	14	-	-	-
678	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25	25	-	25	25			
3,721	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256	140	-	50	228			
1,124	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6	-	-	-	-			
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-	-	-	-	-			
475	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25	-	-	-	25			
6,216	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312	165	-	75	278	-	-	-
-	Mud Transferred Out																												
3,092	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,092	3,092	3,092	3,092
-	Mud Recovered																												

	Comments:		Comments:		Comments:		Comments:
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.	6/4/21	Lay down DP, Set storm packer 200' below well head, with 30 stnads of DP below. Continue to Lay down DP racked back on the derrick.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'	6/5/21	Finish lay down DP. Start on testing BOP's. Recover 86bbls of OBM from Mud Cooler, transfer same to Active system.
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.	6/6/21	Pull Storm packer, Casing press 150psi. Bullhead 30bbls down hole, Casing prss Zero. Start TIH with new BHA and new DP.
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.	6/7/21	Continue to pick up DP from the ground. Circulate BU at the shoe and at 13600'. Hole losses noted. At this time passing 17500'.
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.	6/8/21	
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling	6/9/21	
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#	6/10/21	

6,076

6/7/2021 **Report 27 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

86.1° **12,558' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**18,906 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**191 ft/hr**	**Drilling**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**338 gpm**	**5,860 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD PROPERTIES

Time Sample Taken	2:00		2:30
Sample Location	Suction		shaker
Flowline Temperature °F	115 °F		102 °F
Depth (ft)	18,577'		18,906'
Mud Weight (ppg)	11.2		11.1
Funnel Vis (sec/qt) @ 100 °F	44		43
600 rpm	36		34
300 rpm	22		22
200 rpm	16		17
100 rpm	12		13
6 rpm	6		6
3 rpm	4		5
Plastic Viscosity (cp) @ 150 °F	14		12
Yield Point (lb/100 ft²) T0 = 2	8		10
Gel Strength (lb/100 ft²) 10 sec / 10 min	6/10		5/10
Gel Strength (lb/100 ft2) 30 min	12		13
HTHP Filtrate (cm/30 min) @ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	19%		18%
Corrected Solids (vol%)	16.8%		15.8%
Retort Oil Content	59%		59%
Retort Water Content	22%		23%
O/W Ratio	73:27		72:28
Whole Mud Chlorides (mg/L)	54,000		55,000
Water Phase Salinity (ppm)	277,923		272,715
Whole Mud Alkalinity, Pom	1.4		1.6
Excess Lime (lb/bbl)	1.8 ppb		2.1 ppb
Electrical Stability (volts)	476 v		525 v
Average Specific Gravity of Solids	3.26		3.29
Percent Low Gravity Solids	8%		7.3%
ppb Low Gravity Solids	66 ppb		60 ppb
Percent Barite	8.8%		8.5%
ppb Barite	126 ppb		122 ppb
Estimated Total LCM in System			
Sample Taken By	A.ROMAN		M Washburn

MUD VOLUME (BBL)

In Pits	740 bbl
In Hole	746 bbl
Active	1486 bbl
Storage	1286 bbl
Tot. on Location	2772 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	65
gal/min	171

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	64
gal/min	168

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

Mud Wt. = 11.2 PV=14 YP=8 **CIRCULATION DATA** n = 0.710 K = 133.6

Bit Depth = 18,906 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.						
110.7 bbl	Volume to Bit	261.9 bbl	Strokes To Bit	4,192	Time To Bit	32 min
	Bottoms Up Vol.	484.0 bbl	BottomsUp Stks	7,749	BottomsUp Time	60 min
	TotalCirc.Vol.	1485.9 bbl	TotalCirc.Stks	23,788	Total Circ. Time	184 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	8,937'	
HWDP	4.500	3.000	1,006'	8,937'
P/Ream/Ag	4.500	3.826	8,822'	9,943'
Dir. BHA	5.000	2.000	141'	18,765'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Open Hole Size	6.750		18,906'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	8,937'	307.0	turb	12.22
6.875x4.5	9,943'	307.0	turb	12.40
6.875x4.5	11,974'	307.0	turb	12.52
6.75x4.5	18,765'	327.7	turb	13.25
6.75x5	18,906'	403.4	turb	13.45

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	18,577 ft			#DIV/0!

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	3092.0
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Hole Losses	
Cent/Evap/Trip	
Est. Total on Location	3092.0
Est. Losses/Gains (-)/(+)	-320.1

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.29	53 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
144 lbs	73			

Motor/MWD | Calc. Circ. Pressure 2,607 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Currently drilling lateral, samples are 100% AC. Previously when wash and ream to 18577 incorporate heavy mud cap spotted in vertical hole section that had migrated into lower down dip open hole section, experience loss of circulation as this heavy mud was circulated up into the vertical section, losses were experienced until this mud was circulated out, and cut back from 15.5 to 11.1 with diesel and centrifuging, no more significant losses were encountered after this.. Prepare 100 bbls sweep / pill with 6 ppb graphite, receiving 8.2# OBM slurry from Newpark, currently raising mud wt to 11.2.

06/08/21 **Report #28**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

85.1° **12,622' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**1,154 ft**	**19,731 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**64 ft/hr**	**Drilling**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**349 gpm**	**5,860 psi**

MUD PROPERTY SPECIFICATIONS							MUD VOLUME (BBL)		PUMP #1		PUMP #2		RISER BOOSTER	
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP	In Pits	676 bbl	Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**	In Hole	778 bbl	Stroke	12	Stroke	12	Stroke	12
				6/8/21		6/7/21	Active	1454 bbl	bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
Time Sample Taken				2:00		2:30	Storage	1462 bbl	stk/min	67	stk/min	66	stk/min	
Sample Location				Suction		shaker	Tot. on Location	2916 bbl	gal/min	176	gal/min	173	gal/min	0

Flowline Temperature °F				96 °F		102 °F	PHHP = 1193			**CIRCULATION DATA**					n = 0.652	K = 183.523
Depth (ft)				19,477'		18,906'	Bit Depth = 19,731 '			Washout = 0%			Pump Efficiency = 95%			
Mud Weight (ppg)				11.3		11.1	Drill String Disp.	Volume to Bit	273.6 bbl	Strokes To Bit	4,380		Time To Bit	33 min		
Funnel Vis (sec/qt)	@ 82 °F			46		43		Bottoms Up Vol.	504.3 bbl	BottomsUp Stks	8,074		BottomsUp Time	61 min		
600 rpm				33		34	115.2 bbl	TotalCirc.Vol.	1453.9 bbl	TotalCirc.Stks	23,276		Total Circ. Time	175 min		
300 rpm				21		22	**DRILLING ASSEMBLY DATA**						**SOLIDS CONTROL**			
200 rpm				14		17	Tubulars	OD (in.)	ID (in.)	Length	Top		Unit	Screens	Hours	
100 rpm				9		13	Drill Pipe	4.500	3.826	9,762'	0'		Shaker 1	200	24.0	
6 rpm				6		6	HWDP	4.500	3.000	1,006'	9,762'		Shaker 2	200	24.0	
3 rpm				5		5	DP/Ream/Ag	4.500	3.826	8,822'	10,768'		Shaker 3	200	24.0	
Plastic Viscosity (cp)	@ 150 °F			12		12	Dir. BHA	5.000	2.000	141'	19,590'		NOV Dryers	170	24.0	
Yield Point (lb/100 ft²)	T0 = 4			9		10	**CASING & HOLE DATA**									
Gel Strength (lb/100 ft²)	10 sec/10 min			6/9		5/10	Casing	OD (in.)	ID (in.)	Depth	Top		Centrifuge 1		4.0	
Gel Strength (lb/100 ft²)	30 min			13		13	Riser						**VOLUME ACCOUNTING (bbls)**			
HTHP Filtrate (cm/30 min)	@ 250 °F			7.0		6.0	Surface	10 3/4		3,018'	0'		Prev. Total on Location		3092.0	
HTHP Cake Thickness (32nds)				2.0		2.0	Int. Csg.	7 5/8	6.875	11,974'	0'		Transferred In(+)/Out(-)		449.0	
Retort Solids Content				19%		18%							Oil Added (+)		130.2	
Corrected Solids (vol%)				17%		15.8%							Barite Added (+)		52.4	
Retort Oil Content				61%		59%	Open Hole Size		6.750	19,731'			Other Product Usage (+)		11.0	
Retort Water Content				20%		23%	**ANNULAR GEOMETRY & RHEOLOGY**						Water Added (+)		28.0	
O/W Ratio				75:25		72:28	annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal		Left on Cuttings (-)		-51.1	
Whole Mud Chlorides (mg/L)				50,000		55,000							Hole Losses		-745.7	
Water Phase Salinity (ppm)				281,620		272,715							Cent/Evap/Trip		-50.0	
Whole Mud Alkalinity, Pom				1.2		1.6	6.875x4.5	9,762'	316.6	turb	12.21		Est. Total on Location		2915.9	
Excess Lime (lb/bbl)				1.6 ppb		2.1 ppb	6.875x4.5	10,768'	316.6	turb	12.28		Est. Losses/Gains (-)/(+)		0.0	
Electrical Stability (volts)				486 v		525 v	6.875x4.5	11,974'	316.6	turb	12.32		**BIT HYDRAULICS DATA**			
Average Specific Gravity of Solids				3.36		3.29	6.75x4.5	19,590'	337.9	turb	13.01		Bit H.S.I.	Bit ΔP	Nozzles (32nds)	
Percent Low Gravity Solids				7.2%		7.3%	6.75x5	19,731'	415.9	turb	13.09		0.33	57 psi	18 18 18	
ppb Low Gravity Solids				59 ppb		60 ppb							Bit Impact Force	Nozzle Velocity (ft/sec)	18 18 18	
Percent Barite				9.8%		8.5%										
ppb Barite				140 ppb		122 ppb	**BIT DATA**		Manuf./Type		GTD64M		154 lbs	75		
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	18,577 ft	18.0	1,154 ft	64.1		2,300 psi		5,070 psi	

Remarks/Recommendations:

OBM RECEIVED: 449bbls @ $65.00 /

OBM on surface/ storage 2138bbls

Rig Activity:

In the past 24hrs: Wash and Ream last 500' to bottom; Resume drilling operations on lateral section. Heavy OBM from mud caps incorporated into the active system, unable to isolate due to well control issues. Additions of Diesel and Centrifuge application to maintain MW at 11.2ppg. Blend sweep with 6ppb Graphite and pump 10bbls every connection to slide. Maintain 16ppg OBM in slug tank as contingency for well control. Shut down drilling (19350') for 3hrs. due to rig repairs, Loosing mud down hole noted, while resume drilling well continue to take mud, 70bbls/hr W/350gpm. Diesel and water for dilution, maintain chemical additions to keep properties. At the time of report: Drilling ahead passing 19804'.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:	Daily Total	Cumulative Cost
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -		**$63,425.30**	**$421,709.18**

W 1 P 1 Y 1 E 1 C 1 g 1 G 1 H 1 O 1

INCLUDING 3RD PARTY CHARGES	**$75,485.30**	**$655,709.14**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/08/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #28

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	56		28	28	$400.96	756	$10,825.92
LIME (50)	50# sk	$5.00	50			50	$250.00	840	$4,200.00
OPTI - G	50# sk	$30.59	120		80	40	$1,223.60	260	$7,953.40
BENTONE 38 (50)	50# sk	$163.94	40		36	4	$655.76	69	$11,311.86
BENTONE 910 (50)	50# sk	$59.40						15	$891.00
BENTONE 990 (50)	50# sk	$83.59	40		36	4	$334.36	78	$6,520.02
OPTI - MUL	gal	$10.75	110		55	55	$591.25	550	$5,912.50
OPTI - WET	gal	$8.34	275		220	55	$458.70	550	$4,587.00
NEW PHALT	50# sk	$38.72	40		40			120	$4,646.40
OIL SORB (25)	25# sk	$4.75	19			19	$90.25	40	$190.00
NEW CARB (M)	50# sk	$5.25	60		60			210	$1,102.50
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		48			144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	80		68	12	$289.68	12	$289.68
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1800	403	1450	753	$5,272.40	7854	$54,978.00
OPTI DRILL (OBM)	bbl	$65.00	2883	449	2575	757	$49,205.00	3199	$207,935.00
DISCOUNTED OBM	bbl	$15.00	462		341	121	$1,815.00	324	$4,860.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	64	$63,360.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	64	$1,920.00
ENGINEERING (MILES)	each	$1.00						1049	$1,049.00
SCALE TICKET	EACH	$15.00						18	$270.00
TRUCKING (cwt)	each	$1.98				403	$798.34	10145	$20,087.42
TRUCKING (min)	each	$650.00						3	$1,950.00
PALLETS (ea)	each	$12.00						55	$660.00
SHRINK WRAP (ea)	each	$12.00						53	$636.00
		Daily Sub-Total $63,425.30			**Cumulative Total $421,709.18**			**$421,709.18**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/08/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #28

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	140		140			260	$10,855.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	8608		3248	5360	$12,060.00	11161	$25,112.25
Diesel Received 6/2/21	gal	$2.38	6400		6400				
						Daily Sub-Total	$12,060.00		$233,999.96

Cumulative Total AES & 3rd Party $655,709.14

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

FLUID VOLUME ACCOUNTING

Grand Totals		WEEK 1							WEEK 2							WEEK 3							WEEK 4						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21	6/4/21	6/5/21	6/6/21	6/7/21	6/8/21	6/9/21	6/10/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577	18,577	19,731	
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577	18,577	19,731		
20,166	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137	-	-	-	-	1,154	-	-
1,492	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6	-	-	-	-	51	-	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,092	2,916	2,916
184	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4	-	-	-	-	11		
2,290	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23	18	-	-	14	130		
547	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63	14	-	-	-	52		
4,000	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-	258	86	-	-	449		
-	Slurry Added														-	-	-	-	-	-	-	-	-	-	-	-	-		
425	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-	-	-	-	-	28		
8	Added for Washout						8								-	-	-	-	-	-	-	-	-	-	-	-	-		
7,454	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91	290	86	-	14	671	-	-
703	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25	25	-	25	25	25		
4,467	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256	140	-	50	228	746		
1,175	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6	-	-	-	-	51		
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-	-	-	-	-	-	-		
500	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25	-	-	-	25	25		
7,063	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312	165	-	75	278	847	-	-
-	Mud Transferred Out																												
2,916	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,092	2,916	2,916	2,916
-	Mud Recovered																												

	Comments:		Comments:		Comments:		Comments:
6,525	5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.	6/4/21	Lay down DP, Set storm packer 200' below well head, with 30 stnads of DP below. Continue to Lay down DP racked back on the derrick.
	5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'	6/5/21	Finish lay down DP. Start on testing BOP's. Recover 86bbls of OBM from Mud Cooler, transfer same to Active system.
	5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.	6/6/21	Pull Storm packer, Casing press 150psi. Bullhead 30bbls down hole, Casing prss Zero. Start TIH with new BHA and new DP.
	5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.	6/7/21	Continue to pick up DP from the ground. Circulate BU at the shoe and at 13600'. Hole losses noted. At this time passing 17500'.
	5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.	6/8/21	Drilling ahead, well taking mud. 24hrs losses 745bbls.
	5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling	6/9/21	
	5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#	6/10/21	

6/8/2021 **Report 28 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

85.1° **12,696' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**20,602 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**CIRC @ TD**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**310 gpm**	**4,580 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken	2:00		2:30
Sample Location	Suction		shaker
Flowline Temperature °F	96 °F		99 °F
Depth (ft)	19,477'		20,653'
Mud Weight (ppg)	11.3		11.2
Funnel Vis (sec/qt) @ 82 °F	46		43
600 rpm	33		36
300 rpm	21		23
200 rpm	14		17
100 rpm	9		11
6 rpm	6		7
3 rpm	5		6
Plastic Viscosity (cp) @ 150 °F	12		13
Yield Point (lb/100 ft²) T0 = 4	9		10
Gel Strength (lb/100 ft²) 10 sec / 10 min	6/9		6/10
Gel Strength (lb/100 ft2) 30 min	13		13
HTHP Filtrate (cm/30 min) @ 250 °F	7.0		6.0
HTHP Cake Thickness (32nds)	2.0		2.0
Retort Solids Content	19%		18.5%
Corrected Solids (vol%)	17%		16.3%
Retort Oil Content	61%		58.5%
Retort Water Content	20%		23%
O/W Ratio	75:25		72:28
Whole Mud Chlorides (mg/L)	50,000		56,000
Water Phase Salinity (ppm)	281,620		276,303
Whole Mud Alkalinity, Pom	1.2		1.6
Excess Lime (lb/bbl)	1.6 ppb		2.1 ppb
Electrical Stability (volts)	486 v		525 v
Average Specific Gravity of Solids	3.36		3.29
Percent Low Gravity Solids	7.2%		7.5%
ppb Low Gravity Solids	59 ppb		62 ppb
Percent Barite	9.8%		8.7%
ppb Barite	140 ppb		125 ppb
Estimated Total LCM in System			
Sample Taken By	A.ROMAN		M Washburn

MUD VOLUME (BBL)

In Pits	676 bbl
In Hole	812 bbl
Active	1488 bbl
Storage	1462 bbl
Tot. on Location	2950 bbl

PUMP #1		PUMP #2		RISER BOOSTER	
Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
Stroke	12	Stroke	12	Stroke	12
bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
stk/min	60	stk/min	58	stk/min	
gal/min	157	gal/min	152	gal/min	

Mud Wt. = 11.3 PV=12 YP=9 **CIRCULATION DATA** n = 0.652 K = 183.5

Bit Depth = 20,602 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.							
119.9 bbl	Volume to Bit	286.0 bbl	Strokes To Bit	4,578	Time To Bit	39 min
	Bottoms Up Vol.	525.7 bbl	BottomsUp Stks	8,417	BottomsUp Time	71 min
	TotalCirc.Vol.	1487.7 bbl	TotalCirc.Stks	23,817	Total Circ. Time	202 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	10,633'	
HWDP	4.500	3.000	1,006'	10,633'
P/Ream/Ag	4.500	3.826	8,822'	11,639'
Dir. BHA	5.000	2.000	141'	20,461'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Open Hole Size	6.750		20,602'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	10,633'	280.9	turb	12.00
6.875x4.5	11,639'	280.9	turb	12.00
6.875x4.5	11,974'	280.9	turb	11.99
6.75x4.5	20,461'	299.8	turb	12.57
6.75x5	20,602'	369.0	turb	12.58

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	18,577 ft	18.0	1,154 ft	64.1

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	
Shaker 2	200	
Shaker 3	200	
NOV Dryers	170	
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2915.9
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Hole Losses	
Cent/Evap/Trip	
Est. Total on Location	2915.9
Est. Losses/Gains (-)/(+)	33.8

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.23	45 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
121 lbs	67			

Motor/MWD 2,300 psi | Calc. Circ. Pressure 4,634 psi

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Drill to TD at 20659, pump 2 X 30 bbls Hi - Visc sweeps in tandem, currently circulating at TD and decreasing mud wt from 11.2 to 11.1. Blended $10/ bbl hi grav solids reserve mud with 8.5# slurry to make 400 bbls of 11.2# to maintain active system volume. Preparing 150 bbls 17.0# kill mud to spot in vertical hole section when trip out to run production casing.

06/09/21 **Report #29**

110 Old Market St.
St Martinville, LA 70582
TEL: (337) 394-1078

OUTSOURCE FLUID SOLUTIONS LLC.

87.7° **12,484' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**	**928 ft**	**20,659 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**	**133 ft/hr**	**POOH/Wash&Ream**
Report for	Report for	Field / OCS-G #	Fluid Type	Circulating Rate	Circulating Pressure
Jim Harrison/James Dyer	**Tool Pusher**	**GIDDINGS**	**OBM**	**310 gpm**	**4,580 psi**

MUD PROPERTY SPECIFICATIONS						
Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**
				6/9/21		6/8/21
Time Sample Taken				2:00		2:30
Sample Location				Suction		shaker
Flowline Temperature °F				94 °F		99 °F
Depth (ft)				20,659'		20,653'
Mud Weight (ppg)				11.3		11.2
Funnel Vis (sec/qt)			@ 80 °F	44		43
600 rpm				35		36
300 rpm				22		23
200 rpm				15		17
100 rpm				10		11
6 rpm				7		7
3 rpm				5		6
Plastic Viscosity (cp)			@ 150 °F	13		13
Yield Point (lb/100 ft²)			T0 = 3	9		10
Gel Strength (lb/100 ft²)			10 sec/10 min	6/10		6/10
Gel Strength (lb/100 ft^2)			30 min	13		13
HTHP Filtrate (cm/30 min)			@ 250 °F	6.0		6.0
HTHP Cake Thickness (32nds)				2.0		2.0
Retort Solids Content				19%		18.5%
Corrected Solids (vol%)				16.8%		16.3%
Retort Oil Content				60%		58.5%
Retort Water Content				21%		23%
O/W Ratio				74:26		72:28
Whole Mud Chlorides (mg/L)				53,000		56,000
Water Phase Salinity (ppm)				283,542		276,303
Whole Mud Alkalinity, Pom				1.8		1.6
Excess Lime (lb/bbl)				2.3 ppb		2.1 ppb
Electrical Stability (volts)				498 v		525 v
Average Specific Gravity of Solids				3.35		3.29
Percent Low Gravity Solids				7.2%		7.5%
ppb Low Gravity Solids				60 ppb		62 ppb
Percent Barite				9.6%		8.7%
ppb Barite				138 ppb		125 ppb
Estimated Total LCM in System			ppb			
Sample Taken By				A.ROMAN	0	M Washburn

MUD VOLUME (BBL)	
In Pits	634 bbl
In Hole	843 bbl
Active	1242 bbl
Storage	1423 bbl
Tot. on Location	2900 bbl

PUMP #1		PUMP #2		RISER BOOSTER	
Liner Size	4.75	Liner Size	4.75	Liner Size	4.75
Stroke	12	Stroke	12	Stroke	12
bbl/stk	0.0625	bbl/stk	0.0625	bbl/stk	0.0625
stk/min	60	stk/min	58	stk/min	
gal/min	157	gal/min	152	gal/min	0

CIRCULATION DATA

PHHP = 827 n = 0.670 K = 172.089

Bit Depth = 15,358 ' Washout = 0% Pump Efficiency = 95%

Drill String Disp.					
91.3 bbl	Volume to Bit	211.4 bbl	Strokes To Bit	3,385	Time To Bit 29 min
	Bottoms Up Vol.	396.8 bbl	BottomsUp Stks	6,352	BottomsUp Time 54 min
	TotalCirc.Vol.	1242.2 bbl	TotalCirc.Stks	19,886	Total Circ. Time 169 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Drill Pipe	4.500	3.826	5,389'	0'
HWDP	4.500	3.000	1,006'	5,389'
DP/Ream/Ag	4.500	3.826	8,822'	6,395'
Dir. BHA	5.000	2.000	141'	15,217'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	0'
Int. Csg.	7 5/8	6.875	11,974'	0'
Open Hole Size		6.750	20,659'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	meas. depth	velocity ft/min	flow reg	ECD lb/gal
6.875x4.5	5,389'	280.9	turb	12.15
6.875x4.5	6,395'	280.9	turb	12.29
6.875x4.5	11,974'	280.9	turb	12.32
6.75x4.5	15,217'	299.8	turb	12.67
6.75x5	15,358'	369.0	turb	12.83

BIT DATA Manuf./Type GTD64M

Size	Depth In	Hours	Footage	ROP ft/hr
6 3/4	18,577 ft	25.0	2,082 ft	83.3

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	24.0
Shaker 2	200	24.0
Shaker 3	200	24.0
NOV Dryers	170	24.0
Centrifuge 1		6.0

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2915.9
Transferred In(+)/Out(-)	160.0
Oil Added (+)	150.1
Barite Added (+)	70.4
Other Product Usage (+)	2.9
Water Added (+)	50.0
Left on Cuttings (-)	-41.1
Hole Losses	-378.0
Cent/Evap/Trip	-30.4
Est. Total on Location	2899.9
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
0.23	45 psi	18	18	18
Bit Impact Force	Nozzle Velocity (ft/sec)	18	18	18
121 lbs	67			

Motor/MWD	Calc. Circ. Pressure
2,300 psi	4,135 psi

Remarks/Recommendations:

OBM RECEIVED: 160bbls @ $65.00 /

OBM on surface/ storage 2057bbls

Rig Activity:

In the past 24hrs: Drilled lateral section to TD 20,659'. Pump 3 (10.4ppg) sweeps and circulate hole clean. Upon completing circulations, start POOH. Wash and Ream up the hole Monitor Gas on BU. (2800units). Increase MW to 11.3ppg and circulate gas out. Casing pressure and flow level off, resume Wash & Ream out. Blend LCM sweep with 2ppb Graphite (First Response, Magma Fiber, NewCarb) to spot same at the bottom of the curve. Will POOH up to the shoe and will circulate BU, prior to spotting Mud Cap (17ppg). Mud losses noted once pass 17,400' (70bbls /hr). At the time of report: Continue POOH passing 14980'. Casing pressure 600psi, with pumps off.

Eng. 1:	Eng. 2:	WH 1:	WH 2:	Rig Phone:
Mike Washburn	Adolfo A. Roman	MIDLAND	WH #2	
Phone: 361-945-5777	Phone: 956-821-9994	Phone: 432-686-7361	Phone: -	

W	P	Y	E	C	g	G	H	O
1	1	1	1	1	1	1	1	1

	Daily Total	Cumulative Cost
	$27,605.68	**$449,314.86**
INCLUDING 3RD PARTY CHARGES	**$42,888.68**	**$698,597.82**

OUTSOURCE FLUID SOLUTIONS LLC.

MATERIAL CONSUMPTION

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/09/21	MAGNOLIA OIL & GAS	RAINIER A-1H ST-01	248	Report #29

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
SAPP (50)	50# sk	$44.56	10		10			32	$1,425.92
PHPA LIQUID (pail)	5 gal	$41.36	32		32				
EVO-LUBE	gal	$14.00							
NEW GEL (PREMIUM)									
ALUMINUM TRISTEARATE									
CACL2 (50)	50# sk	$14.32	28	168	168	28	$400.96	784	$11,226.88
LIME (50)	50# sk	$5.00		300	300			840	$4,200.00
OPTI - G	50# sk	$30.59	80		80			260	$7,953.40
BENTONE 38 (50)	50# sk	$163.94	36		36			69	$11,311.86
BENTONE 910 (50)	50# sk	$59.40						15	$891.00
BENTONE 990 (50)	50# sk	$83.59	36		36			78	$6,520.02
OPTI - MUL	gal	$10.75	55	220	275			550	$5,912.50
OPTI - WET	gal	$8.34	220	220	385	55	$458.70	605	$5,045.70
NEW PHALT	50# sk	$38.72	40	40	80			120	$4,646.40
OIL SORB (25)	25# sk	$4.75		50	50			40	$190.00
NEW CARB (M)	50# sk	$5.25	60		50	10	$52.50	220	$1,155.00
CYBERSEAL	25# sk	$21.47							
MAGMAFIBER F (25)	25# sk	$28.05	48		48			144	$4,039.20
MAGMAFIBER R (30)	30# sk	$28.05							
VARISEAL									
FIBER PLUG	30# sk	$30.37							
NUT PLUG M (50)	50# sk	$12.04	25		25			9	$108.36
MICA F (50)	50# sk	$10.28	40		40				
GRAPHITE - FINE (50)	50# sk	$24.14	68		64	4	$96.56	16	$386.24
NEW WATE (SACK BARITE)	100# sk	$11.50	150		150				
BARITE BULK (100)	100# sk	$7.00	1450	812	1250	1012	$7,082.60	8866	$62,060.60
OPTI DRILL (OBM)	bbl	$65.00	2575	361	2760	176	$11,440.00	3375	$219,375.00
DISCOUNTED OBM	bbl	$15.00	341		140	201	$3,015.00	525	$7,875.00
ENGINEERING (24 HR)	each	$990.00				2	$1,980.00	66	$65,340.00
ENGINEERING (DIEM)	bbl	$30.00				2	$60.00	66	$1,980.00
ENGINEERING (MILES)	each	$1.00				450	$450.00	1499	$1,499.00
SCALE TICKET	EACH	$15.00						18	$270.00
TRUCKING (cwt)	each	$1.98				812	$1,607.36	10957	$21,694.78
TRUCKING (min)	each	$650.00				1	$650.00	4	$2,600.00
PALLETS (ea)	each	$12.00				13	$156.00	68	$816.00
SHRINK WRAP (ea)	each	$12.00				13	$156.00	66	$792.00
		Daily Sub-Total $27,605.68			**Cumulative Total $449,314.86**			**$449,314.86**	

THIRD PARTY COST SHEET

Date	Operator	Well Name and No.	Rig Name and No.	Report No.
06/09/21	**MAGNOLIA OIL & GAS**	**RAINIER A-1H ST-01**	**248**	**Report #29**

DAILY USAGE & COST								CUMULATIVE	
Item	Unit	Unit Cost	Previous Inventory	Received	Closing Inventory	Daily Usage	Daily Cost	Cum Usage	Cum Cost
TURBO CHEM / FIRST RESPONSE	25# sk	$41.75	140		120	20	$835.00	280	$11,690.00
TURBO CHEM SYNSEAL	25# sk	$85.00	196		196				
OBM-D 5_12_21	gal	$2.31						14004	$32,349.24
OBM-D 5_15_21	gal	$2.35						7200	$16,920.00
OBM-D 5/16/21	gal	$2.35						14400	$33,840.00
OBM-D 5/17/21	gal	$2.31						7200	$16,632.00
OBM-D 5/19/21	gal	$2.33						14403	$33,558.99
OBM-D 5/24/21	gal	$2.24						7202	$16,132.48
Mud Diesel 5/27/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/29/21	gal	$2.25						7200	$16,200.00
Diesel Received 5/31/21	gal	$2.25	3248			3248	$7,308.00	14409	$32,420.25
Diesel Received 6/2/21	gal	$2.38	6400		3400	3000	$7,140.00	3000	$7,140.00
Diesel Received 6/9/21	gal	$2.34		7000	7000				
						Daily Sub-Total	**$15,283.00**		**$249,282.96**

Cumulative Total AES & 3rd Party $698,597.82

OUTSOURCE FLUID SOLUTIONS LLC.

FLUID VOLUME ACCOUNTING

Operator:	MAGNOLIA OIL & GAS
Rig Name:	248
Well Name:	RAINIER A-1H ST-01

FLUID VOLUME ACCOUNTING

Grand Totals		WEEK 1							WEEK 2							WEEK 3							WEEK 4						
	Date	5/14/21	5/15/21	5/16/21	5/17/21	5/18/21	5/19/21	5/20/21	5/21/21	5/22/21	5/23/21	5/24/21	5/25/21	5/26/21	5/27/21	5/28/21	5/29/21	5/30/21	5/31/21	6/1/21	6/2/21	6/3/21	6/4/21	6/5/21	6/6/21	6/7/21	6/8/21	6/9/21	6/10/21
		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu
	Bit Size	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	9 7/8	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	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	108	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577	18,577	19,731	20,659
	Ending Depth	3,033	4,504	7,680	9,621	11,337	11,977	11,985	11,985	12,523	12,540	11,997	12,231	12,250	12,725	12,725	14,591	15,494	16,219	17,666	18,440	18,577	18,577	18,577	18,577	18,577	19,731	20,659	
21,094	Footage Drilled	2,925	1,471	3,176	1,941	1,716	640	8	-	538	17	-	234	19	475	-	1,866	903	725	1,447	774	137	-	-	-	-	1,154	928	-
1,533	New Hole Vol.	277	139	301	184	163	61	1	-	24	1	-	10	1	21	-	83	40	32	64	34	6	-	-	-	-	51	41	-
	Starting System Volume	2,525	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,092	2,916	2,900
186	Chemical Additions		15	14	18	13	9			15	5	12	10	3	1	-	13	6	12	10	13	4	-	-	-	-	11	3	
2,440	Base Fluid Added		38	392	158	214	174	26	4	78	18	101	95	25	11	3	169	229	191	95	86	23	18	-	-	14	130	150	
618	Barite Increase		13	13	19		3	6			142	59	62	21	14	7	-	10	-	21	28	63	14	-	-	-	52	70	
4,160	Weighted Mud Added			300		479			407						-	250	-	127	788	804	52	-	258	86	-	-	449	160	
-	Slurry Added														-	-	-	-	-	-	-	-	-	-	-	-	-	-	
475	Water Added		60		70	83	37						58	9	-	-	-	-	-	30	50	-	-	-	-	-	28	50	
8	Added for Washout						8								-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7,887	Total Additions	-	126	719	264	788	231	32	411	93	164	172	225	58	26	260	181	372	991	960	230	91	290	86	-	14	671	433	-
703	Surface Losses		3	42	119	105	105	11	10	23	21	12	35	17	-	-	-	25	25	-	25	25	25	-	25	25	25	-	
4,845	Formation Loss			50	83	92	134	25	73		68	28	14		99	50	554	384	691	386	316	256	140	-	50	228	746	378	
1,216	Mud Loss to Cuttings		125	301	191	135	63	1		25	1			4	19	-	83	40	32	64	34	6	-	-	-	-	51	41	
218	Unrecoverable Volume		17	40	35		45	22	10			24			25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
531	Centrifuge Losses		4	20	24	15	6			12	7	3	6	6	25	22	50	50	75	76	25	25	-	-	-	25	25	30	
7,512	Total Losses	-	149	453	452	346	353	59	93	60	97	68	55	27	168	72	687	499	823	526	401	312	165	-	75	278	847	450	-
-	Mud Transferred Out																												
2,900	Ending System Volume	2,525	2,502	2,768	2,580	3,022	2,900	2,873	3,191	3,225	3,292	3,396	3,566	3,597	3,455	3,644	3,138	3,011	3,178	3,612	3,441	3,220	3,345	3,431	3,356	3,092	2,916	2,900	2,900
-	Mud Recovered																												

Comments:		Comments:		Comments:		Comments:	
5/14/21	Cemented surface in good fashion with cement back to surface. Cleaned rig pit, NU BOP and tested the same. Filled pit and reconditioning the same. Testing BOP at rpt time.	5/21/21	Cemented with good returns dumping 10bbls interface, 40bbls spacer and 39bbls cement. Lost to seepage while riunning casing 72.5bbls, Evap 10.1bbls and Interface 10bbls	5/28/21	TIH with new BHA, Wash and Ream from 12150 to bottom and resume drilling.	6/4/21	Lay down DP, Set storm packer 200' below well head, with 30 stnads of DP below. Continue to Lay down DP racked back on the derrick.
5/15/21	Drilling ahead at 4,504'MD. Mud lost to Evap 3bbls, Cent 4bbls, Shakers 17bbls and cutting 125bbls	5/22/21	Mud lost to cuttings 24.8bbls, Evap 22.87bbls and Cent 12bbls	5/29/21	Drilling ahead, Well start taking mud at 13693. lower MW to 10.6ppg. Continue drilling'	6/5/21	Finish lay down DP. Start on testing BOP's. Recover 86bbls of OBM from Mud Cooler, transfer same to Active system.
5/16/21	Daily Losses: Evap 42bbls. Cent 20bbls, Shakers 40bbls, Seepage 50bbls and Cuttings 300.9. Drilled to 7,680'MD.	5/23/21	Mud lost to formation due to weight up 68.2bbls, Evap 20.5bbls and Cent 7bbls	5/30/21	Drilled ahead, to 15494', ROP decreased to 20fph. Circulate and POOH to change out BHA.	6/6/21	Pull Storm packer, Casing press 150psi. Bullhead 30bbls down hole, Casing prss Zero. Start TIH with new BHA and new DP.
5/17/21	At RPT time change out rot Head. Mud lost to Cutting 191.3bbls, Evap 118.8bbls, Cent 24bbls, Shakers 35bbls and Seepage 83bbls	5/24/21	Mud left in Previous well bore 24.34bbls. Mud lost to Evap 12.4bbls, Cent 3bbls and seepage circ kill mud 28bbls	5/31/21	Stage in the hole, well taking mud, 100bbl/hr. Resume drilling and cut mw down to 10.1ppg. w/340gpm losses back to normal, w/370gpm start lossing 30bbl/hr.	6/7/21	Continue to pick up DP from the ground. Circulate BU at the shoe and at 13600'. Hole losses noted. At this time passing 17500'.
5/18/21	Mud Lost to Cuttings 135bbls, Evap 104.6bbls, Cent 15bbls and Seepage 91.8bbls	5/25/21	Mud lost to Seepage 13.9bbls, Cent 6bbls and Evap 35.2bbls. Attempting 2nd sidetrack.	6/1/21	Drilling ahead, well continue taking mud, 20bbls /hr. Pump sweep every connection.	6/8/21	Drilling ahead, well taking mud. 24hrs losses 745bbls.
5/19/21	Mud Lost to Cuttings 63bbls, Evap 104.6bbls, Cent 6bbls, Shakers 18bbls, Rotating Head 27bbls and seepage 133.8bbls	5/26/21	Mud lost to Cuttings 3.4bbls, Cent 6bbls and Evap 17.2bbls	6/2/21	Drilling ahead, circulate Well control Issues, 60bbl influx . Resume drilling	6/9/21	Drilled to TD 20659'. Circulate hole clean, wash and ream up to the shoe. Well taking mud.
5/20/21	Mud Lost to Cuttings 1bbl, Evap 10.8bbls, Tripping 22bbls and Seepage 25bbls	5/27/21	Drilled Side track to 12725'/ Circulate and POOH to lay down BhA.	6/3/21	Drilled to 18577'. Lost differential and High torque, POOH to change out BHA and Test BOP's. Lay down DP after spotting Mud cap 17#	6/10/21	

6,685

6/11/2021 **Report 31 pm**

110 Old Market St.
St Martinville, LA 70582

TEL: (337) 394-1078

90.4° **12,527' TVD**

Operator	Contractor	County / Parish / Block	Engineer Start Date	24 hr ftg.	Drilled Depth
MAGNOLIA OIL & GAS	**PATTERSON**	**FAYETTE**	**05/09/21**		**20,659 ft**
Well Name and No.	Rig Name and No.	State	Spud Date	Current ROP	Activity
RAINIER A-1H ST-01	**248**	**TEXAS**	**05/13/21**		**Wash/Ream**
Report for	Report for	Field / OSC-G #	Fluid Type	Circulating Rate	Circulating Pressure
Kevin Burt/ Kevin Cooper	**Tool Pusher**	**GIDDINGS**	**OBM**	**210 gpm**	**1,471 psi**

MUD PROPERTY SPECIFICATIONS

Weight	PV	YP	E.S.	CaCl2	GELS	HTHP
8.5-12	**5-25**	**8-12**	**>400**	**±280K**	**<10 <15**	**<8**

MUD PROPERTIES				
Time Sample Taken		2:00		12:00
Sample Location		Suction		shaker
Flowline Temperature °F		115 °F		150 °F
Depth (ft)		20,659'		20,659'
Mud Weight (ppg)		11.3		11.3
Funnel Vis (sec/qt)	@ 90 °F	46		47
600 rpm		34		42
300 rpm		21		26
200 rpm		17		17
100 rpm		11		12
6 rpm		6		7
3 rpm		5		6
Plastic Viscosity (cp)	@ 150 °F	13		16
Yield Point (lb/100 ft²)	T0 = 4	8		10
Gel Strength (lb/100 ft²)	10 sec / 10 min	7/12		7/12
Gel Strength (lb/100 ft2)	30 min	14		14
HTHP Filtrate (cm/30 min)	@ 250 °F	7.0		7.0
HTHP Cake Thickness (32nds)		2.0		2.0
Retort Solids Content		18.5%		18.5%
Corrected Solids (vol%)		16.4%		16.4%
Retort Oil Content		60.5%		60.5%
Retort Water Content		21%		21%
O/W Ratio		74:26		74:26
Whole Mud Chlorides (mg/L)		52,000		52,000
Water Phase Salinity (ppm)		279,688		279,688
Whole Mud Alkalinity, Pom		1.9		2.2
Excess Lime (lb/bbl)		2.5 ppb		2.9 ppb
Electrical Stability (volts)		467 v		404 v
Average Specific Gravity of Solids		3.43		3.39
Percent Low Gravity Solids		6.3%		6.7%
ppb Low Gravity Solids		52 ppb		55 ppb
Percent Barite		10.1%		9.7%
ppb Barite		145 ppb		140 ppb
Estimated Total LCM in System				
Sample Taken By		P. Blair		M.Meehan

MUD VOLUME (BBL)

In Pits	624 bbl
In Hole	811 bbl
Active	1249 bbl
Storage	579 bbl
Tot. on Location	2014 bbl

PUMP #1

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	80
gal/min	210

PUMP #2

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

RISER BOOSTER

Liner Size	4.75
Stroke	12
bbl/stk	0.0625
stk/min	
gal/min	

Mud Wt. = 11.3 PV=13 YP=8 **CIRCULATION DATA** n = 0.695 K = 140.3

Bit Depth = 16,449 ' | Washout = | Pump Efficiency = 95%

Drill String Disp.						
122.7 bbl	Volume to Bit	324.0 bbl	Strokes To Bit	5,186	Time To Bit	65 min
	Bottoms Up Vol.	301.2 bbl	BottomsUp Stks	4,822	BottomsUp Time	60 min
	TotalCirc.Vol.	1249.2 bbl	TotalCirc.Stks	19,997	Total Circ. Time	250 min

DRILLING ASSEMBLY DATA

Tubulars	OD (in.)	ID (in.)	Length	Top
Casing	5.500	4.670	9,250'	
Casing	5.000	4.278	7,199'	9,250'
				16,449'
				16,449'

CASING & HOLE DATA

Casing	OD (in.)	ID (in.)	Depth	Top
Riser				
Surface	10 3/4		3,018'	
Int. Csg.	7 5/8	6.875	11,974'	
Open Hole Size		6.750	20,659'	

ANNULAR GEOMETRY & RHEOLOGY

annular section	depth	velocity ft/min	flow reg	ECD lb/gal
6.875x5.5	9,250'	302.3	turb	12.89
6.875x5	11,974'	231.0	turb	12.64
6.75x5	16,449'	250.2	turb	12.87

BIT DATA Manuf./Type

Size	Depth In	Hours	Footage	ROP ft/hr	Motor/MWD	Calc. Circ. Pressure
6 3/4	20,659 ft					#DIV/0!

SOLIDS CONTROL

Unit	Screens	Hours
Shaker 1	200	12.0
Shaker 2	200	12.0
Shaker 3	200	12.0
NOV Dryers	170	12.0
Centrifuge 1		

VOLUME ACCOUNTING (bbls)

Prev. Total on Location	2781.2
Transferred In(+)/Out(-)	
Oil Added (+)	
Barite Added (+)	
Other Product Usage (+)	
Water Added (+)	
Left on Cuttings (-)	
Hole Losses	-766.7
EVAP/ Trips	
Est. Total on Location	2014.5
Est. Losses/Gains (-)/(+)	0.0

BIT HYDRAULICS DATA

Bit H.S.I.	Bit ΔP	Nozzles (32nds)		
#DIV/0!	#DIV/0!			
Bit Impact Force	Nozzle Velocity (ft/sec)			
#DIV/0!				

Afternoon Remarks/Recommendations:

Afternoon Rig Activity:

Running 5" casing to bottom. RIH to 14880 ft. Circulate out mud cap. Continue to RIH to 16282 ft. Circulated out 150 bbl of mud cap and recaptured it for reuse. Continue to wash and ream to bottom. Adding hourly treatments of First Response and SynSeal of 10 sacks per hour. Adding Optimul and Lime to increase the emulsion. Lowering the HTHP fluid loss with additions of Opti-G.