FIELD TICKET

Client	MERIT ENERGY COMPANY
Well	15-055-20387-0001
Job Description	Squeeze-Hole - Existing Well
Date	March 23, 2018

Field Ticket # FT-04984-K1B4G70202-00871

Field Ticket #	FT-04984-K1B4G70202-00871	**Credit Approval #**	
Client	MERIT ENERGY COMPANY	**Purchase Approval #**	
	PO BOX 1293, LIBERAL, 67905-1293	**Invoice #**	
Field Rep	Victor Corona-Marta	**Well**	15-055-20387-0001
Field Client Rep	Martin Aragon	**Well API #**	15-055-20387-0001
District	Liberal, KS	**Well Type**	
Job Type	Squeeze-Hole - Existing Well	**Well Classification**	
Job Depth (ft)	0.00	**County**	USA
Gas Used On Job	No	**State/Province**	KS
		Field	STALEY
		Lease	Staley

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MATERIALS

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
L100022	CEMENT, CLASS H	SK	200.0000	$50.27	$10,054.00	45.00	$5,529.70
L100112	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	LB	100.0000	$2.40	$240.00	45.00	$132.00
				Product Material Subtotal:	**$10,294.00**		**$5,661.70**

SERVICES

Product Code	Description	UOM	Quantity	List Price	Gross Amount	Disc (%)	Net Amount
S-100004	Cement Crew Mobilization-Demobilizaton Fee	EA	1.00	$10,880.00	$10,880.000	90.00	$1,088.000
S-100051	Cement pump charge, 3,001-4,000 feet/901-1,200 m	6/HR	1.00	$5,472.00	$5,472.000	90.00	$547.200
S-100001	Mileage - vehicle heavy weight	MI	50.00	$18.96	$948.000	90.00	$94.800
S-100002	Mileage - vehicle light weight	MI	50.00	$10.72	$536.000	90.00	$53.600
				Service Subtotal:	**$17,836.00**		**$1,783.60**

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FIELD ESTIMATES

TOTAL GROSS AMOUNT	$28,130.000
TOTAL % DISC	73.533%
TOTAL NET AMOUNT	$7,445.300

Arrive Location

Client Rep.

Service Order

I authorize work to begin per service instructions in accordance with the terms and conditions printed on the following pages of this form and represent that I have authority to accept and sign this order.

Service receipt

I certify that the materials and services listed were received and all services performed in a workmanlike manner.

BJ REPRESENTATIVE

Victor Corona-Marta

CLIENT AUTHORIZED AGENT

Martin Aragon

Cementing Treatment

Start Date	3/23/2018	**Well**	15-055-20387-0001
End Date	3/23/2018	**County**	
Client	MERIT ENERGY COMPANY	**State/Province**	KS
Client Field Rep	Martin Aragon	**API**	15-055-20387-0001
Service Supervisor		**Formation**	
Field Ticket No.		**Rig**	
District	Liberal, KS	**Type of Job**	Squeeze-Hole - Existing Well

WELL GEOMETRY

Type	ID (in)	OD (in)	Wt. (lb/ft)	MD (ft)	TVD (ft)	Excess(%)	Grade	Thread
Casing	4.95	5.50	15.50	300.00	300.00			
Tubing	2.44	2.88	6.50	250.00	250.00			

Shoe Length (ft):

HARDWARE

Bottom Plug Used?	No	**Tool Type**	Cement Retainer
Bottom Plug Provided By		**Tool Depth (ft)**	3,204.00
Bottom Plug Size		**Max Tubing Pressure - Rated (psi)**	
Top Plug Used?	No	**Max Tubing Pressure - Operated (psi)**	
Top Plug Provided By		**Max Casing Pressure - Rated (psi)**	
Top Plug Size		**Max Casing Pressure - Operated (psi)**	
Centralizers Used	No	**Pipe Movement**	None
Centralizers Quantity		**Job Pumped Through**	Squeeze Manifold
Centralizers Type		**Top Connection Thread**	ltc
Landing Collar Depth (ft)	3,204	**Top Connection Size**	2.875

CIRCULATION PRIOR TO JOB

Cementing Treatment

Well Circulated By	BJ	**Solids Present at End of Circulation**	No
Circulation Prior to Job	Yes	**10 sec SGS**	
Circulation Time (min)		**10 min SGS**	
Circulation Rate (bpm)		**30 min SGS**	
Circulation Volume (bbls)		**Flare Prior to/during the Cement Job**	No
Lost Circulation Prior to Cement Job	No	**Gas Present**	No
Mud Density In (ppg)		**Gas Units**	
Mud Density Out (ppg)			
PV Mud In			
PV Mud Out			
YP Mud In			
YP Mud Out			

TEMPERATURE

Ambient Temperature (°F)	85.00	**Slurry Cement Temperature (°F)**	85.00
Mix Water Temperature (°F)	75.00	**Flow Line Temperature (°F)**	

BJ FLUID DETAILS

Fluid Type	Fluid Name	Density (ppg)	Yield (Cu Ft/sk)	H2O Req. (gals/sk)	Planned Top of Fluid (Ft)	Length (Ft)	Vol (sk)	Vol (Cu Ft)	Vol (bbls)
Tail Slurry	Tail Cement	15.6000	1.1966	5.24		0.00	200	240.0000	42.7000

Fluid Type	Fluid Name	Component	Concentration	UOM
Tail Slurry	Tail Cement	CEMENT, CLASS H	100.0000	PCT
Tail Slurry	Tail Cement	ACCELERATOR, SALT, CHLORIDE, CALCIUM, A-7P, PELLETS	2.0000	BWOB

Cementing Treatment

TREATMENT SUMMARY

Time	Fluid	Rate (bpm)	Fluid Vol. (bbls)	Pipe Pressure (psi)	Annulus Pressure (psi)	Comments
	Tail Cement	3.00	42.70			

	Min	Max	Avg
Pressure (psi)	0.00	2,500.00	500.00
Rate (bpm)	0.50	3.00	2.00

DISPLACEMENT AND END OF JOB SUMMARY

Displaced By	BJ	**Amount of Cement Returned/Reversed**	
Calculated Displacement Volume (bbls)	18.50	**Method Used to Verify Returns**	Visual
Actual Displacement Volume (bbls)	18.50	**Amount of Spacer to Surface**	
Did Float Hold?	Yes	**Pressure Left on Casing (psi)**	
Bump Plug	No	**Amount Bled Back After Job**	
Bump Plug Pressure (psi)	1,100.00	**Total Volume Pumped (bbls)**	
Were Returns Planned at Surface	No	**Top Out Cement Spotted**	No
Cement returns During Job		**Lost Circulation During Cement Job**	No

CEMENT PLUG

Bottom of Cement Plug?	No	**Wiper Balls Used?**	No
Wiper Ball Quantity		**Plug Catcher**	No
Number of Plugs			

SQUEEZE

Injection Rate (bpm)	1.500	**Fluid Density (ppg)**	15.60

Cementing Treatment

Injection Pressure (psi)	800.000	**ISIP (psi)**	
Type of Squeeze		**FSIP (psi)**	
Operators Max SQ Pressure (psi)	2,500.00		

COMMENTS

Treatment Report

42bbls of tail cement
18.5bbls of displacement

Job Summary

establish barrel rate
pumped 31bbls of tail cement from 150sacks at 15.6lbs
pumped 10bbls of tail cement from 50sacks with CC at 15.6lbs
displacement of 18.5bbls
reverse out with total of 25bbls