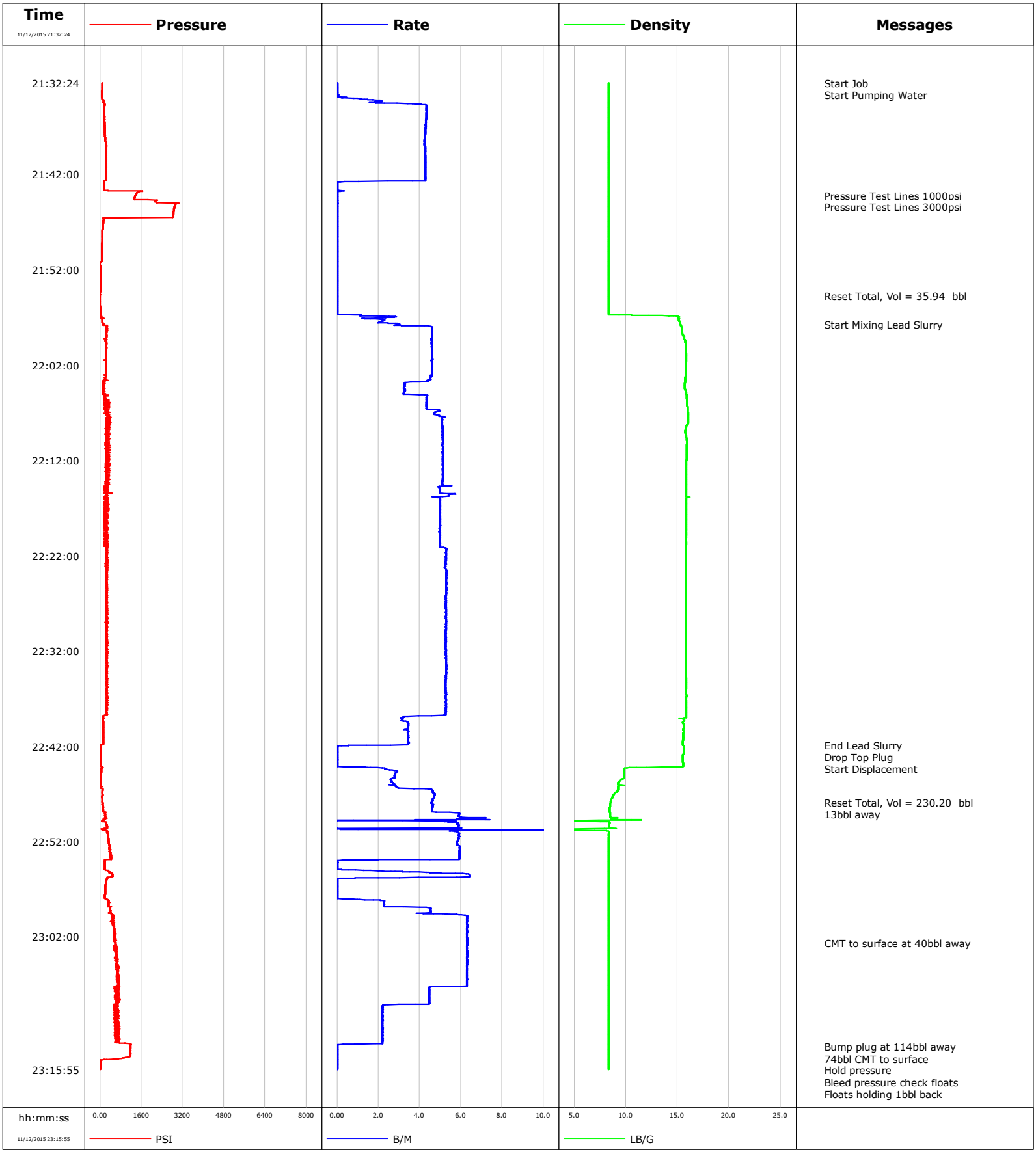
Schlumberger

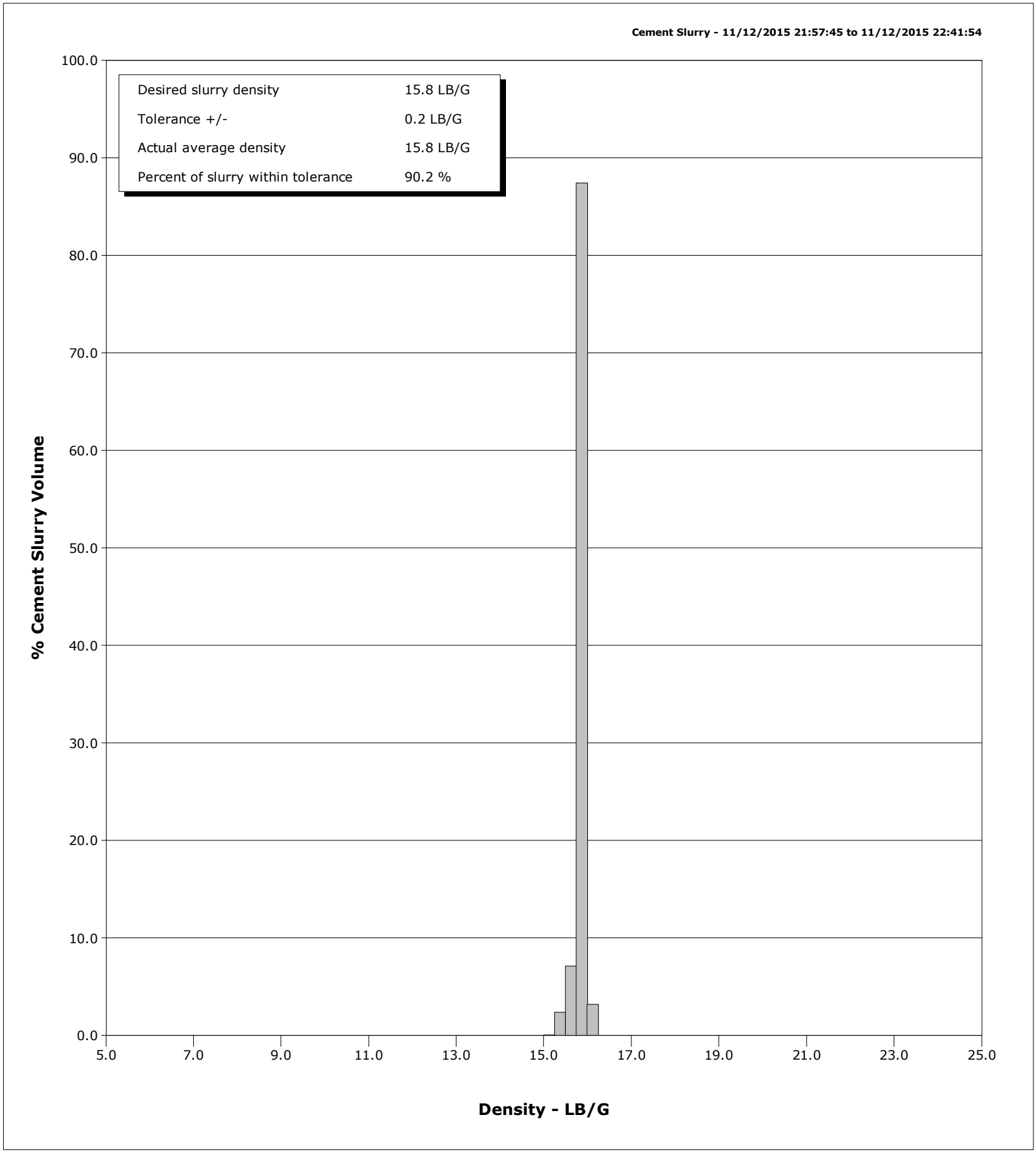
Cementing Job Report

Well	Thomas East	**Client**	Extraction
Field	DJ	**SIR No.**	D5VO-00920
Engineer	Chris Valerio/Jason Crick	**Job Type**	Surface
Country	United States	**Job Date**	11-12-2015



Schlumberger Cementing Qa/Qc Density Report

Well	Thomas East	**Client**	Extraction
Field	DJ	**SIR No.**	D5VO-00920
Engineer	Chris Valerio/Jason Crick	**Job Type**	Surface
Country	United States	**Job Date**	11-12-2015



Schlumberger

Cementing Service Report

Customer	Job Number
Extraction	D5VO-00920

Well	Location (legal)	Schlumberger Location	Job Start
Thomas East 1			Nov/12/2015

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ	Shale	deg	13.5 in	1532.0 ft	1532.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	100 degF	84 degF	lb/gal

Well Master	API/UWI
0631657416	05123422850000

Rig Name	Drilled For	Service Via
Savanna #802	Oil	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
Other	lb/gal	cP

Service Line	Job Type
Cementing	Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
2500 psi	psi	Single Cement head

Service Instructions

36bbl water
209bbl CMT @ 15.8# 1.16 Yield 5.12 gal/sk water

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1532.0	9.6	36.0	J55	8RD
0.0	0.0	0.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread

Perforations/Open Hole

Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval
ft	ft			ft
ft	ft			Diameter
ft	ft			in

Treat Down	Displacement	Packer Type	Packer Depth
Casing	115.3 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	118.4 bbl	133.0 bbl	bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Lift Pressure	759 psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
	1	

Cement Head Type	Single

Job Scheduled For	Arrived on Location	Leave Location
Nov/12/2015 16:30	Nov/12/2015 16:30	Nov/13/2015 00:30

Casing Tools		Squeeze Job	
Shoe Type	Float	Squeeze Type	
Shoe Depth	1532.0 ft	Tool Type	
Stage Tool Type		Tool Depth	ft
Stage Tool Depth	ft	Tail Pipe Size	in
Collar Type	Float	Tail Pipe Depth	ft
Collar Depth	1492.0 ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
11/12/2015	21:32:24	81	0.0	8.33	0.0	Stopped Acquisition
11/12/2015	21:32:25	81	0.0	8.33	0.0	Start Job
11/12/2015	21:33:22	75	0.0	8.33	0.0	Start Pumping Water
11/12/2015	21:37:24	180	4.3	8.33	12.8	
11/12/2015	21:42:24	239	4.3	8.33	34.1	
11/12/2015	21:44:14	1365	0.0	8.33	35.6	Pressure Test Lines 1000psi
11/12/2015	21:45:25	2886	0.0	8.33	35.6	Pressure Test Lines 3000psi
11/12/2015	21:47:24	112	0.0	8.33	35.6	
11/12/2015	21:52:24	15	0.0	8.33	35.6	
11/12/2015	21:54:45	-1	0.0	8.33	35.6	Reset Total, Vol = 35.94 bbl
11/12/2015	21:57:24	84	2.2	15.17	36.9	
11/12/2015	21:57:45	116	3.0	15.29	37.7	Start Mixing Lead Slurry
11/12/2015	22:02:24	219	4.6	15.77	58.8	
11/12/2015	22:07:24	277	5.0	16.02	79.7	
11/12/2015	22:12:24	239	5.1	15.85	105.3	
11/12/2015	22:17:24	156	5.0	15.84	130.6	
11/12/2015	22:22:24	282	5.3	15.80	155.9	
11/12/2015	22:27:24	264	5.3	15.79	182.2	
11/12/2015	22:32:24	251	5.2	15.77	208.6	
11/12/2015	22:37:24	248	5.3	15.83	234.9	
11/12/2015	22:41:54	5	1.4	15.54	252.8	End Lead Slurry

Well	Field	Job Start	Customer	Job Number
Thomas East 1	DJ	Nov/12/2015	Extraction	D5VO-00920

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
11/12/2015	22:42:01	27	0.0	15.60	252.8	Start Displacement
11/12/2015	22:42:24	25	0.0	15.59	252.8	
11/12/2015	22:47:24	88	4.7	8.67	263.3	
11/12/2015	22:47:55	88	4.6	8.50	265.7	Reset Total, Vol = 230.20 bbl
11/12/2015	22:48:16	106	4.6	8.46	267.3	13bbl away
11/12/2015	22:52:24	358	5.9	8.34	290.0	
11/12/2015	22:57:24	197	0.0	8.33	303.0	
11/12/2015	23:02:24	610	6.3	8.33	325.6	
11/12/2015	23:02:39	587	6.3	8.33	327.1	CMT to surface at 40bbl away
11/12/2015	23:07:24	605	4.4	8.33	356.7	
11/12/2015	23:12:24	663	2.2	8.32	371.5	
11/12/2015	23:13:30	1185	0.0	8.32	373.4	Bump plug at 114bbl away
11/12/2015	23:13:49	1167	0.0	8.32	373.4	74bbl CMT to surface
11/12/2015	23:13:57	1169	0.0	8.32	373.4	Hold pressure
11/12/2015	23:14:29	1167	0.0	8.32	373.4	Bleed pressure check floats
11/12/2015	23:15:29	15	0.0	8.32	373.4	Floats holding 1bbl back

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
4.2			6.0	209.0	0.0	36.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
1169	15	329	1169			bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	209.0 bbl	114.0 bbl	74 degF	Cement Circulated to Surface? [X]	Volume 74.0 bbl
				Washed Thru Perfs [ ]	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Shawn Mcintyre	Chris Valerio/Jason Crick	-	[X] -