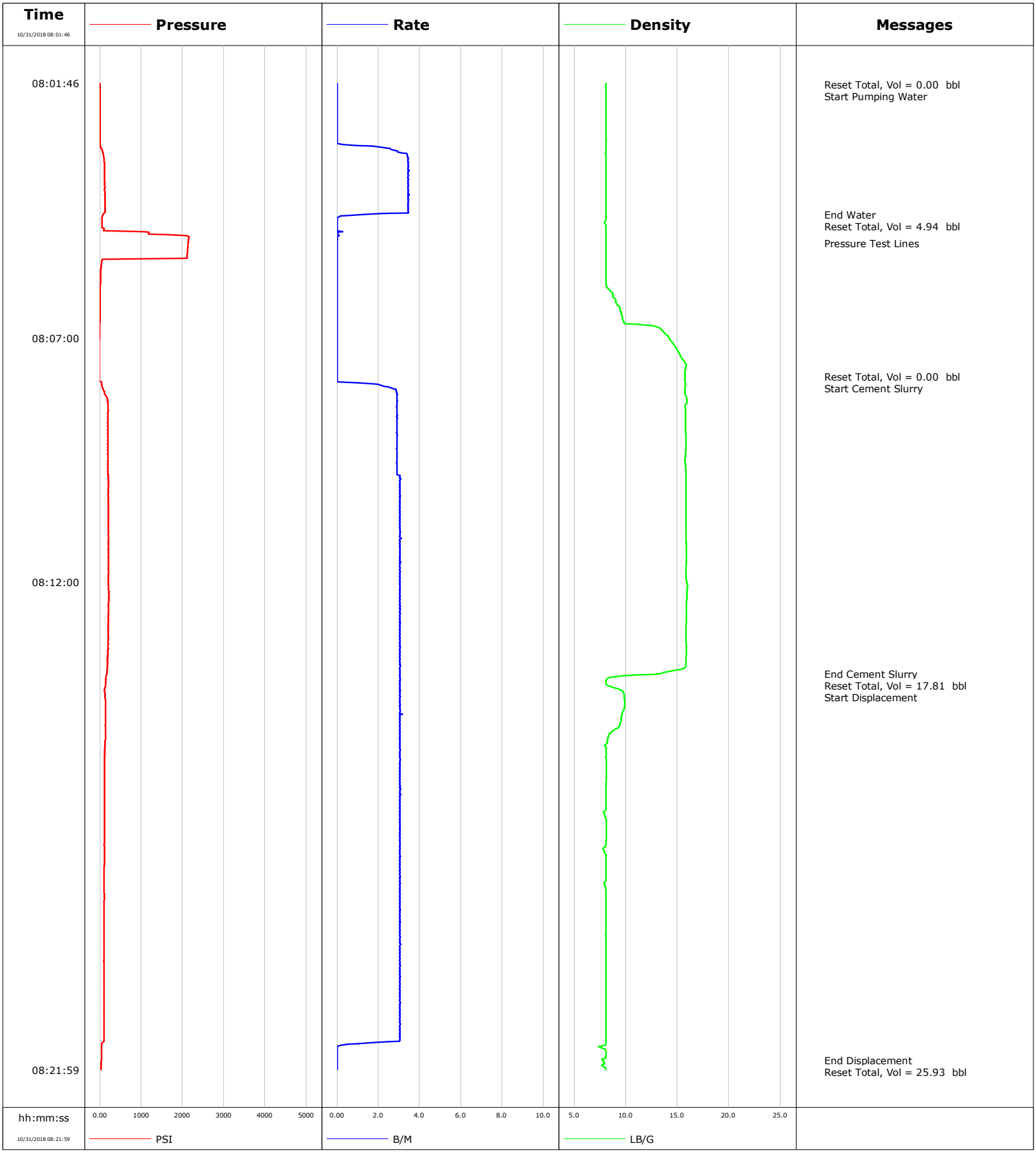
Schlumberger

Cementing Job Report

CemCAT v1.7

Well	HSR-Parker 15-16A	**Client**	Anadarko
Field	DJ	**SIR No.**	DXVN-01653
Engineer	Richard White	**Job Type**	P A Nio Plug
Country	United States	**Job Date**	10-31-2018



Schlumberger

Cementing Service Report

Customer	Job Number
Anadarko	DXVN-01653

Well	Location (legal)	Schlumberger Location	Job Start
HSR-Parker 15-16A	CWY	Cheyenne	Oct/31/2018

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	7980.0 ft	7980.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	220 degF	210 degF	lb/gal

Well Master	API/UWI
630314883	

Rig Name	Drilled For	Service Via
SPN 724	Oil and Gas	Land

Offshore Zone	Well Class	Well Type
	Old	Other

Drilling Fluid Type	Max. Density	Plastic Viscosity
Other	8.40 lb/gal	cP

Service Line	Job Type
Cementing	P & A Nio Plug

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	2 3/8" 4.7# T/S

Service Instructions

Nio Plug/ water and cmt checked and verified
Est. TOC @ 6799 ft
5 bbl water
17.7 bbl cmt@15.8ppg 65sks 1.53yield 6.35gps
25.9 bbl Displacement

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
7980.0	4.5	11.6	n/a	n/a
0.0	0.0	0.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
T	7980.0	2.4	4.7	n/a	n/a
	0.0	0.0	0.0		

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
Tubing	25.9 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	bbl	bbl	bbl

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

Lift Pressure	psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
Oct/31/2018	Oct/31/2018	Oct/31/2018

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

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Message
10/31/2018	08:01:46	0	0.0	8.11	Started Acquisition
10/31/2018	08:01:48	0	0.0	8.11	Reset Total, Vol = 0.00 bbl
10/31/2018	08:01:51	0	0.0	8.11	Start Pumping Water
10/31/2018	08:04:28	78	1.3	8.11	End Water
10/31/2018	08:04:31	60	0.1	8.11	Reset Total, Vol = 4.94 bbl
10/31/2018	08:05:03	2138	0.0	8.11	Pressure Test Lines
10/31/2018	08:07:47	-18	0.0	15.73	Reset Total, Vol = 0.00 bbl
10/31/2018	08:07:48	-18	0.0	15.73	Start Cement Slurry
10/31/2018	08:13:52	174	3.0	13.46	End Cement Slurry
10/31/2018	08:13:53	165	3.0	12.83	Reset Total, Vol = 17.81 bbl
10/31/2018	08:13:56	151	3.0	8.90	Start Displacement
10/31/2018	08:21:47	37	0.0	7.68	End Displacement

Well	Field	Job Start	Customer	Job Number
HSR-Parker 15-16A	DJ	Oct/31/2018	Anadarko	DXVN-01653

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
3.0			3.5	45.5	0.0	0.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2161	32	189				bbl	lb/gal

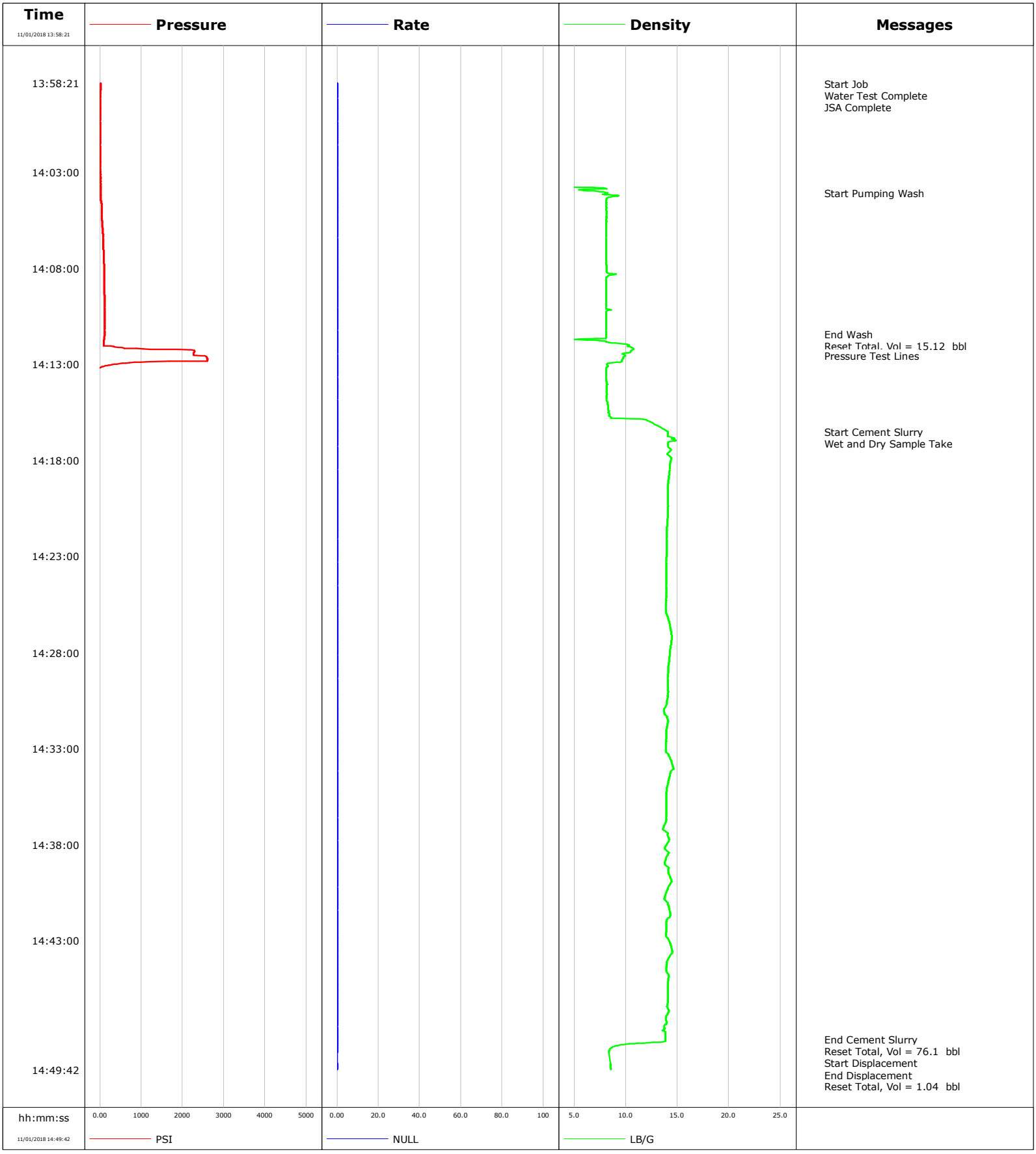
Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	0.0 bbl	22.9 bbl	degF	Cement Circulated to Surface? ☐	Volume bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor		
Jensine Doyle	Richard White	Circulation Lost ☐	Job Completed ☐
		-	-

Schlumberger

Cementing Job Report

Well	PARKER 15-16A	**Client**	ANADARKO
Field	DJ	**SIR No.**	DXVN-01654
Engineer	Wayne Silvester	**Job Type**	Plug Abandon
Country	USA	**Job Date**	11-01-2018



Schlumberger

Cementing Service Report

Customer	Job Number
ANADARKO	DXVN-01654

Well	Location (legal)	Schlumberger Location	Job Start
PARKER 15-16A	21704	Cheyenne	Nov/01/2018

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	1355.0 ft	1355.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
Weld	Colorado	psi	90 degF	80 degF	lb/gal

Well Master	API/UWI
630314883	5123203360000

Rig Name	Drilled For	Service Via
	Oil and Gas	Land

Offshore Zone	Well Class	Well Type
	Old	Other

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

Service Line	Job Type
Cementing	Plug & Abandon

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	2 3/8" 4.7# T/S

Service Instructions

Stub Plug 275 sks 1.55 ft3/sk 7.914 gps = 76 bbls

Est Toc= 59 ft

CW7= 15 bbl
CMT= 76 bbl @ 14 ppg
Displace = 1 bbl

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1355.0	4.5	11.6	N/A	N/A
775.0	8.6	24.0	N/A	N/A

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
T	1355.0	2.4	4.7	N/A	N/A
	0.0	0.0	0.0		

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
Tubing	1.0 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
5.2 bbl	bbl	bbl	bbl

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

Lift Pressure	psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs

Cement Head Type

Job Scheduled For	Arrived on Location	Leave Location
Nov/01/2018	Nov/01/2018	Nov/01/2018

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

Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume B/M	Pressure PSI	Message
11/01/2018	13:58:21	0.0	0.01	0.0	9	Started Acquisition
11/01/2018	13:58:24	0.0	-0.00	0.0	14	Start Job
11/01/2018	13:58:26	0.0	-0.00	0.0	14	Water Test Complete
11/01/2018	14:03:22	0.0	0.01	0.0	14	
11/01/2018	14:04:05	0.0	8.28	0.0	14	Start Pumping Wash
11/01/2018	14:08:23	0.0	8.37	2.2	96	
11/01/2018	14:11:26	0.0	8.10	2.2	119	End Wash
11/01/2018	14:11:29	0.0	8.10	2.2	119	Reset Total, Vol = 15.12 bbl
11/01/2018	14:12:34	0.0	9.94	0.0	2545	Pressure Test Lines
11/01/2018	14:13:24	0.0	8.11	0.0	-165	
11/01/2018	14:16:31	0.0	14.07	0.0	-403	Start Cement Slurry
11/01/2018	14:16:33	0.0	14.07	0.0	-403	Wet and Dry Sample Take
11/01/2018	14:18:25	0.0	14.25	2.2	-229	
11/01/2018	14:23:26	0.0	13.92	2.2	-233	
11/01/2018	14:28:27	0.0	14.22	2.2	-165	
11/01/2018	14:33:28	0.0	14.27	2.2	-211	
11/01/2018	14:38:29	0.0	14.10	2.2	-243	
11/01/2018	14:43:30	0.0	14.48	2.2	-206	
11/01/2018	14:48:08	0.0	13.82	2.2	-179	End Cement Slurry
11/01/2018	14:48:09	0.0	13.82	2.2	-179	Reset Total, Vol = 76.1 bbl
11/01/2018	14:48:11	0.0	13.81	2.2	-179	Start Displacement

Well	Field	Job Start	Customer	Job Number
PARKER 15-16A	DJ	Nov/01/2018	ANADARKO	DXVN-01654

Date	Time 24-hr clock	Flow Rate B/M	Density LB/G	Volume B/M	Pressure PSI	Message
11/01/2018	14:48:36	0.0	8.53	2.2	-174	End Displacement
11/01/2018	14:48:38	0.0	8.46	1.1	-197	Reset Total, Vol = 1.04 bbl
11/01/2018	14:48:49	0.0	8.38	0.0	-320	End Job
11/01/2018	14:48:50	0.0	8.38	0.0	-330	Stopped Acquisition
11/01/2018	14:49:20	0.0	8.51	0.0	-407	Started Acquisition

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
2.1			2.5	76.0	0.0	15.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2600	-41	167				bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	76.0 bbl	1.0 bbl	63 degF	Cement Circulated to Surface? ☐	Volume bbl
				Washed Thru Perfs ☐	To ft

Customer or Authorized Representative	Schlumberger Supervisor		
Jensine Doyle	Wayne Silvester	Circulation Lost ☐	Job Completed ☒
		-	-