Schlumberger Cementing Servic Report

Customer	Job Number
Noble	1234

Well	Location (legal)	Schlumberger Location	Job Start
Wells Ranch USX AA 35-14	CWY	Cheyenne	Dec/16/2019

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	2100.0 ft	2100.0 ft

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

Well Master	API/UWI
1234	

Rig Name	Drilled For	Service Via
Rigless #1	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	Courtesy Plug & Condition

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	

Service Instructions

Courtesy plug from 2100 ft to 1588 ft
10 bbl water
38.2 bbl cmt@15.8ppg 1.16y 185sks 5.13gps
24.6 bbl Disp

Cut and condition from 686 ft to surface
10 bbl cemwash
55 bbl water

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
2100.0	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

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	24.6 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
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
Dec/16/2019	Dec/16/2019	Dec/16/2019

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	Volume BBL	Message
12/16/2019	11:01:23	0.0	0.0	0.0	0.0	Started Acquisition
12/16/2019	11:03:08	0.0	0.0	0.0	0.0	Start Job
12/16/2019	11:03:10	0.0	0.0	0.0	0.0	Pressure Test Lines
12/16/2019	11:06:23	0.0	0.0	0.0	0.0	
12/16/2019	11:08:18	0.0	0.0	0.0	0.0	PSI up to perf at 2500'
12/16/2019	11:08:19	0.0	0.0	0.0	0.0	Remark
12/16/2019	11:11:23	0.0	0.0	0.0	0.0	
12/16/2019	11:16:23	0.0	0.0	0.0	0.0	
12/16/2019	11:20:57	0.0	0.0	0.0	0.0	Start Pumping Spacer
12/16/2019	11:21:23	0.0	0.0	0.0	0.0	
12/16/2019	11:26:23	0.0	0.0	0.0	0.0	
12/16/2019	11:31:23	0.0	0.0	0.0	0.0	
12/16/2019	11:32:40	0.0	0.0	0.0	0.0	End Spacer
12/16/2019	11:32:43	0.0	0.0	0.0	0.0	Start Mixing Lead Slurry
12/16/2019	11:33:03	0.0	0.0	0.0	0.0	Reset Total, Vol = 11.68 bbl
12/16/2019	11:33:05	0.0	0.0	0.0	0.0	Returns
12/16/2019	11:36:14	0.0	0.0	0.0	0.0	Remark
12/16/2019	11:36:16	0.0	0.0	0.0	0.0	Remark
12/16/2019	11:36:23	0.0	0.0	0.0	0.0	
12/16/2019	11:41:23	0.0	0.0	0.0	0.0	
12/16/2019	11:42:47	0.0	0.0	0.0	0.0	Returns good

Well	Field	Job Start	Customer	Job Number
Wells Ranch USX AA 35-14	DJ	Dec/16/2019	N	1234

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
12/16/2019	11:49:58	0.0	0.0	0.0	0.0	End lead slurry
12/16/2019	11:50:04	0.0	0.0	0.0	0.0	Start Pumping displacement
12/16/2019	11:50:09	0.0	0.0	0.0	0.0	Reset Total, Vol = 38.60 bbl
12/16/2019	11:51:23	0.0	0.0	0.0	0.0	
12/16/2019	11:56:23	0.0	0.0	0.0	0.0	
12/16/2019	12:01:17	0.0	0.0	0.0	0.0	End displacement
12/16/2019	12:01:23	0.0	0.0	0.0	0.0	
12/16/2019	12:01:27	0.0	0.0	0.0	0.0	End Job
12/16/2019	12:01:36	0.0	0.0	0.0	0.0	Remark
12/16/2019	12:01:37	0.0	0.0	0.0	0.0	Remark
12/16/2019	12:57:00	0.0	0.0	0.0	0.0	PSI test courtesy plug
12/16/2019	12:59:08	0.0	0.0	0.0	0.0	Reset Total, Vol = 24.76 bbl
12/16/2019	13:01:23	0.0	0.0	0.0	0.0	
12/16/2019	13:06:23	0.0	0.0	0.0	0.0	
12/16/2019	13:08:32	0.0	0.0	0.0	0.0	PSI up to cut casing at 686'
12/16/2019	13:11:23	0.0	0.0	0.0	0.0	
12/16/2019	13:16:23	0.0	0.0	0.0	0.0	
12/16/2019	13:21:23	0.0	0.0	0.0	0.0	
12/16/2019	13:21:29	0.0	0.0	0.0	0.0	Start Job
12/16/2019	13:21:31	0.0	0.0	0.0	0.0	Start Pumping Wash
12/16/2019	13:26:23	0.0	0.0	0.0	0.0	
12/16/2019	13:29:59	0.0	0.0	0.0	0.0	End Wash 10 bbl
12/16/2019	13:30:02	0.0	0.0	0.0	0.0	Start Pumping Spacer
12/16/2019	13:31:23	0.0	0.0	0.0	0.0	
12/16/2019	13:36:23	0.0	0.0	0.0	0.0	
12/16/2019	13:41:23	0.0	0.0	0.0	0.0	
12/16/2019	13:42:24	0.0	0.0	0.0	0.0	Chem wash to surfce 47bbl away
12/16/2019	13:43:14	0.0	0.0	0.0	0.0	End Spacer end water
12/16/2019	13:46:23	0.0	0.0	0.0	0.0	

Post Job Summary

Average Pump Rates, bbl/min			
Slurry	N2	Mud	Maximum Rate

Volume of Fluid Injected, bbl			
Total Slurry	Mud	Spacer	N2

Treating Pressure Summary, psi				
Maximum	Final	Average	Bump Plug to	Breakdown
	0			

Breakdown Fluid		
Type	Volume	Density
	bbl	lb/gal

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

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Chris H.	Richard White	-	X -

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Customer	Job Number
Noble	1234

Well	Location (legal)	Schlumberger Location	Job Start
Wells ranch USX AA 35-14	CWY	Cheyenne	Dec/17/2019

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
DJ		deg	in	686.0 ft	686.0 ft

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

Well Master	API/UWI
1234	

Rig Name	Drilled For	Service Via
Rigless #1	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	Surface Plug

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
psi	psi	

Service Instructions

Surface Plug from 686 ft to Surface

10 bbl water
61 bbl cmt@15.8ppg 1.16 y 295sks 5.13gps
.3 bbl Disp

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
686.0	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

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	0.3 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
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
Dec/17/2019	Dec/17/2019	Dec/17/2019

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	Volume BBL	Message
12/17/2019	08:17:13	-0	0.0	0.00	0.0	Started Acquisition
12/17/2019	08:22:13	-0	0.0	0.01	0.0	
12/17/2019	08:27:13	0	0.0	0.01	0.0	
12/17/2019	08:30:02	1	0.3	6.08	0.0	Reset Total, Vol = 0.01 bbl
12/17/2019	08:32:13	0	0.0	8.49	0.0	
12/17/2019	08:37:13	66	0.9	8.49	0.0	
12/17/2019	08:42:13	31	1.0	8.49	0.0	
12/17/2019	08:43:12	37	1.0	8.48	0.0	Reset Total, Vol = 10.30 bbl
12/17/2019	08:47:13	63	3.1	15.87	0.0	
12/17/2019	08:52:13	71	3.1	15.81	0.0	
12/17/2019	09:02:13	100	2.3	16.02	0.0	
12/17/2019	09:04:52	90	1.7	16.17	0.0	Reset Total, Vol = 61.11 bbl
12/17/2019	09:05:06	33	1.0	8.96	0.0	Reset Total, Vol = 0.31 bbl
12/17/2019	09:07:13	15	0.0	8.56	0.0	
12/17/2019	09:12:13	62	2.7	8.62	0.0	
12/17/2019	09:17:13	4	0.0	8.48	0.0	
12/17/2019	09:22:13	5	0.0	0.01	0.0	
12/17/2019	09:27:13	11	0.0	0.01	0.0	

Well	Field	Job Start	Customer	Job Number
Wells ranch USX AA 35-14	DJ	Dec/17/2019		1234

Post Job Summary

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

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

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	0.0 bbl	bbl	degF	Cement Circulated to Surface? [X]	Volume 4.0 bbl
				Washed Thru Perfs [ ]	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
Chris H.	Richard White	-	- [X]