



Service Order #: 70,187

Date: 02-Nov-17

Well Name	Location	County	St	API#
HERBSTER PMF 26-15		WELD	CO	

Formation	Cement Via	Type Of Service	Well Type	Age	AFE#	PO#
	TUBING	PLUG		REWORK		

Customer: NOBLE ENERGY

Remarks: CLASS G CMT, 1.15 YIELD, 15.8 LBS/GAL
W/ .2% RETARDER

253 SKS, 51.8 BBLS THROUGH RETAINER
10 SKS, 2 BBLS ABOVE RETAINER
4528'-4080' CASING, 4528'-3804' ANNULUS
5 BBLS DISPLACEMENT

Customer Rep: C.SWIFT

PH:

WELLBORE DATA				
Type	Size	Weight	Depth	Volume
Surface Casing:				
Production Casing:	2.875	6.5	4,528.0	
Intermediate:				
Drill Pipe:				
Tubing:	1.660	3.0	4,425.0	
Type	Size	Depth (Top)	Depth (Bot)	Volume
Liner:				
Open Hole:	9.000	300.0	4,528.0	

OTHER DATA		
BHT	Max PSI	Total Depth
	1,551	4,528.0

Packer or RetainerType / Depth:

Perf Depths:	#	Total
4,528.0	0	0
	0	
	0	

TIME	PUMP RATES		DENSITY	PRESS	STG TOT	TOTAL	REMARKS
	WATER (gpm)	PUMP (bpm)	(lb/gl)	(psi)	(bbls)	(bbls)	
13:04	0	0.0	6.88	2,293	0.3	0.3	PSI TEST
13:05	0	0.0	6.88	11	0.0	0.0	MUD FLUSH
13:15	0	1.3	6.91	1,274	10.0	10.0	H2O SPACER
13:19	0	1.3	15.83	1,299	5.0	15.0	START CMT
14:02	0	1.3	15.49	1,155	53.9	68.9	START DISPLACEMENT
14:09	0	0.0	9.63	11	5.0	77.6	OFFLINE STING OUT OF RETAINER
14:10	0	0.0	9.62	6	5.0	77.6	BALANCE CMT
14:11	0	0.0	9.63	35	6.0	78.6	OFFLINE
14:16	225	0.0	9.59	18	6.0	78.6	Paused 14:16:18

Summary

Max Fl. Rate	Avg Fl. Rate	Max Psi	Avg Psi
1.3	1.2	2,382	1,117

Customer Acknowledgement:

Service Rating:

- ☐ Satisfactory
☐ Unsatisfactory

Cementer:

A.HOWELL

PRODUCTS USED



Service Order #: 73024

Date: 06-Nov-17

Well Name	Location	County	St	API#		
HERBSTER PMF 26-15		WELD	CO			
Formation	Cement Via	Type Of Service	Well Type	Age	AFE#	PO#
	CASING	PLUG		REWORK		

Customer: NOBLE ENERGY

Remarks: SAFETY MEETING
PUMPED 300 SKS 61.4 BBLS,
2500'-1860'
PUMPED 295 SKS, 60.4 BBLS
1054'- 570'
PUMPED 274 SKS, 56 BBLS
570'-0'

Customer Rep: TONY

PH:

WELLBORE DATA				
Type	Size	Weight	Depth	Volume
Surface Casing:	8.625	24.0	300.0	
Production Casing:	2.875	6.5	2,500.0	
Intermediate:				
Drill Pipe:				
Tubing:				

Type	Size	Depth (Top)	Depth (Bot)	Volume
Liner:				
Open Hole:	9.000	300.0	2,500.0	

OTHER DATA		
BHT	Max PSI	Total Depth
	2,981	2,500.0

Packer or RetainerType / Depth:

Perf Depths:	#	Total
	0	0
	0	
	0	

TIME	PUMP RATES		DENSITY	PRESS	STG TOT	TOTAL	REMARKS
	WATER (gpm)	PUMP (bpm)	(lb/gal)	(psi)	(bbbls)	(bbbls)	
13:06	0	0.0	6.88	2,665	0.3	0.3	PSI TEST
13:08	0	0.0	6.88	36	0.3	0.3	MUD FLUSH
13:17	27	2.5	15.34	145	0.0	20.1	H2O SPACER
13:19	0	2.5	15.78	177	0.0	25.3	CMT
13:48	0	2.0	15.50	73	0.0	90.4	DISPLACEMENT
13:52	0	0.0	13.15	30	8.5	98.9	OFF LINE
10:41	0	0.0	6.88	1,517	0.8	0.8	PSI TEST
10:42	0	0.0	6.88	6	0.0	0.0	MUD FLUSH
10:50	0	2.5	6.91	99	20.1	20.1	H2O SPACER
10:54	49	0.8	15.91	30	5.4	25.6	CMT
11:06	55	2.5	16.12	82	26.8	52.4	ANNOTATION
11:24	0	0.6	11.86	19	79.6	105.1	DISPLACEMENT
11:25	0	0.0	12.17	19	2.3	108.2	OFF LINE
9:21	0	0.0	6.88	0	0.0	0.0	ANNOTATION
9:42	0	0.0	6.88	67	0.0	0.0	ANNOTATION
9:42	0	0.0	6.88	67	0.0	0.0	ANNOTATION
9:58	0	0.0	6.88	19	0.3	0.3	MUD FLUSH
10:05	46	1.5	7.12	30	0.0	10.1	H2O SPACER
10:09	47	2.0	15.54	54	5.0	15.2	CMT
10:43	187	0.0	15.68	12	54.8	70.0	Paused 10:43:13

Customer Acknowledgement:

Service Rating:

- ☐ Satisfactory
☐ Unsatisfactory

Cementer:

S. BOHLEN

PRODUCTS USED

EC BLEND, 1.15 YEILD, 15.8 LBS/GAL
CLASS G CMT 1.15 YEILD, 15.8 LBS/GAL



Service Order #: 73024

Date: 06-Nov-17

Summary

Max Fl. Rate	Avg Fl. Rate	Max Psi	Avg Psi
2.5	0.8	2,981	85

Customer Acknowledgement:

Service Rating:

- ☐ Satisfactory
☐ Unsatisfactory

Cementer:

S. BOHLEN

PRODUCTS USED

EC BLEND, 1.15 YEILD, 15.8 LBS/GAL
CLASS G CMT 1.15 YEILD, 15.8 LBS/GAL