



Service Order #: 70,222

Date: 17-May-18

Well Name	Location	County	St	API#		
COOPER 23-15		WELD	CO			
Formation	Cement Via	Type Of Service	Well Type	Age	AFE#	PO#
	TUBING	PLUG		REWORK		

Customer: NOBLE ENERGY

Remarks: THERMAL BLEND, 1.53 YIELD, 15.8 LBS/ GAL
20 SKS, 5.4 BBLS, @ 6597'-6249'

CLASS G CMT, 1.15 YIELD, 15.8 LB/ GAL

25 SKS, 5.1 BBLS, @ 2477'-2148'
64 SKS, 13 BBLS, @ 701'-0'

Customer Rep: C.MATHIAS

PH:

WELLBORE DATA				
Type	Size	Weight	Depth	Volume
Surface Casing:				
Production Casing:	4.500	11.6		
Intermediate:				
Drill Pipe:				
Tubing:	2.375	4.7	6,597.0	

OTHER DATA		
BHT	Max PSI	Total Depth
	452	6,597.0

Packer or Retainer Type / Depth:

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Type	Size	Depth (Top)	Depth (Bot)	Volume
Liner:				
Open Hole:				

Perf Depths:	#	Total
	0	0
	0	
	0	

TIME	PUMP RATES		DENSITY	PRESS	STG TOT	TOTAL	REMARKS
	WATER (gpm)	PUMP (bpm)	(lb/gal)	(psi)	(bbls)	(bbls)	
11:28	0	0.0	7.00	1,769	3.3	59.6	PSI TEST
11:29	0	0.0	0.00	0	0.0	0.0	H2O SPACER
11:37	0	1.0	15.81	123	7.0	7.0	START CMT
11:43	182	1.7	10.28	0	5.4	14.6	START DISPLACEMENT
11:54	0	0.0	7.00	0	24.0	38.7	OFFLINE
13:25	0	0.0	7.08	0	24.0	38.7	H2O SPACER
13:34	0	1.2	15.86	0	10.0	10.0	START CMT
13:40	0	1.3	10.33	0	5.1	15.9	START DISPLACEMENT
13:46	0	0.0	7.00	0	8.2	24.2	OFFLINE
14:31	0	0.0	9.25	0	0.2	0.2	H2O SPACER
14:35	0	1.9	15.82	40	4.9	4.9	START CMT
14:42	0	1.0	10.98	92	12.9	18.0	CMT TO SURFACE OFFLINE
14:51	0	0.1	7.41	0	17.6	22.7	Paused 14:51:52

Summary

Max Fl. Rate Avg Fl. Rate Max Psi Avg Psi
1.9 0.9 1,920 61

Customer Acknowledgement:

Service Rating:

- ☐ Satisfactory
☐ Unsatisfactory

Cementer:

A.HOWELL

PRODUCTS USED