



Customer: Great Western Operating Company	Rig: 12	Cement Unit: CP7
Company Foreman: Mark Tibbs	Date: 10/20/2020	
Well Name: Thayer #2-30	Invoice Number: CT02250	
Start time: 8:00 AM	End Time: 4:00 PM	

**Job Log:**

CP7, Drove to location, signed JSA, spot in equipment and rigged up, wait for rig to be ready for cement  
 Had safety meeting, RU valve, pressure test lines to 2000 psi.

Status: 2-7/8" 6.5# tubing, EOT: 2,577', inside 7-7/8" open hole  
 Established circulation with 15 bbl. of SAPP pill (1 sack/5 bbl.) and 95 bbl. of freshwater  
 Pumped 200 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 2% CaCl BWOW, displaced with 8.5 bbl. of freshwater  
 2.5 bbl./min rate, max pressure of 1,000 psi. Cement from 2,577' - 1,897', RD valve, washout pump, shut down for day

**Service and Equipment Charges**

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	1		
4 hour cementer charge	by 4 hours	1		
Environmental fee*	per job	1		
Pickup mileage	per mile	100		
Cement Pump and Pneumatic Bulker mileage	per mile	200		
Data Acquisition System	per job	0		
Bulk material mixing service charge	cubic foot	200		
Additional pneumatic hours (non discounted)	per hour	3		
Additional cement pump hours (non discounted)	per hour	3		
		0		
Cut and Cap fee	per request	0		
Fresh Water Transport	per hour	4		
Fresh water	per bbl.	80		
<b>Service and Equipment Totals</b>				

**Material & Products**

Description	Unit	Quantity
Class G neat cement	Per sack	200
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	4
Calcium Chloride (CaCl)	Per pound	200
Sugar	Per pound	0
SAPP	Per sack	3
Thixotropic Cement (IWS 13, IWS EXP, CaCl2, Fluid Loss)	Per sack	0
<b>Material &amp; Product Totals</b>		



Customer: Great Western Operating Company	Rig: 12	Cement Unit: CP7
Company Foreman: Mark Tibbs	Date: 10/21/2020	
Well Name: Thayer #2-30	Invoice Number: CT02251	
Start time: 7:30 AM	End Time: 3:30 PM	

**Job Log:**

CP7, Drove to location, signed JSA, spot in equipment and rigged up, wait for rig to be ready for cement  
 Had safety meeting, RU valve, pressure test lines to 2000 psi.

Status: 2-7/8" 6.5# tubing, EOT: 1,545', inside 7-7/8" open hole from 1,513' - 533', inside 9-5/8" 36# surface casing from 533' - 0'  
 Established circulation with 5 bbl. of freshwater  
 Pumped 300 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 2% CaCl BWOW, displaced with 2.5 bbl. of freshwater  
 3 bbl./min rate, max pressure of 200 psi. Cement from 1,545' - 525', RD valve, washout pump, stand by for next plug, 4 hr WOC

Status: 2-7/8" 6.5# tubing, EOT: 998', inside aprox 9" open hole from 1,000' - 533', inside 9-5/8" 36# surface casing from 533' - 0'  
 Established circulation with 5 bbl. of freshwater  
 Pumped 230 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 2% CaCl BWOW, displaced with 2.5 bbl. of freshwater  
 3 bbl./min rate, max pressure of 20 psi. Cement from 998' - 400', RD valve, washout pump, shut down for night

**Service and Equipment Charges**

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	1		
4 hour cementer charge	by 4 hours	1		
Environmental fee*	per job	1		
Pickup mileage	per mile	100		
Cement Pump and Pneumatic Bulker mileage	per mile	200		
Data Acquisition System	per job	0		
Bulk material mixing service charge	cubic foot	530		
Additional pneumatic hours (non discounted)	per hour	3		
Additional cement pump hours (non discounted)	per hour	3		
Cut and Cap fee	per request	0		
Fresh Water Transport	per hour	0		
Fresh water	per bbl.	0		

**Service and Equipment Totals**

**Material & Products**

Description	Unit	Quantity
Class G neat cement	Per sack	530
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	6
Calcium Chloride (CaCl)	Per pound	550
Sugar	Per pound	0
SAPP	Per sack	0
Thixotropic Cement (IWS 13, IWS EXP, CaCl2, Fluid Loss)	Per sack	0

**Material & Product Totals**



Customer: Great Western Operating Company	Rig: 12	Cement Unit: CP7
Company Foreman: Mark Tibbs	Date: 10/22/2020	
Well Name: Thayer #2-30	Invoice Number: CT02252	
Start time: 7:00 AM	End Time: 11:00 AM	

**Job Log:**

CP7, Drove to location, signed JSA, spot in equipment and rigged up, wait for rig to be ready for cement  
 Had safety meeting, RU valve, pressure test lines to 2000 psi.

Status: 2-7/8" 6.5# tubing, EOT: 1,513', inside 7-7/8" open hole from 626' - 533', inside 9-5/8" 36# surface casing from 533' - 0'  
 Established circulation with 5 bbl. of freshwater  
 Pumped 280 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 2% CaCl BWOW, 57.3 bbl. of slurry to surface  
 3 bbl./min rate, max pressure of 100 psi. Cement from 626' - 0', RD valve, washout pump, stand by for rig to TOH, NDBOP

Topped off well with 20 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 2% CaCl BWOW, 4 bbl. of slurry, cement at surface  
 RD valve, washout pump, P&A complete, RDMO

**Service and Equipment Charges**

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	1		
4 hour cementer charge	by 4 hours	1		
Environmental fee*	per job	1		
Pickup mileage	per mile	100		
Cement Pump and Pneumatic Bulker mileage	per mile	200		
Data Acquisition System	per job	0		
Bulk material mixing service charge	cubic foot	300		
Additional pneumatic hours (non discounted)	per hour	0		
Additional cement pump hours (non discounted)	per hour	0		
Cut and Cap fee	per request	0		
Fresh Water Transport	per hour	0		
Fresh water	per bbl.	0		

**Service and Equipment Totals**

**Material & Products**

Description	Unit	Quantity
Class G neat cement	Per sack	300
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	4
Calcium Chloride (CaCl)	Per pound	300
Sugar	Per pound	0
SAPP	Per sack	0
Thixotropic Cement (IWS 13, IWS EXP, CaCl2, Fluid Loss)	Per sack	0

**Material & Product Totals**