



Customer: Great Western Operating Company	Rig: 14	Cement Unit: CP10
Company Foreman: Tom Collins	Date: 1/23/2021	
Well Name: Pearl Johnson #2	Invoice Number: CT01193	
Start time: 10:30 AM	End Time: 1:15 PM	

Job Log:

CP10, 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 1,000 psi.

Status: 2-3/8" 4.7# tubing, EOT: 7,200', inside 4-1/2" 11.6# casing, Established circulation with 5 bbl. of freshwater, good circulation
Pumped 25 sxs of 15.8# 1.52 cu.ft./sack yield Class G cement with 35% Silica Flour BWOC, 6.7 bbl. of slurry, displaced 25.1 bbl.
2 bbl./min rate, max pressure of 350 psi. cement from 7,200' - 6,764', 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	25		
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	5		
Fresh water	per bbl.	80		

Service and Equipment Totals

Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	0
Thermal Cement (Class G with 35% silica flour)	Per sack	25
Defoamer	Per Gallon	2
Calcium Chloride (CaCl)	Per pound	0
Retarder	Per Gallon	0
SAPP	Per sack	0
Thixotropic Cement (IWS 13, IWS EXP, CaCl ₂ , Fluid Loss)	Per sack	0

Material & Product Totals



Customer: Great Western Operating Company	Rig: 14	Cement Unit: CP7
Company Foreman: Tom Collins	Date: 1/24/2021	
Well Name: Pearl Johnson #2	Invoice Number: CT02312	
Start time: 7:30 AM	End Time: 11:30 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 3,500 psi.

Status: 2-3/8" 4.7# tubing, EOT: 6,200', stung into CICR, inside 4-1/2" 11.6# casing, perms at 6,400'
Established injection with 25 bbl. of freshwater, good circulation
Pumped 95 sxs of 15.8# 1.52 cu.ft./sack yield Class G cement with 35% Silica Flour BWOC, 25.7 bbl. of slurry
Displaced with 21.3 bbl. to inject 85 sxs under CICR, sting out and balanced 10 sxs on top of CICR
2 bbl./min rate, max pressure of 1600 psi. cement from 6,400' - 6,026', 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	95		
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	6		
Fresh water	per bbl.	80		

Service and Equipment Totals
Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	0
Thermal Cement (Class G with 35% silica flour)	Per sack	95
Defoamer	Per Gallon	2
Calcium Chloride (CaCl)	Per pound	0
Retarder	Per Gallon	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: 14	Cement Unit: CP7
Company Foreman: Tom Collins	Date: 1/25/2021	
Well Name: Pearl Johnson #2	Invoice Number: CT02313	
Start time: 8:00 AM	End Time: 1:30 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 1,000 psi.

Status: 2-3/8" 4.7# tubing, EOT: 4,037', inside 4-1/2" 11.6# casing from 4,037' - 3,990', inside 7-7/8" open hole above 3,990'
Established circulation with 20 bbl. of freshwater, good circulation
Pumped 60 sxs of 13.5# 1.86 cu.ft./sack yield Class G cement with Thixotropic additive pack , 19.8 bbl. of slurry
Displaced with 13.2 bbl. of freshwater, 2.5 bbl./min rate, max pressure of 500 psi.
Cement from 4,037' - 3,671', RD valve, washout pump, stand by for next plug

Status: 2-3/8" 4.7# tubing, EOT: 2,007', inside 7-7/8" open hole, established circulation with 20 bbl. of freshwater, good circulation
Pumped 60 sxs of 13.5# 1.86 cu.ft./sack yield Class G cement with Thixotropic additive pack , 19.8 bbl. of slurry
Displaced with 5.8 bbl. of freshwater, 2.5 bbl./min rate, max pressure of 300 psi.
Cement from 2,007' - 1,677', RD valve, washout pump, shut down for day, 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	120		
Additional pneumatic hours (non discounted)	per hour	1		
Additional cement pump hours (non discounted)	per hour	1		
Cut and Cap fee	per request	0		
Fresh Water Transport	per hour	8		
Fresh water	per bbl.	80		

Service and Equipment Totals
Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	0
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	2
Calcium Chloride (CaCl)	Per pound	0
Retarder	Per Gallon	0
SAPP	Per sack	0
Thixotropic Cement (IWS 13, IWS EXP, CaCl2, Fluid Loss)	Per sack	120

Material & Product Totals



Customer: Great Western Operating Company	Rig: 14	Cement Unit: CP7
Company Foreman: Tom Collins	Date: 1/26/2021	
Well Name: Pearl Johnson #2	Invoice Number: CT02314	
Start time: 7:00 AM	End Time: 12:00 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 1,000 psi.

Status: 2-3/8" 4.7# tubing, EOT: 1,107', inside 7-7/8" from 1,107' - 931', inside 8-5/8" 24# from 931' - 0'
Established circulation with 10 bbl. of freshwater, good circulation
Pumped 390 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 2% CaCl₂, 79.8 bbl. of slurry with good returns to surface
Cement from 1,107' - 0', RD valve, washout pump, stand by for rig to TOH, NDBOP

Topped off well with 47 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 2% CaCl₂, 9.6 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	437		
Additional pneumatic hours (non discounted)	per hour	0.5		
Additional cement pump hours (non discounted)	per hour	0.5		
Cut and Cap fee	per request	0		
Fresh Water Transport	per hour	7		
Fresh water	per bbl.	80		

Service and Equipment Totals

Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	437
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	2
Calcium Chloride (CaCl)	Per pound	450
Retarder	Per Gallon	0
SAPP	Per sack	0
Thixotropic Cement (IWS 13, IWS EXP, CaCl ₂ , Fluid Loss)	Per sack	0

Material & Product Totals