



Customer: Great Western Operating Company	Rig: 14	Cement Unit: CP10
Company Foreman: Nick Fisher	Date: 4/28/2021	
Well Name: Sable Farms #22-31	Invoice Number: CT02442	
Start time: 10:00 AM	End Time: 3:30 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: bullheading down 8-5/8" 24# surface casing

Pumped 35 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 3% CaCl₂ BWOW, 7.2 bbl. of slurry

Displaced with 1 bbl., had returns outside of casing

1.5 bbl./min rate, 25 psi max pressure, 112' of cement, TOC: 16' estimated bottom of cement: 128'

RD valve, wash out pump, shut down for night

1 gallon of defoam A used in cement

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	100		
Data Acquisition System	per job	0		
Bulk material mixing service charge	cubic foot	35		
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	7		
Fresh water	per bbl.	80		

Service and Equipment Totals
Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	35
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	1
Calcium Chloride (CaCl)	Per pound	50
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: CP10
Company Foreman: Nick Fisher	Date: 4/29/2021	
Well Name: Sable Farms #22-31	Invoice Number: CT02447	
Start time: 7:00 AM	End Time: 6:00 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: bullheading down 8-5/8" 24# surface casing

Pumped 50 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement, 10.2 bbl. of slurry, displaced with 1 bbl., had returns outside of casing
1.5 bbl./min rate, 25 psi max pressure, 160' of cement, TOC: 16' estimated bottom of cement; 160'
RD valve, wash out pump, stand by for next plug

Status: bullheading down 8-5/8" 24# surface casing

Pumped 55 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement, 11.2 bbl. of slurry, displaced with 1 bbl., had returns outside of casing
1.5 bbl./min rate, 25 psi max pressure, 176' of cement, TOC: 16' estimated bottom of cement; 176'
RD valve, wash out pump, stand by for next plug

2 gallon of defoam A used in cement

Service and Equipment Charges

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	2		
4 hour cementer charge	by 4 hours	2		
Environmental fee*	per job	2		
Pickup mileage	per mile	100		
Cement Pump and Pneumatic Bulker mileage	per mile	100		
Data Acquisition System	per job	0		
Bulk material mixing service charge	cubic foot	105		
Additional pneumatic hours (non discounted)	per hour	1.5		
Additional cement pump hours (non discounted)	per hour	1.5		
Cut and Cap fee	per request	0		
Fresh Water Transport	per hour	11		
Fresh water	per bbl.	80		

Service and Equipment Totals

Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	105
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	2
Calcium Chloride (CaCl)	Per pound	150
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: Nick Fisher	Date: 4/30/2021	
Well Name: Sable Farms #22-31	Invoice Number: CT02449	
Start time: 7:00 AM	End Time: 6:00 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: bullheading down 8-5/8" 24# surface casing

Pumped 20 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 3% CaCl₂ BWOW, 4.1 bbl. of slurry displaced with .4 bbl., had returns outside of casing
1.5 bbl./min rate, 25 psi max pressure, 66' of cement, TOC: 7' estimated bottom of cement; 73'
RD valve, wash out pump, stand by for next plug

Status: bullheading down 8-5/8" 24# surface casing

Pumped 20 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 3% CaCl₂ BWOW, 4.1 bbl. of slurry displaced with .4 bbl., had returns outside of casing
1.5 bbl./min rate, 25 psi max pressure, 66' of cement, TOC: 7' estimated bottom of cement; 73'
RD valve, wash out pump, stand by for next plug

2 gallon of defoam A used in cement, 50# of Calcium Chloride used in cement slurry

Service and Equipment Charges

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	2		
4 hour cementer charge	by 4 hours	2		
Environmental fee*	per job	2		
Pickup mileage	per mile	100		
Cement Pump and Pneumatic Bulker mileage	per mile	100		
Data Acquisition System	per job	0		
Bulk material mixing service charge	cubic foot	105		
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	11		
Fresh water	per bbl.	80		

Service and Equipment Totals
Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	40
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	2
Calcium Chloride (CaCl)	Per pound	50
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: Cement Unit: CP7
Company Foreman: Nick Fisher	Date: 5/3/2021
Well Name: Sable Farms #22-31	Invoice Number: CT02455
Start time: 3:00 PM	End Time: 1:00 AM on 5/4/21

Job Log:

CP7, Drove to location, signed JSA, spot in equipment and rigged up, had safety meeting, RU valve, pressure test lines to 1,500 psi.

Status: 2-7/8" PH6 tubing, EOT: 2,500', 7-7/8" OH, established circulation with 5 bbl.

Pumped 200 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 3% CaCl₂ BWOW, 41 bbl. of slurry, displaced with 8.5 bbl.

2 bbl./min rate, 150 psi max pressure, Cement from 2,500' - 1,856', RD valve, wash out pump, shut down for night

300 # of Calcium Chloride used in cement slurry, 1 gallon of Defoam A used in cement slurry

Service and Equipment Charges

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	2		
4 hour cementer charge	by 4 hours	2		
Environmental fee*	per job	2		
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	0		
Additional pneumatic hours (non discounted)	per hour	2		
Additional cement pump hours (non discounted)	per hour	2		
Cut and Cap fee	per request	0		
Fresh Water Transport	per hour	12		
Fresh water	per bbl.	80		

Service and Equipment Totals
Material & Products

Description	Unit	Quantity
<u>Class G neat cement</u>	Per sack	200
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	1
Calcium Chloride (CaCl)	Per pound	300
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: Cement Unit: CP7
Company Foreman: Nick Fisher	Date: 5/4/2021
Well Name: Sable Farms #22-31	Invoice Number: CT02457
Start time: 8:30 AM	End Time: 6:00 PM

Job Log:

CP7, Drove to location, signed JSA, spot in equipment and rigged up, had safety meeting, RU valve, pressure test lines to 1,500 psi.

Status: 2-7/8" PH6 tubing, EOT: 2,093', 7-7/8" OH, established circulation with 10 bbl.

Pumped ~~200~~ ²⁰⁰ sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 3% CaCl₂ BWOW, 41 bbl. of slurry, displaced with 7.5 bbl.

2 bbl./min rate, 150 psi max pressure, Cement from 2,093' - 1,449', RD valve, wash out pump, stand by for next plug

300 # of Calcium Chloride used in cement slurry, 1 gallon of Defoam A used in cement slurry

Status: 2-7/8" PH6 tubing, EOT: 1,734', 7-7/8" OH, established circulation with 10 bbl.

Pumped ~~200~~ ²⁰⁰ sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 3% CaCl₂ BWOW, 41 bbl. of slurry, displaced with 4.8 bbl.

2 bbl./min rate, 150 psi max pressure, Cement from 1,734' - 929', RD valve, wash out pump, shut down for night

300 # of Calcium Chloride used in cement slurry, 1 gallon of Defoam A used in cement slurry

Service and Equipment Charges

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	2		
4 hour cementer charge	by 4 hours	2		
Environmental fee*	per job	2		
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	0		
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	12.5		
Fresh water	per bbl.	160		

Service and Equipment Totals

Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	400 ⁴⁵⁰
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	2
Calcium Chloride (CaCl)	Per pound	600
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: Cement Unit: CP7
Company Foreman: Nick Fisher	Date: 05/05/2021
Well Name: Sable Farms #22-31	Invoice Number: CT02462
Start time: 7:00 AM	End Time: 3:30 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 2,000 psi.

Status: 2-3/8" 4.7# tubing, EOT: 1439', in 7-7/8" OH from 1439' -795', established circulation with 5 bbl.

Pumped 200 sxs of 15.8# 1.15 cu.ft./sack yield Class G cement with 3 % CACL BWOW, 40.9 bbl of slurry, displace with 4.1bbl H2O, good returns at surface

2.5 bbl./min rate, 150 psi max pressure, cement from 1439' - 795', RD valve, stand by for 4 HR Wait

EOT @ 819' , Pumped 126 Sacks of 15.8# class G with 3% CACL BWOW, 25.8bbl of slurry, displace with 2bbl H2O. Trip out of hole EOT

@ 416' Pumped 135 sack of 15.8# class G cement with 3% CACL BWOW, 27.6bbl slurry, good return with visible cement at surface, wait tooh, and NDBOP, top well off with 25 Sacks, 5.1 bbl of slurry.

650 lbs of CACL and 6 gallons of defomer used in cementing blends

819' - 400'

400' - surface

Service and Equipment Charges

Description	Unit	Quantity	Price	Net Amount
Restraints, high pressure iron	per job	2		
4 hour cementer charge	by 4 hours	2		
Environmental fee*	per job	2		
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	486		
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	11.5		
Fresh water	per bbl.	160		

Service and Equipment Totals

Material & Products

Description	Unit	Quantity
Class G neat cement	Per sack	486
Thermal Cement (Class G with 35% silica flour)	Per sack	0
Defoamer	Per Gallon	6
Calcium Chloride (CaCl)	Per pound	650
Retarder	Per Gallon	0
SAPP	Per sack	0
Thixotropic Cement (IWS 13, IWS EXP, CaCl2, Fluid Loss)	Per sack	0

Material & Product Totals