
WEXPRO COMPANY E-BILL

**Jacks Draw 18
POWDER WASH
Moffat County, Colorado**

Cement Surface Casing
01-Nov-2011

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 343491		Ship To #: 2881002		Quote #:		Sales Order #: 8522461	
Customer: WEXPRO COMPANY E-BILL				Customer Rep: Wexpro SST-88			
Well Name: Jacks Draw			Well #: 18			API/UWI #: 05-081-07635	
Field: POWDER WASH		City (SAP): CRAIG		County/Parish: Moffat		State: Colorado	
Contractor: Wexpro			Rig/Platform Name/Num: SST 88				
Job Purpose: Cement Surface Casing							
Well Type: Development Well				Job Type: Cement Surface Casing			
Sales Person: VOLNER, THOMAS			Srvc Supervisor: DENT, JEROD			MBU ID Emp #: 457336	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CAUDILL, LOREN W	7	476757	DENT, JEROD Judd	7	457336	MCNUTT, GILBERT D	7	455161
MILSTEN, DAVID G	7	429844						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025113C	100 mile	10744715C	100 mile	10804559	100 mile	10867409	100 mile
11139002	100 mile	11288836	100 mile	11377690	100 mile		

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10-31-2011	5	1.5	11-01-2011	2	.5			
TOTAL			<i>Total is the sum of each column separately</i>					

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Form Type	Job depth MD	Job Depth TVD	Water Depth	Perforation Depth (MD)	From	To	Called Out	Date	Time	Time Zone
				BHST	1524. ft							31 - Oct - 2011	13:15	MST
				99 degF								31 - Oct - 2011	18:00	MST
										5. ft		31 - Oct - 2011	23:18	MST
												01 - Nov - 2011	00:18	MST
												01 - Nov - 2011	02:00	MST

Well Data

Description	Max pressure psig	Size in	ID in	Weight lbf/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Conductor Pipe		16.	15.376	55.			.	80.		
Surface Open Hole			12.25				80.	1524.		
Surface Casing		9.625	8.921	36.		J-55	.	1524.		

Sales/Rental/3rd Party (HES)

Description	Qty	Qty uom	Depth	Supplier
MICRO MATRIX RETARDER	2	GAL		
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		
PLUG,CMTG,BOT,9 5/8,HWE,8.16 MIN/9.06 MA	1	EA		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	9.625	1	HES
Float Shoe	9.625	1	HES	1524.03	Bridge Plug					Bottom Plug			
Float Collar	9.625	1	HES	1484.54	Retainer					SSR plug set			
Insert Float										Plug Container	9.625	1	HES
Stage Tool										Centralizers	9.625	7	HES

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc %
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Fresh Water			bbl	8.33	.0	.0	.0	
2	Varicem RS1	VARICEM (TM) CEMENT (452009)	170.0	sacks	11.4	3.08	18.95		18.95
	0.125 lbm	POLY-E-FLAKE (101216940)							
	0.25 lbm	KWIK SEAL, SK (100064010)							
	18.499 Gal	FRESH WATER							
3	Mtn G Cement	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)	295.0	sacks	15.8	1.15	4.99		4.99
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
	0.125 lbm	POLY-E-FLAKE (101216940)							
	4.968 Gal	FRESH WATER							
4	Displacement Water			bbl	8.5	.0	.0	.0	
5	Mountain G	CMT - PREMIUM - CLASS G, 94 LB SK (100003685)	100	sacks	15.8	1.16	5.01		5.01
	94 lbm	CMT - PREMIUM - CLASS G REG OR TYPE V, BULK (100003685)							
	2 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	5.019 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	114.75	Shut In: Instant		Lost Returns	0	Cement Slurry	153.67	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	44	Actual Displacement	114.75	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	288.42
Rates									
Circulating	8	Mixing		7	Displacement		7	Avg. Job	7
Cement Left In Pipe	Amount	39.49 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

Planned Pump Schedule

Wexpro Jacks Draw 18 Surface

1. Pressure Test HES Lines

2. Pump Spacer

	Name	Density (lb/gal)	Volume (bbls)	Rate (bpm)	Surfactants
2a.	Water	8.33	20	5	

3. Pump Cement

	Name	Density (lb/gal)	Slurry Volume (bbls)	Rate (bpm)	Mix Water Required (bbls)
3a.	VariCem RS1-Lead	11.4	93.2	5	76.7
3b.	Premium-Tail	15.8	60.3	5	35.0
3c.	Mountain G-Top Out	15.8	20.7	5	11.9

4. Shutdown, Drop Top Plug

5. Displacement

	Name	Density (lb/gal)	Volume (bbls)	Rate (bpm)
5a.	Water	8.33	20.0	5
5b.	Water	8.33	20.0	2

The Road to Excellence Starts with Safety

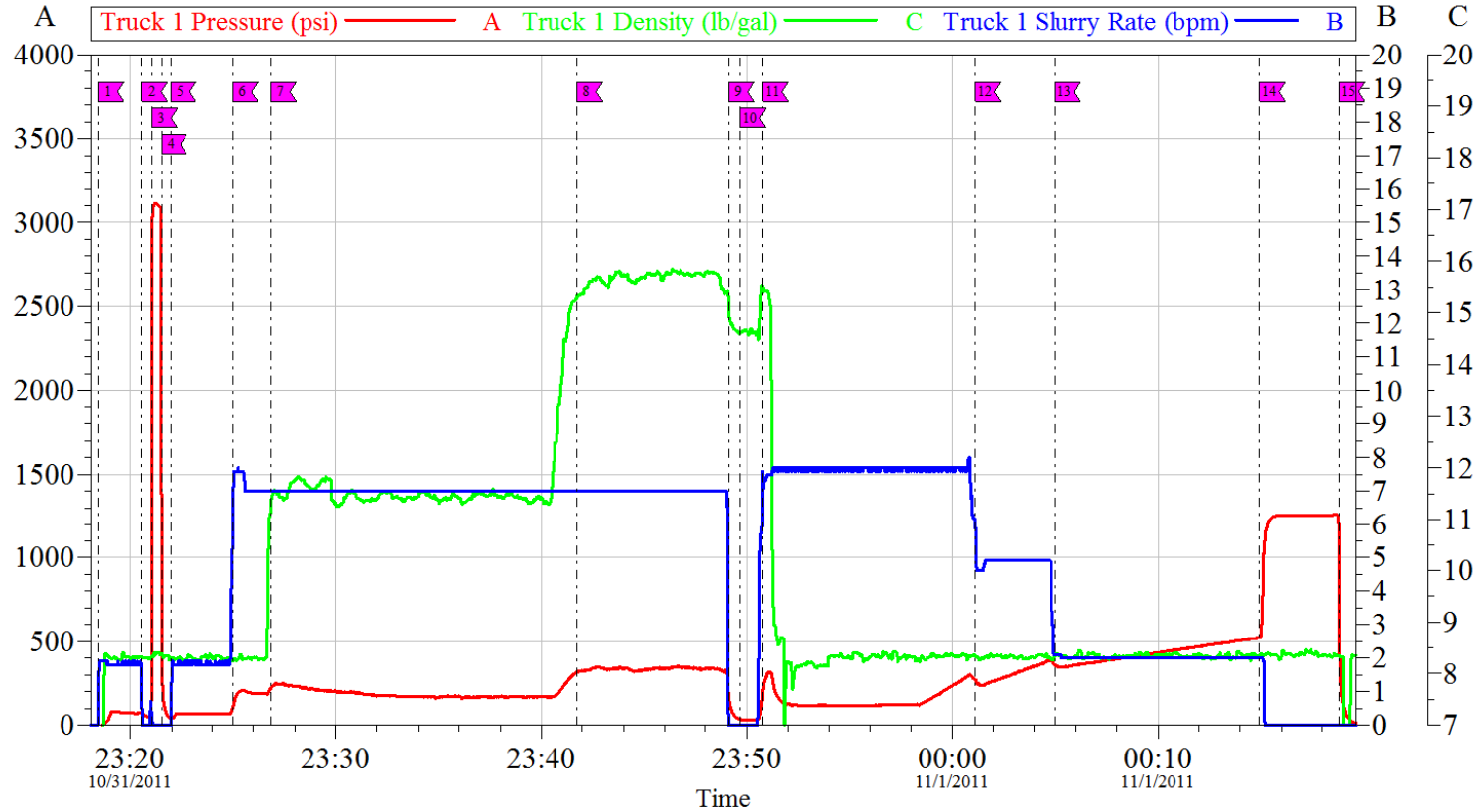
Sold To #: 343491		Ship To #: 2881002		Quote #:		Sales Order #: 8522461		
Customer: WEXPRO COMPANY E-BILL				Customer Rep: SST 88, Wexpro				
Well Name: Jacks Draw			Well #: 18		API/UWI #: 05-081-07635			
Field: POWDER WASH		City (SAP): CRAIG		County/Parish: Moffat		State: Colorado		
Legal Description:								
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.				Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.				
Contractor: Wexpro			Rig/Platform Name/Num: SST 88					
Job Purpose: Cement Surface Casing						Ticket Amount:		
Well Type: Development Well			Job Type: Cement Surface Casing					
Sales Person: VOLNER, THOMAS			Srvc Supervisor: DENT, JEROD			MBU ID Emp #: 457336		
Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	10/31/2011 13:15							CREW CALLED
Pre-Convoy Safety Meeting	10/31/2011 15:00							HES CREW TALKED ABOUT ROUTES, HAZARDS, AND POLICIES.
Crew Leave Yard	10/31/2011 15:30							
Arrive At Loc	10/31/2011 18:00							ARRIVED ON LOCATION 1800 HRS
Assessment Of Location Safety Meeting	10/31/2011 18:15							CREW ASSESSED LOCATION AND TALKED ABOUT ANY HAZARDS, SPOTTING OF EQUIPMENT AND PROCEDURES.
Pre-Rig Up Safety Meeting	10/31/2011 19:00							CREW TALKED ABOUT HAZARDS AND HES STANDARDS OF RIGGING UP GROUND.
Rig-Up Equipment	10/31/2011 20:00							
Casing on Bottom	10/31/2011 21:30							CASING ON BOTTOM AT 2130 HRS, RIG CIRCULATED AT 8 BBLS/MIN AT 200 PSI.
Pre-Job Safety Meeting	10/31/2011 22:30							HES CREW, RIG CREW AND COMPANY MAN TALKED ABOUT HES STANDARDS, MUSTER AREAS, SWING PLANES, PINCH POINTS, EMERGENCY PROCEDURES AND PUMPING SCHEDULE.

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Start Job	10/31/2011 23:18	1						
Pump Water	10/31/2011 23:18	1	2	5	5		.0	PUMPED 5 BBLS OF WATER TO FILL LINES.
Shutdown	10/31/2011 23:20	2						
Pressure Test	10/31/2011 23:21	3						PRESSURE TEST TO 3000 PSI.
Other	10/31/2011 23:21	4						RELEASE IRON PRESSURE.
Pump Spacer	10/31/2011 23:21	5	5	15	20		39.0	PUMPED 15 BBLS SPACER. TOTAL OF 20 BBLS AHEAD.
Other	10/31/2011 23:24	6						INCREASE RATE.
Pump Lead Cement	10/31/2011 23:26	7	7	93.25	93.25		220.0	MIXED AND PUMPED 170 SKS VARICEM RS1-LEAD AT 11.4 LB/GAL, 3.08 CF/SK, 18.95 GAL/SK.
Pump Tail Cement	10/31/2011 23:41	8	7	60.42	153.67		313.0	MIXED AND PUMPED 295 SKS PREMIUM-TAIL AT 15.8 LB/GAL, 1.15 CF/SK, 4.99 GAL/SK.
Shutdown	10/31/2011 23:49	9						
Drop Top Plug	10/31/2011 23:49	10						DROP HES TOP PLUG.
Pump Displacement - Start	10/31/2011 23:50	11	7	70	70		203.0	PUMP 70 BBLS WATER DISPLACEMENT AT 8 BBLS/MIN.
Slow Rate	11/01/2011 00:01	12	5	25	95		268.0	PUMPED 25 BBLS WATER DISPLACEMENT AT 5 BBLS/MIN.
Slow Rate	11/01/2011 00:05	13	2	19.75	114.75		360.0	PUMPED 19.75 BBLS WATER DISPLACEMENT AT 2 BBLS/MIN.
Bump Plug	11/01/2011 00:14	14					521.0	BUMPED PLUG. FINAL CIRCULATING PRESSURE 521 PSI.
Check Floats	11/01/2011 00:18	15						FLOATS HELD WITH 1 BBL BACK TO PUMP TRUCK.

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
End Job	11/01/2011 00:18	15						GOOD SAFE JOB.
Safety Meeting - Pre Rig-Down	11/01/2011 00:30							HES CREW TALKED ABOUT RIG DOWN PROCEDURES AND POLICIES AND STANDARDS.
Depart Location Safety Meeting	11/01/2011 01:30							TALKED ABOUT ROUTES, STOPS AND HAZARDS OF DRIVING.
Depart Location for Service Center or Other Site	11/01/2011 02:00							CREW LEFT LOCATION.
Other	11/01/2011 02:01							GOOD SAFE JOB, RETURNS THROUGHOUT THE JOB, PLUG BUMPED FLOATS HELD WITH 1 BBL BACK, FINAL CIRCULATING PRESSURE WAS 521 PSI AND 44 BBLS OF CEMENT BACK TO SURFACE.

Cementing Job Log

WEXPRO, SST- 88, JACKS DRAW, SURFACE, WELL # 18



Intersection		T1D	T1P	T1SR	Intersection		T1D	T1P	T1SR	Intersection		T1D	T1P	T1SR			
1	START JOB/ FILL LINES	10/31/2011 23:18:27	-0.060	-3.000	2	SHUTDOWN	10/31/2011 23:20:34	8.327	67.66	0.463	3	PRESSURE TEST	10/31/2011 23:21:03	8.339	3006	0.124	
4	RELEASE PRESSURE	10/31/2011 23:21:31	8.381	394.1	5	PUMP WATER SPACER	10/31/2011 23:21:58	8.300	39.44	0.000	6	INCREASE RATE	10/31/2011 23:24:59	8.250	99.83	5.361	
7	PUMP LEAD CMNT.	10/31/2011 23:26:50	11.32	220.8	7.000	8	PUMP TAIL CMNT.	10/31/2011 23:41:44	15.29	313.2	7.000	9	SHUTDOWN	10/31/2011 23:49:07	15.12	161.8	0.000
10	DROP PLUG	10/31/2011 23:49:40	14.61	36.00	0.000	11	START DISPLACEMENT	10/31/2011 23:50:46	15.52	203.0	7.556	12	SLOW RATE	11/1/2011 00:01:07	8.330	268.5	5.900
13	SLOW RATE	11/1/2011 00:05:00	8.330	360.0	2.100	14	BUMP PLUG	11/1/2011 00:14:57	8.360	521.4	2.000	15	CHECK FLOATS/ END JOB	11/1/2011 00:18:50	8.349	1170	0.000

Customer: WEXPRO	Job Date: 31-Oct-2011	Sales Order #: 8522461
Well Description: 18	JOB TYPE: SURFACE	SUPERVISOR: JEROD DENT

OptiCem v6.4.9
01-Nov-11 00:49

Sold To #: 343491

Ship To #: 2881002

Quote #:

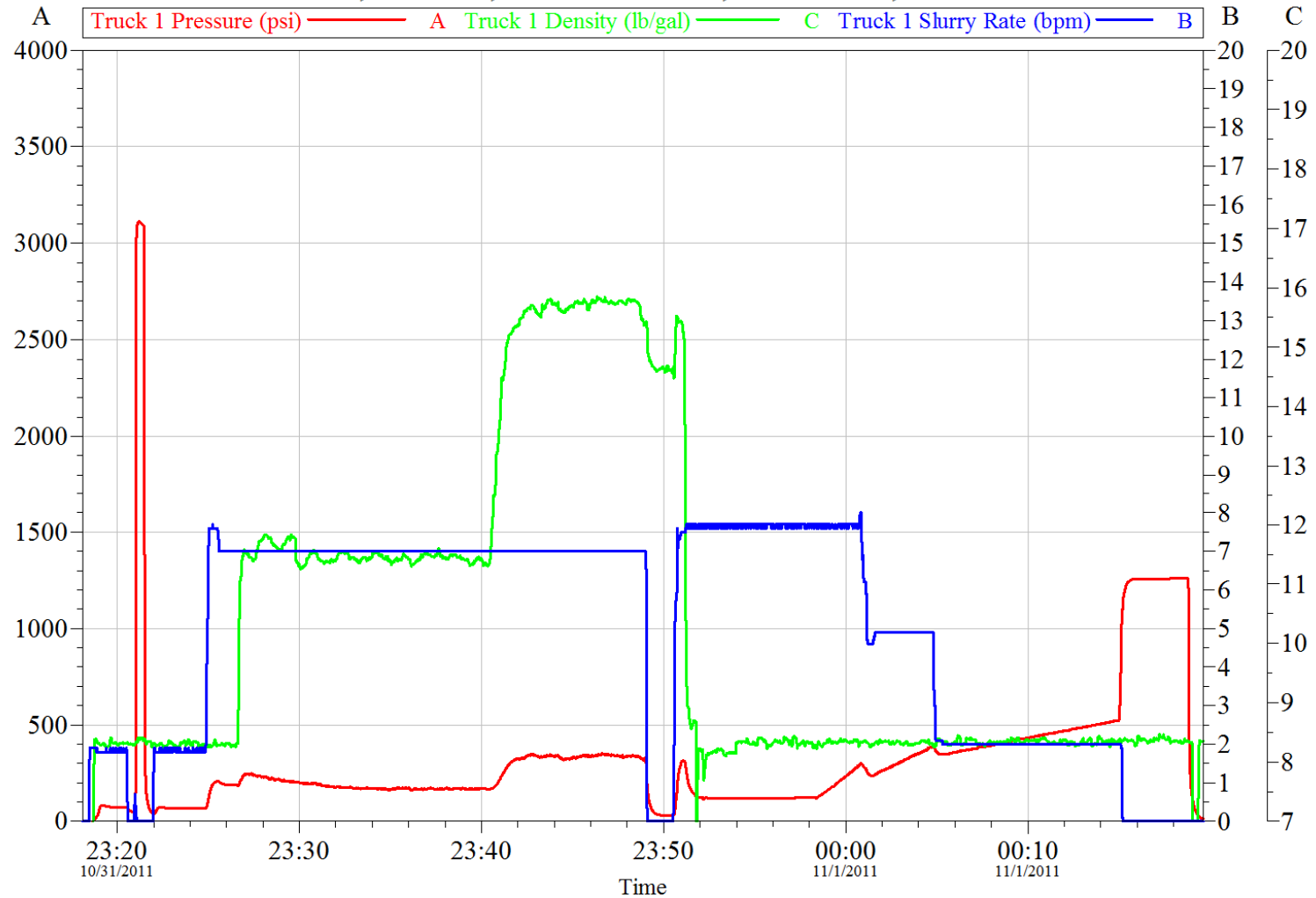
Sales Order #: 8522461

SUMMIT Version: 7.2.27

Tuesday, November 08, 2011 05:09:00

Cementing Job Log

WEXPRO, SST- 88, JACKS DRAW, SURFACE, WELL # 18



Customer: WEXPRO	Job Date: 31-Oct-2011	Sales Order #: 8522461
Well Description: 18	JOB TYPE: SURFACE	SUPERVISOR: JEROD DENT

OptiCem v6.4.9
01-Nov-11 00:50

Sold To #: 343491

Ship To #: 2881002

Quote #:

Sales Order #: 8522461

SUMMIT Version: 7.2.27

Tuesday, November 08, 2011 05:09:00

HALLIBURTON

Cementing

Water Analysis Report

COMPANY: WEXPRO **Date Recorded** 10/31/2011
SUBMITTED BY: JEROD DENT **SO#** 8522461
LEASE: JACKS DRAW **Job Type** SURFACE
WELL #: 18 **Camp Location** Rock Springs WYO

CEMENT MIX WATER REQUIREMENTS

Item	Recorded Test Value	Units	Max. Acceptable Limit	Potential Problems in Exceeding Limit
pH	7.5	---	6.0 - 8.0	Chemicals in the water can cause severe retardation
Chlorides	0	ppm	3000 ppm	Can shorten thickening time of cement
Sulfates	<200	ppm	1500 ppm	Will greatly decrease the strength of cement
Total Hardness	120	ppm	500 mg/L	High concentrations will accelerate the set of the cement
Calcium	50	ppm	500 ppm	High concentrations will accelerate the set of the cement
Total Alkalinity	120	ppm	1000 ppm	Cement is greatly retarded to the point where it may not set up at all (typically occurs @ pH ≥ 8.3).
Potassium	0	ppm	5000 ppm	High concentrations will shorten the pump time of cement (indicates the presence of chlorides, therefore if
Iron	0.3	ppm	300 ppm	High concentrations will accelerate the set of the cement
Temperature	55	°F	50-80 °F	High temps will accelerate; Low temps may risk freezing in cold weather

Item	Approximate Calculated Value	Units	Max. Acceptable Limit	Potential Problems in Exceeding Limit - Calculation Method
Magnesium	70	ppm	300 ppm	High concentrations will accelerate the set of the cement