

# Cement Verification Report - Cementer's Well Service, Inc.

P.O. BOX 336220 • GREELEY, CO 80633 • (970) 353-7299 • FAX (970) 353-7712



COGCC Operator Guidance RULE #308.A.B(2)A.ii

CLIENT: Verdad Resources	Cementer's FIELD TICKET #	334102-D
--------------------------	------------------------------	----------

## Requested Operator Guidance:

Well Name & Number	Lease	Helen 2536		Well No.	12H
Well API Number	05-123-46834				
Job Date	5/17/22		Time on	1:30	24 hr time
Job Type	New Well   Surface				
Cementing Company	Cementer's Well Service, Inc		Contact	Nate Kvamme - 303-324-4296	
Ambient conditions	clear		65	temp deg F	
Slurry Description					
a) Purpose	Surface - 9 5/8" 36# CSG, 13 1/2" hole				
b) Cement Class	Type I / II				
c) Cement Yield	1.61	cuft / sk			
d) Cement Density	13.9	PPG			
e) Number of sks	1152	sks (94# equiv)			
f) Mix Fluid Type					
Water / Cement	8.5	Gal / sk			
g) Slurry mixed	330.3	BBLs slurry			
h) Additives used	1.50%	CaCl2	3.00%	Bentonite	
Total Water Used	429.0	BBLs H2O			
i) Displacement Fluid Vol	175.9	BBLs H2O			
j) Method of Placement					
k) Set Depth	2,319	feet (ft)			
l) Stage tool depth	n/a				
m) Float Collar Depth	2,275	feet (ft)			
n) Designed Top of Cement	n/a	to surface			
o) Centralizer depths	0	feet (ft)			

## Charts - (pressure, density, pump rate)

Landed Plug @ 1670 psi Final Lift Pressure @ 550 psi

Cement Density (as weighed during job) @ 13.9 PPG

## Job notes

a) Plug down	<input checked="" type="radio"/> Y <input type="radio"/> N	Time	5:22	24 hr time
b) Floats held	<input checked="" type="radio"/> Y <input type="radio"/> N		5/17/22	
c) Full Returns	<input checked="" type="radio"/> Y <input type="radio"/> N	Lost Circulation	<input checked="" type="radio"/> Y <input type="radio"/> N	
d) Cement to surface	<input checked="" type="radio"/> Y <input type="radio"/> N	60.0	BBLs to surface	
e) If no returns, top off	n/a	BBLs		
f) Top off detail				
g) Additional Detail	0			
	0			

# Surface Cement Job Report - Cementer's Well Service, Inc.

P.O. BOX 336220 • GREELEY, CO 80633 • (970) 353-7299 • FAX (970) 353-7712

DATE: 5/17/22



## Verdad Resources

Lease: Helen 2536

Well: 12H

API# 05-123-46834

Date & Time On	5/17/22
	1:30

Item	Event	Date	Time (24 hr)	Density (PPG)	Pump Rate (BPM)	Incremental (Line Item) Volume (BBLs)	Cumulative Volume (BBLs)	Pressure (PSI)	Comment
Pre-job	1 Call Out	5/16/22	22:00						Verdad Resources call out w/ 4 hr notice
	2 Leave Yard	5/16/22	0:47						Cementer's leaves yard to travel to location
On Location: Pre-job	3 Arrive On Location	5/17/22	1:30						Arrive on location
	4 Spot Trucks	5/17/22	1:35						Spot trucks on location
	5 Rig Up	5/17/22	1:37						Rig up water & Cementer's Bulk Truck, prep pump and mixing operation
	6 Safety Meeting	5/17/22	1:42						Pre-job safety meeting with Ikon12 rig crew, Verdad company man & Cementer's crew
	7 Rig Up	5/17/22	1:47						Rig up cement head w/plug
	8 Fill Lines	5/17/22	1:49	8.34	2.00				Fill lines with up to 5 bbls of fresh water
	9 Pressure Test	5/17/22	0:00	8.34	-			-	Pressure test pumps and lines
Initial Job Start	10 Pump Spacer	5/17/22	2:59	8.34	4.00	20	20	-	Pump dye fresh water @ 20 BBLs
Cementing	11 Pump Cement	5/17/22	3:04	13.90	4.00	330.31	350.31	45	Pump Cement @ 1,152 SKS
									Type I/II cement with 1.5% CaCl2 & 3.0% Bentonite @ 1.61 cuft/sk & 13.9 PPG 330.31 BBLs slurry
Displacement	12 Drop Plug	5/17/22	4:36	n/a					Shut down cementing operation & release top plug
	13 Initial Displacement	5/17/22	4:38	8.34	2.00	4.00	354.31	-	Send plug with 4.0 BBLs H2O @ 2.0 BPM
	14 Plug Drop Verification	5/17/22	4:42	n/a					Visual verification plug released from head
	15 Displacement	5/17/22	4:44	8.34	5.00	101.86	452.17	80-450	Continued Displacement with total fresh water @ 175.86 BBLs H2O
	16 Spacer To Surface	5/17/22	5:13	8.34	5.00	105.86	456.17	385	Identified Spacer, looking for Cement / green water
	17 Cement To Surface	5/17/22	5:15	8.34	5.00	115.86	466.17	390	Identify Cement to surface w/ 60 BBLs back
	18 Drop Rate	5/17/22	5:20	8.34	2.50	165.86	516.17	400	Drop rate to 2.5 BPM for last 10 BBLs of Displacement to land plug
	19 Land Plug	5/17/22	5:22	8.34	2.50	175.86	526.17	1,670	Land Plug @ 1,670 PSI
Casing Test									with final lift pressure @ 550 PSI
	20	Casing Test	5/17/22	5:22	n/a	0	0	1,670	Start 30 min casing test w/ pressure @ 1,670 PSI
	21		5/17/22	5:32	n/a	0	0	1,657	10 min into casing test, pressure @ 1,657 PSI
	22		5/17/22	5:42	n/a	0	0	1,645	20 min into casing test, pressure @ 1,645 PSI
	23		5/17/22	5:52	n/a	0	0	1,620	30 min into casing test, pressure @ 1,620 PSI
Post Job & Testing	24 Check Floats	5/17/22	5:53	n/a	0	0	0	1	BBLs back (.25-1BBL expected)
	25 End Job	5/17/22	5:55						Bleed off pressure, job complete
	26 Safety Meeting	5/17/22	5:57						Pre-rig down safety meeting, wash up equipment
	27 Rig Down	5/17/22	6:00						Rig down Cementer's Equipment, leave location

# Cementer's Well Service, Inc.

P.O. BOX 336220 • GREELEY, CO 80633 • (970) 353-7299 • FAX (970) 353-7712



## Verdad Resources

### Surface Casing Pressure Test - Cement Job Graph

#### COMPANY DETAILS

Date	5/17/22	API #	05-123-46834	Well No.	12H
County	Weld	State	CO	Lease	Helen 2536

Client Verdad Resources

Contact / email

#### JOB DETAILS

TIME ON	1:30	24 hr	Depth	2,335	ft.	Pressure Test @	1,670	psi
START TIME	2:59	5/17/22	Bottom of Surface	2,319	ft.	10 min	1,657	psi
END TIME	6:07	5/17/22	Plug Landed @	2,275	ft.	20 min	1,645	psi
			Plug Landed @	5:22	24 hr	30 min	1,620	psi

#### SUMMARY GRAPH

