

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: Great Western Operating	Cementor's FIELD TICKET #	334035-D
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Requested Operator Guidance:

Well Name & Number	Lease	County Line 3130	Well No.	02H
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Well API Number	05-123-51180
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Job Date	8/28/21	Time on	12:30	24 hr time
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Job Type	New Well Surface
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Cementing Company	Cementor's Well Service, Inc	Contact	Nate Kvamme - 303-324-4296
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Ambient conditions	clear / rain / snow / other	90	temp deg F
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Slurry Description	
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a) Purpose	Surface - 9 5/8" 36# CSG, 13 1/2" hole
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b) Cement Class	Type I / II
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c) Cement Yield	1.61 cuft / sk
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d) Cement Density	13.9 PPG
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e) Number of sks	1140 sks (94# equiv)
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f) Mix Fluid Type	
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Water / Cement	8.5 Gal / sk
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g) Slurry mixed	327.0 BBLs slurry
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h) Additives used	1.50% CaCl2 3.00% Bentonite
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Total Water Used	431.8 BBLs H2O
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i) Displacement Fluid Vol	181.0 BBLs H2O
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j) Method of Placement	
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k) Set Depth	2,386 feet (ft)
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l) Stage tool depth	n/a
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m) Float Collar Depth	2,341 feet (ft)
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n) Designed Top of Cement	n/a to surface feet (ft)
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o) Centralizer depths	0
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Charts - (pressure, density, pump rate)

Landed Plug @	1604 psi	Final Lift Pressure @	650 psi
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Cement Density (as weighed during job) @	13.9 PPG
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Job notes

a) Plug down	Y / N	Time	16:50	24 hr time
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b) Floats held	Y / N	8/28/21
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c) Full Returns	Y / N	Lost Circulation	Y / N
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d) Cement to surface	Y / N	31.0 BBLs to surface
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e) If no returns, top off	n/a BBLs
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f) Top off detail	-
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DATE: 8/28/21



Verdad Resources

Lease: County Line 3130

Well: 02H

API# 05-123-51180

Date & Time On	8/28/21
	12:30

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	8/28/21	8:30						Verdad Resources call out w/ 4 hr notice
	2 Leave Yard	8/28/21	11:45						Cementor's leaves yard to travel to location
On Location: Pre-job	3 Arrive On Location	8/28/21	12:30						Arrive on location
	4 Spot Trucks	8/28/21	12:35						Spot trucks on location
	5 Rig Up	8/28/21	12:37						Rig up water & Cementor's Bulk Truck, prep pump and mixing operation
	6 Safety Meeting	8/28/21	12:42						Pre-job safety meeting with IKON12 rig crew, Verdad company man & Cementor's crew
	7 Rig Up	8/28/21	12:47						Rig up cement head w/plug
	8 Fill Lines	8/28/21	12:49	8.34	2.00				Fill lines with up to 5 bbls of fresh water
	9 Pressure Test	8/28/21	0:00	8.34	-			-	Pressure test pumps and lines
Initial Job Start	10 Pump Spacer	8/28/21	18:58	8.34	4.00	20	20	-	Pump dye fresh water @ 20 BBLs
Cementing	11 Pump Cement	8/28/21	19:03	13.90	4.00	327.02	347.02	45	Pump Cement @ 1,140 SKS
									Type I/II cement with 1.5% CaCl2 & 3.0% Bentonite @ 1.61 cuft/sk & 13.9 PPG 327.02 BBLs slurry
Displacement	12 Drop Plug	8/28/21	20:04			n/a			Shut down cementing operation & release top plug
	13 Initial Displacement	8/28/21	20:06	8.34	2.00	4.00	351.02	-	Send plug with 4.0 BBLs H2O @ 2.0 BPM
	14 Plug Drop Verification	8/28/21	20:10			n/a			Visual verification plug released from head
	15 Displacement	8/28/21	20:12	8.34	5.00	135.96	482.98	80-450	Continued Displacement with total fresh water @ 181.0 BBLs H2O
	16 Spacer To Surface	8/28/21	16:40	8.34	5.00	139.96	486.98	385	Identified Spacer, looking for Cement / green water
	17 Cement To Surface	8/28/21	16:43	8.34	5.00	149.96	496.98	390	Identify Cement to surface w/ 31 BBLs back
	18 Drop Rate	8/28/21	16:48	8.34	2.50	170.96	517.98	400	Drop rate to 2.5 BPM for last 10 BBLs of Displacement to land plug
Casing Test	19 Land Plug	8/28/21	16:50	8.34	2.50	180.96	527.98	1,604	Land Plug @ 1,604 PSI
									with final lift pressure @ 650 PSI
								1,604	Start 30 min casing test w/ pressure @ 1,604 PSI
								1,556	10 min into casing test, pressure @ 1,556 PSI
								1,527	20 min into casing test, pressure @ 1,527 PSI
Post Job & Testing	20 Check Floats	8/28/21	17:21	n/a	0	0	0	1,523	30 min into casing test, pressure @ 1,523 PSI
	21 End Job	8/28/21	17:23						BBLs back (.25-1BBL expected)
	22 Safety Meeting	8/28/21	17:25						Bleed off pressure, job complete
	27 Rig Down	8/28/21	17:28						Pre-rig down safety meeting, wash up equipment
									Rig down Cementor's Equipment, leave location

Cementer's Well Service, Inc.

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Verdad Resources

Surface Cement Job Graph

COMPANY DETAILS

Date	8/28/21	API #	05-123-51180	Well No.	02H
County	Weld	State	CO	Lease	County Line 3130

Client Verdad Resources

Contact / email

JOB DETAILS

TIME ON	12:30	24 hr	Depth	2,400	ft.	Pressure Test @	1,604	psi
START TIME	18:40	8/28/21	Bottom of Surface	2,386	ft.	10 min	1,556	psi
END TIME	21:15	8/28/21	Plug Landed @	2,341	ft.	20 min	1,527	psi
			Plug Landed @	16:50	24 hr	30 min	1,523	psi

SUMMARY GRAPH

