

GUNNISON ENERGY CORP - EBUS

DGU Federal 1289 #18-CS2

Savannah 650

Post Job Summary
Cement Surface Casing

Date Prepared: 08/28/2014

Job Date: 08/26/2014

Submitted by: Kory Hugentobler – Grand Junction Cement Engineer

The Road to Excellence Starts with Safety

Sold To #: 338641	Ship To #: 3458734	Quote #:	Sales Order #: 0901613061
Customer: GUNNISON ENERGY CORP - EBUS		Customer Rep: Mike Barber	
Well Name: DGU FEDERAL -1289-	Well #: 18-CS2	API/UWI #: 05-051-06124-00	
Field: WEST MUDDY CREEK	City (SAP): SOMERSET	County/Parish: GUNNISON	State: COLORADO
Legal Description: SE NW-18-12S-89W-1601FNL-2569FWL			
Contractor: SAVANNA DRLG		Rig/Platform Name/Num: SAVANNA 650	
Job BOM: 7521			
Well Type: COAL DE-GAS			
Sales Person: HALAMERICA\HX17509		Srvc Supervisor: Edward Deussen	

Job

Formation Name	
Formation Depth (MD)	Top Bottom
Form Type	BHST
Job depth MD	1050ft Job Depth TVD
Water Depth	Wk Ht Above Floor
Perforation Depth (MD)	From To

Well Data

Description	New / Used	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Casing		9.625	8.921	36	LTC	J-55	0	1032.71		0
Open Hole Section			12.25				0	1050		0

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe				1033	Top Plug	9.625	1	HES
Float Shoe					Bottom Plug			
Float Collar					SSR plug set			
Insert Float					Plug Container	9.625	1	HES
Stage Tool					Centralizers			

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 /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Fresh Water Spacer	Fresh Water Spacer	20	bbl	8.34			4.0	

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
2	VariCem GJ5	VARICEM (TM) CEMENT	100	sack	12.28	2.45		6.0	14.17	
14.17 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
3	VariCem GJ5	VARICEM (TM) CEMENT	50	sack	12.78	2.18		6.0	12.11	
12.11 Gal		FRESH WATER								
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal	
4	Fresh Water Displacement	Fresh Water Displacement	76.4	bbl	8.4			8.0		
Cement Left In Pipe		Amount	44.58 ft		Reason			Shoe Joint		
Comment										

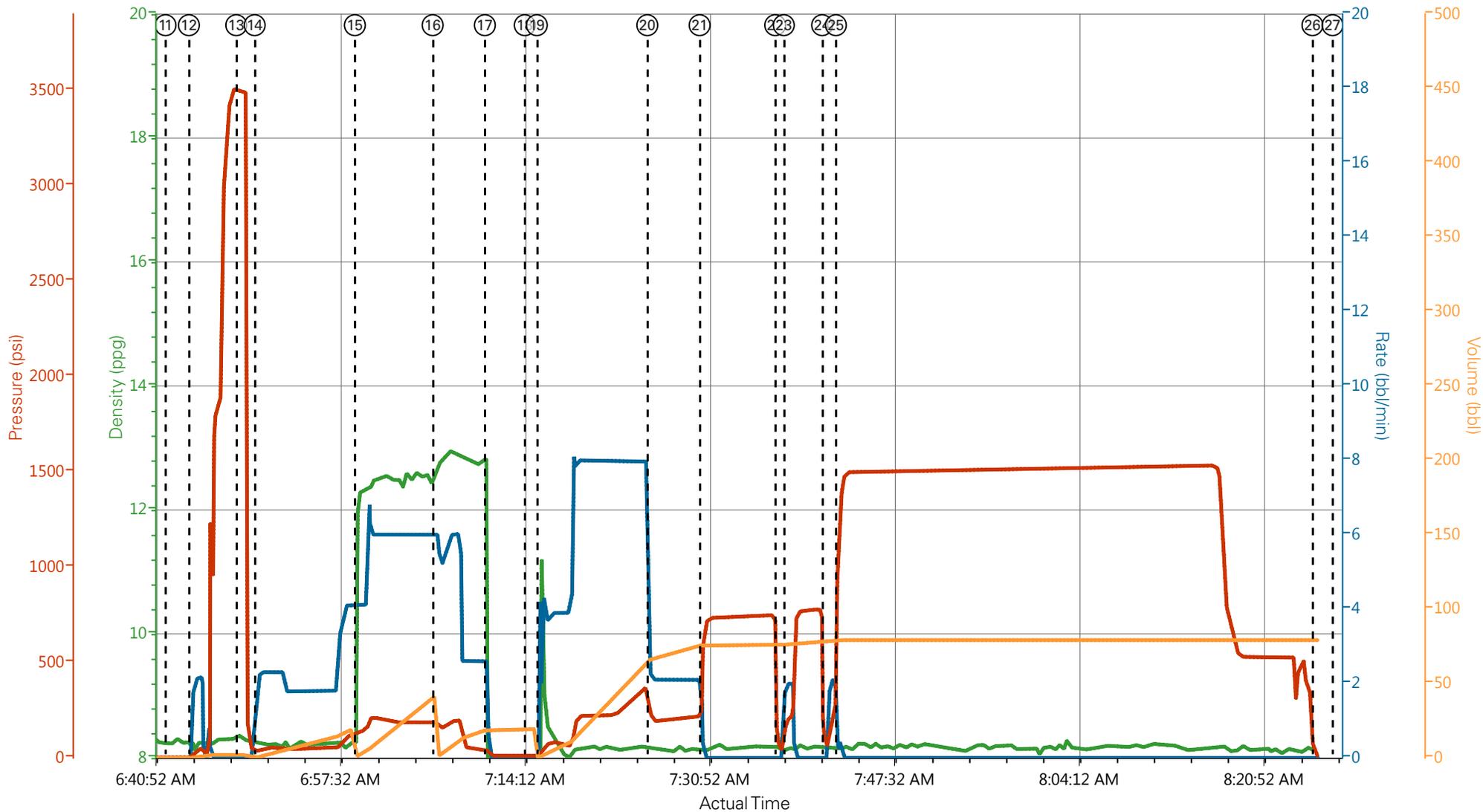
3.1 Job Event Log

Type	Seq No.	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comment
Event	1	Call Out	8/25/2014	21:45:00	USER					
Event	2	Pre-Convoy Safety Meeting	8/25/2014	23:45:00	USER					
Event	3	Crew Leave Yard	8/26/2014	00:00:00	USER					1 Elite, 1 660, 1 pickup
Event	4	Arrive At Loc	8/26/2014	02:30:00	USER					Rig still running casing
Event	5	Assessment Of Location Safety Meeting	8/26/2014	02:45:00	USER					JSA written for spotting equipment
Event	6	Spot Equipment	8/26/2014	05:00:00	USER					
Event	7	Pre-Rig Up Safety Meeting	8/26/2014	05:20:00	USER					
Event	8	Rig-Up Equipment	8/26/2014	05:30:00	USER					Hard line with standpipe to floor, water hose to day tank, cement hose to 660
Event	9	Rig-Up Completed	8/26/2014	06:00:00	USER					
Event	10	Pre-Job Safety Meeting	8/26/2014	06:20:00	USER					All personnel on site in attendance - MW 9.6 lb, PV 11, YP 9
Event	11	Start Job	8/26/2014	06:42:01	COM5					TD 1050', TP 1032.71', SJ 44.58', 9 5/8" 36# J-55 csg, 12 1/4" OH
Event	12	Prime Pumps	8/26/2014	06:44:07	COM5	8.33	2.0	52	2.0	Fresh Water
Event	13	Pressure Test	8/26/2014	06:48:24	USER			3510		Pressure held at 3510 psi
Event	14	Pump Spacer 1	8/26/2014	06:50:03	COM5	8.33	4.0	105	20.0	Fresh Water
Event	15	Pump Lead Cement	8/26/2014	06:59:06	COM5	12.3	6.0	221	43.6	100 sks, 12.28 ppg, 2.45 yield, 14.17 gal/sk
Event	16	Pump Tail Cement	8/26/2014	07:06:07	COM5	12.8	6.0	189	19.4	50 sks, 12.78 ppg, 2.18 yield, 12.11 gal/sk
Event	17	Shutdown	8/26/2014	07:10:50	USER					Wash up on top of plug
Event	18	Drop Top Plug	8/26/2014	07:14:26	USER					Plug launched -verified by tattletail
Event	19	Pump Displacement	8/26/2014	07:15:31	COM5	8.33	8.0	370	76.4	Fresh Water
Event	20	Slow Rate	8/26/2014	07:25:30	USER	8.33	2.0	209	10.0	

Event	21	Bump Plug	8/26/2014	07:30:13	USER			225		
Event	22	Check Floats	8/26/2014	07:37:02	USER			738		Floats did not hold
Event	23	Pump Water	8/26/2014	07:37:49	USER	8.33	2.0	740	2.0	Another attempt to get floats to hold
Event	24	Check Floats	8/26/2014	07:41:16	USER			740		Floats did not hold - agreed with company rep to proceed with casing test
Event	25	Pressure Up Well	8/26/2014	07:42:31	COM5	8.33	0.8	1501	0.5	Pressure up to 1500 psi for 30 minutes
Event	26	Shut In Well	8/26/2014	08:25:32	USER			250		Bleed pressure off to 250 psi, shut in well - recommended hold for 8 hours
Event	27	End Job	8/26/2014	08:27:21	COM5					Good returns throughout job - no cement to surface - approx 10 bbls water spacer back to surface - 20 lbs sugar used

Post-Job Safety Meeting	8/26	08:35								Cement head, one 2" Lo-torq, and one 1" left on location – D0794
Rig-Down Equipment	8/26	08:45								
Rig-Down Completed	8/26	09:45								
Pre-Convoy Safety Meeting	8/26	10:00								
Crew Leave Location	8/26	10:15								Thank you for using Halliburton

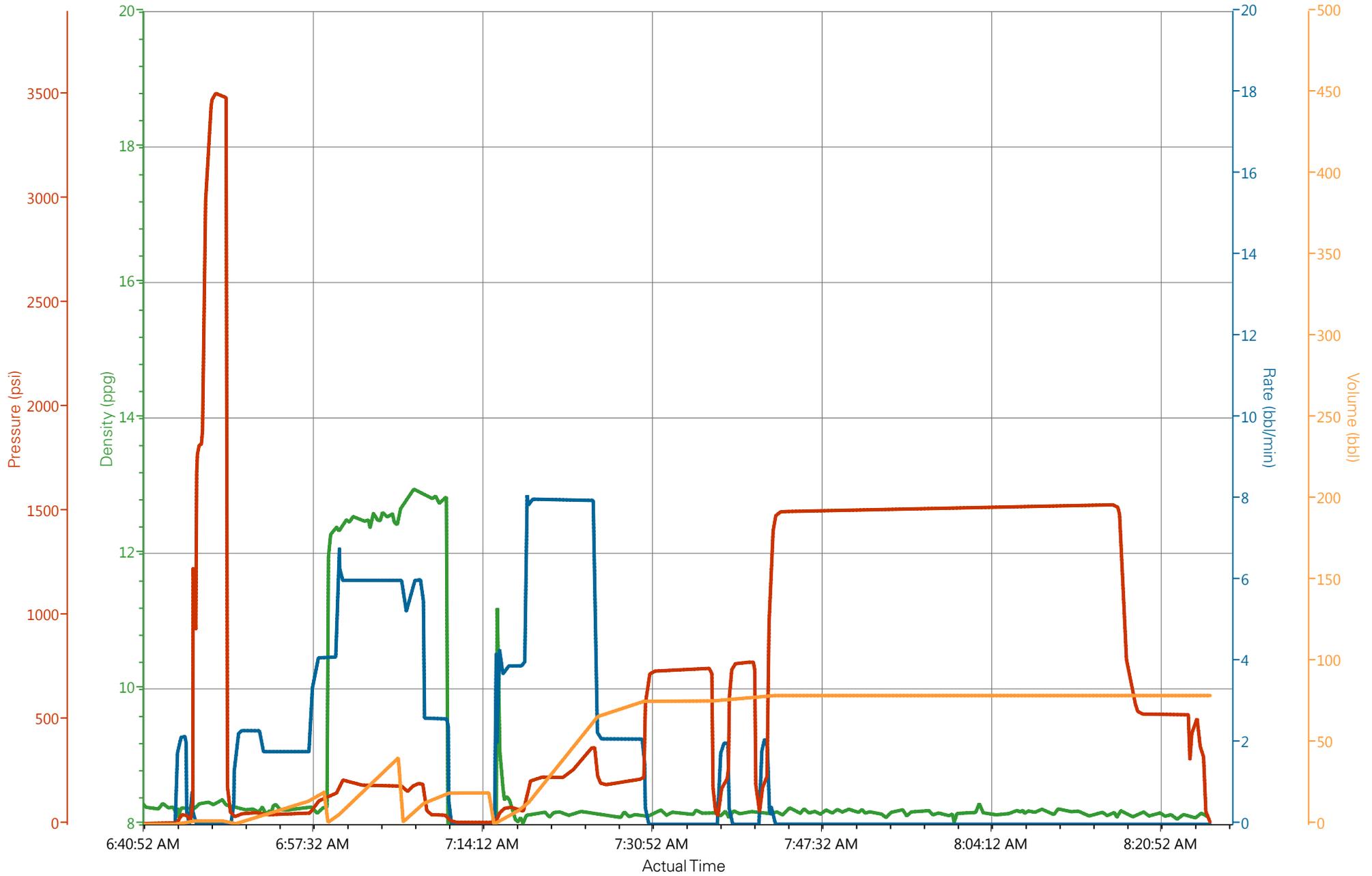
GUNNISON - DGU FED 1289 - 18-CS2 - 9 5/8" SURFACE



DH Density (ppg) 8.14 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 23 Pump Stg Tot (bbl) 79.2

- | | | | | |
|---|---|--------------------------------------|--------------------------------------|---------------------|
| ① Call Out n/a;n/a;n/a;n/a | ⑤ Assessment Of Location Safety Meeting n/a;n/a;n/a;n/a | ⑨ Rig-Up Completed 1.37;0;1;0 | ⑬ Pressure Test 8.33;0;3501;2 | ⑰ Shutdown 1.49;0 |
| ② Pre-Convoy Safety Meeting n/a;n/a;n/a;n/a | ⑥ Spot Equipment n/a;n/a;n/a;n/a | ⑩ Pre-Job Safety Meeting -0.01;0;1;0 | ⑭ Pump Spacer 1 8.23;1.8;44;0.6 | ⑱ Pump Displacement |
| ③ Crew Leave Yard n/a;n/a;n/a;n/a | ⑦ Pre-Rig Up Safety Meeting n/a;n/a;n/a;n/a | ⑪ Start Job 8.25;0;2;0 | ⑮ Pump Lead Cement 12.26;4.1;136;1.7 | ⑲ Pump Displacement |
| ④ Arrive At Loc n/a;n/a;n/a;n/a | ⑧ Rig-Up Equipment n/a;n/a;n/a;n/a | ⑫ Prime Pumps 8.25;0.8;2;0 | ⑯ Pump Tail Cement 12.69;6;191;0.1 | ⑳ Slow Rate 8.14;2 |

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— DH Density (ppg) 8.14
 — Comb Pump Rate (bbl/min) 0
 — PS Pump Press (psi) 23
 — Pump Stg Tot (bbl) 79.2

HALLIBURTON

Water Analysis Report

Company: GUNNISON
Submitted by: ED DEUSSEN
Attention: J.TROUT
Lease: DGU FED 1289
Well #: 18-CS2

Date: 8/26/2014
Date Rec.: 8/26/2014
S.O.#: 901613061
Job Type: SURFACE

Specific Gravity	<i>MAX</i>	1
pH	<i>8</i>	7.5
Potassium (K)	<i>5000</i>	400 Mg / L
Calcium (Ca)	<i>500</i>	250 Mg / L
Iron (FE2)	<i>300</i>	0 Mg / L
Chlorides (Cl)	<i>3000</i>	0 Mg / L
Sulfates (SO ₄)	<i>1500</i>	<200 Mg / L
Temp	<i>40-80</i>	58 Deg
Total Dissolved Solids		290 Mg / L

Respectfully: ED DEUSSEN

Title: CEMENTING SUPERVISOR

Location: Grand Junction, CO

NOTICE:

This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its

Sales Order #: 0901613061	Line Item: 10	Survey Conducted Date: 8/26/2014
Customer: GUNNISON ENERGY CORP - EBUS		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative:		API / UWI: (leave blank if unknown) 05-051-06124-00
Well Name: DGU FEDERAL -1289-		Well Number: 0080597828
Well Type: COAL DE-GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GUNNISON

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	8/26/2014
Survey Interviewer	The survey interviewer is the person who initiated the survey.	HB57194
Customer Participation	Did the customer participate in this survey? (Y/N)	No
Customer Representative	Enter the Customer representative name	
HSE	Was our HSE performance satisfactory? Circle Y or N	
Equipment	Were you satisfied with our Equipment? Circle Y or N	
Personnel	Were you satisfied with our people? Circle Y or N	
Customer Comment	Customer's Comment	

CUSTOMER SIGNATURE

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KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date	8/26/2014
The date the survey was conducted	

Cementing KPI Survey	
Type of Job	0
Select the type of job. (Cementing or Non-Cementing)	
Select the Maximum Deviation range for this Job	Vertical
What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	
Total Operating Time (hours)	3
Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	
HSE Incident, Accident, Injury	No
HSE Incident, Accident, Injury. This should be recordable incidents only.	
Was the job purpose achieved?	Yes
Was the job delivered correctly as per customer agreed design?	
Pumping Hours	1
Total number of hours pumping fluid on this job. Enter in decimal format.	
Type of Rig Classification Job Was Performed	Drilling Rig (Portable)
Type Of Rig (classification) Job Was Performed On	
Number Of JSAs Performed	5
Number Of Jsas Performed	
Was this a Primary Cement Job (Yes / No)	Yes
Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Number of Unplanned Shutdowns	0
Unplanned shutdown is when injection stops for any period of time.	
Customer Non-Productive Rig Time (hrs)	0

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Well Type: COAL DE-GAS	Well Country: USA	
H2S Present: No	Well State: COLORADO	Well County: GUNNISON

Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
If a top plug was run, was the plug bumped? (Yes/No/N/A) If a top plug was run, was the plug bumped? (Yes/No/N/A)	Yes
If applicable, was Halliburton float equipment used? (Yes/No/N/A) If applicable, was Halliburton float equipment used? (Yes/No/N/A)	N/A
If applicable, did the floats hold? (Yes/No/N/A) If applicable, did the floats hold? (Yes/No/N/A)	No
Mixing Density of Job Stayed in Designed Density Range (0-100%) Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	99
Pump Rate (percent) of Job Stayed At Designed Pump Rate Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	99
If applicable, were there returns throughout the job? (Yes/No/N/A) If applicable, were there returns throughout the job? (Yes/No/N/A)	YES
Nbr of Remedial Plug Jobs Rqd - HES Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
Nbr of Remedial Sqz Jobs Rqd - HES Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0