

# HALLIBURTON

iCem<sup>®</sup> Service

**SRC ENERGY INC - EBUS**

**Golden Eagle 28C-1-M Production**

Sincerely,  
**Meghan Jacobs**

## Legal Notice

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### Disclaimer:

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## 1.0 Cementing Job Summary

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### 1.1 Executive Summary

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Halliburton appreciates the opportunity to perform the cementing services on the **Golden Eagle 20C-1-M** cement **Production** casing job. A pre-job safety meeting was held before the job where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined.

**Approximately 15 bbls of cement were returned to surface.**

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

**Halliburton Fort Lupton**

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 359915		<b>Ship To #:</b> 3961577		<b>Quote #:</b>		<b>Sales Order #:</b> 0905753797				
<b>Customer:</b> SRC ENERGY INC-EBUS				<b>Customer Rep:</b> JOHN MEYERS						
<b>Well Name:</b> GOLDEN EAGLE			<b>Well #:</b> 28C-1-M		<b>API/UWI #:</b> 05-123-50130-00					
<b>Field:</b> WATTENBERG		<b>City (SAP):</b> EATON		<b>County/Parish:</b> WELD		<b>State:</b> COLORADO				
<b>Legal Description:</b> NE NE-6-6N-66W-1039FNL-498FEL										
<b>Contractor:</b> PRECISION DRLG				<b>Rig/Platform Name/Num:</b> PRECISION 562						
<b>Job BOM:</b> 7523 7523										
<b>Well Type:</b> HORIZONTAL OIL										
<b>Sales Person:</b> HALAMERICA\HB41307				<b>Srv Supervisor:</b> Vitali Neverdasov						
<b>Job</b>										
<b>Formation Name</b>										
<b>Formation Depth (MD)</b>		<b>Top</b>		<b>Bottom</b>						
<b>Form Type</b>				<b>BHST</b>						
<b>Job depth MD</b>		15329ft		<b>Job Depth TVD</b>		7296				
<b>Water Depth</b>				<b>Wk Ht Above Floor</b>						
<b>Perforation Depth (MD)</b>		<b>From</b>		<b>To</b>						
<b>Well Data</b>										
<b>Description</b>	<b>New / Used</b>	<b>Size in</b>	<b>ID in</b>	<b>Weight lbm/ft</b>	<b>Thread</b>	<b>Grade</b>	<b>Top MD ft</b>	<b>Bottom MD ft</b>	<b>Top TVD ft</b>	<b>Bottom TVD ft</b>
Casing		9.625	8.921	36	LTC	J-55	0	1823	0	1823
Casing	0	5.5	4.778	20	TXP-BTC	P110IC	0	15329	0	7296
Open Hole Section			8.5				1823	15349	1823	7296
<b>Tools and Accessories</b>										
<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	<b>Depth ft</b>		<b>Type</b>	<b>Size in</b>	<b>Qty</b>	<b>Make</b>	
Guide Shoe	5.5					Top Plug	5.5	1	N/A	
Float Shoe	5.5	1	.NA	15329		Bottom Plug	5.5	1	N/A	
Float Collar	5.5	1	N/A	15224		SSR plug set	5.5			
Insert Float	5.5					Plug Container	5.5	1	HES	
Stage Tool	5.5					Centralizers	5.5	232	N/A	
<b>Fluid Data</b>										
<b>Stage/Plug #:</b> 1										

Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
1	Tuned Prime Cement Spacer	SBM FDP-C1337-18 CEMENT SPACER SYS	80	bbl	11.5	3.84		5	
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
2	ElastiCem	ELASTICEM (TM) SYSTEM	1241	sack	13.2	1.57		8	7.54
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
3	NeoCem	NeoCem TM	840	sack	13.2	2.04		8	9.75
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
4	MMCR Displacement	MMCR Displacement	20	bbl	8.34			8	
0.20 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
5	Water	Water	246.5	bbl	8.33			8	
1 gal/Mgal		CLA-WEB - BULK (101985043) / FE3							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal
6	MMCR Displacement	MMCR Displacement	70	bbl	8.34			8	
0.20 gal/bbl		MICRO MATRIX CEMENT RETARDER, 5 GAL PAIL (100003781)							
Cement Left In Pipe		Amount	0 ft		Reason			Shoe Joint	
Comment : 15 BBLs OF CEMENT BACK TO SURFACE. ESTIMATED TOP OF TAIL @ 7849'.									

## 2.0 Real-Time Job Summary

## 2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DH Density (ppg)	PS Pump Press (psi)	Comments
Event	1	Call Out	Call Out	6/9/2019	08:30:00	USER				ON LOCATION @ 15:30
Event	2	Depart Yard Safety Meeting	Depart Yard Safety Meeting	6/9/2019	13:35:00	USER				HELD JSA PRIOR LEAVING THE YARD
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	6/9/2019	14:05:00	USER				
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	6/9/2019	15:10:00	USER				44 MILES. DISCUSS NUMBERS AND PROCEDURE WITH CUSTOMER. RIG IS RUNNING CASING.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/9/2019	15:27:00	USER				JSA PRIOR SPOTTING EQUIPMENT AND RIGGING UP
Event	6	Other	SPOT TRUCKS	6/9/2019	15:30:00	USER				SPOT TRUCKS
Event	7	Other	RIG UP	6/9/2019	15:40:00	USER				RIG UP ALL SURFACE LINES.
Event	8	Casing on Bottom	Casing on Bottom	6/9/2019	17:00:00	USER				CASING LANDED. RIG IS CIRCULATING THRU CRT
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/9/2019	18:33:00	USER	0.00	8.62	1.00	DISCUSS HAZARDS AND JOB PROCEDURE WITH ALL PERSONAL INVOLVED
Event	10	Start Job	Start Job	6/9/2019	19:05:52	COM4	0.00	8.63	3.00	
Event	11	Check Weight	Check Weight	6/9/2019	19:11:41	COM4	0.00	8.67	7.00	
Event	12	Check Weight	Check Weight	6/9/2019	19:12:08	COM4	0.00	8.67	7.00	
Event	13	Pressure Test	Pressure Test	6/9/2019	19:16:00	USER	0.00	8.49	1852.00	LOAD LINE AND TEST TO 6470 PSI
Event	14	Drop Bottom Plug	Drop Bottom Plug	6/9/2019	19:18:00	USER	0.00	8.68	6445.00	DROP BOTTOM PLUG VERIFYIED BY CUSTOMER
Event	15	Pump Spacer	Pump Spacer	6/9/2019	19:20:00	USER	0.00	8.51	8.00	BATCH/ WEIGHT/ PUMP 80 BBLS OF TUNED SPACER @ 11.5 PPG WITH SURFACTANS.

Event	16	Pump Lead Cement	Pump Lead Cement	6/9/2019	19:35:00	USER	6.00	11.48	226.00	WEIGHT/ PUMP 1241 SKS (347 BBLS) OF ELASTICEM @ 13.2 PPG.
Event	17	Check Weight	Check Weight	6/9/2019	19:37:43	COM4	7.00	13.32	431.00	
Event	18	Pump Tail Cement	Pump Tail Cement	6/9/2019	20:22:00	USER	6.90	13.22	396.00	WEIGHT/ PUMP 840 SKS (305.2 BBLS) OF NEOCEM @ 13.2 PPG.
Event	19	Check Weight	Check Weight	6/9/2019	20:28:07	COM4	4.80	13.22	314.00	
Event	20	Shutdown	Shutdown	6/9/2019	21:13:00	USER	1.70	13.19	68.00	FINISHED PUMPING CEMENT
Event	21	Clean Lines	Clean Lines	6/9/2019	21:15:00	USER	0.00	13.22	18.00	WASH PUMPS AND LINES.
Event	22	Drop Top Plug	Drop Top Plug	6/9/2019	21:23:00	USER	3.90	8.08	119.00	DROP TOP PLUG VERYFYED BY CUSTOMER.
Event	23	Pump Displacement	Pump Displacement	6/9/2019	21:25:00	USER	0.00	8.07	3.00	336.5 BBLS OF FRESH WATER DISPLACEMENT. FIRST 20 BBLS WIRH MMCR, REMAINING WITH CLA-WEB AND BE3-S. LAST 70 BBLS WITH MMCR.
Event	24	Bump Plug	Bump Plug	6/9/2019	22:07:00	USER	2.70	8.13	2423.00	BUMP PLUG @ 2987 PSI 500 OVER FINAL LIFT PRESSURE.
Event	25	Other	SHIFT WET SHOE SUB	6/9/2019	22:12:00	USER	1.00	8.22	4282.00	PRESSURE UP 5110 PSI TO SHIFT WET SHOE SUB AND PUMP 6 BBLS WET SHOE.
Event	26	Shutdown	Shutdown	6/9/2019	22:14:00	USER	4.10	8.14	2614.00	
Event	27	Check Floats	Check Floats	6/9/2019	22:16:00	USER	0.00	8.12	2014.00	FLOATS HELD. 2.5 BBLS BACK.
Event	28	End Job	End Job	6/9/2019	22:17:41	COM4	0.00	8.05	5.00	
Event	29	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	6/9/2019	22:23:00	USER	0.00	8.06	5.00	HELD JSA PRIOR TO RIG DOWN



## 3.0 Attachments

### 3.1 Golden Eagle 28C-1-M Production – Job Chart

