

HALLIBURTON

iCem® Service

SRC ENERGY INC-EBUS

Golden Eagle 25N-1B-M

Sincerely,

Alexandria Dionigi

Legal Notice

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1.0 Cementing Job Summary

1.1 Executive Summary

Halliburton appreciates the opportunity to perform the cementing services on the **Golden Eagle 25N-1B-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

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The Road to Excellence Starts with Safety

Sold To #: 359915	Ship To #: 3961707	Quote #:	Sales Order #: 0905853681
Customer: SRC ENERGY INC-EBUS		Customer Rep: Andy B.	
Well Name: GOLDEN EAGLE		Well #: 25N-1B-M	API/UWI #: 05-123-50124-00
Field: WATTENBERG	City (SAP): EATON	County/Parish: WELD	State: COLORADO
Legal Description: NE NE-6-6N-66W-1219FNL-498FEL			
Contractor: PRECISION DRLG		Rig/Platform Name/Num: PRECISION 562	
Job BOM: 7523 7523			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HB41307		Srvc Supervisor: Prince Perez	

Job				
Formation Depth (MD)	Top	0'	Bottom	15,428'
Job depth MD	15,407'		Job Depth TVD	7,114'
Water Depth			Wk Ht Above Floor	7'

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	1825	0	1825
Casing		5.5	4.778	20	TXP-BTC	P110IC	0	15407	0	7114
Open Hole Section			8.5				1825	15428	1825	7114

Tools and Accessories									
Type	Size in	Qty	Make	Depth ft		Type	Size in	Qty	Make
Guide Shoe	5.5			15407		Top Plug	5.5		HES
Float Shoe	5.5					Bottom Plug	5.5		HES
Float Collar	5.5					SSR plug set	5.5		HES
Insert Float	5.5					Plug Container	5.5		HES
Stage Tool	5.5					Centralizers	5.5		HES

Fluid Data									
Stage/Plug #: 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	Spacer	SBM FDP-C1337-18 CEMENT SPACER SYS	80	bbl	11.5	3.84	23.9	6	2,796

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	Lead	ELASTICEM (TM) SYSTEM	1,233	sack	13.2	1.6	7.8	8	9,617

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	Tail	NeoCem TM	856	sack	13.2	2.08	10.18	8	8,714	
4	Displacement	MMCR Displacement	20	bbl	8.34			8		
5	Displacement	Water	250	bbl	8.33			8		
6	Displacement	MMCR Displacement	70	bbl	8.34			8		
Cement Left In Pipe		Amount	0 ft		Reason			Wet Shoe		
Mix Water:		pH 6	Mix Water Chloride:		<300 ppm		Mix Water Temperature:			73 °F
Cement Temperature:		## °F	Plug Displaced by:		8.33 lb/gal		Disp. Temperature:			73 °F
Plug Bumped?		Yes	Bump Pressure:		2,474 psi		Floats Held?			Yes
Cement Returns:		15 bbls	Returns Density:		## lb/gal		Returns Temperature:			## °F
Comment										
Pumped 80 bbls of Tuned Prime with 20 gallons of D Air, 40 gallons of Dual B, 40 gallons of Musol A.										
Pumped 351.4 bbls of Elasticem.										
Pumped 317.1 bbls of Neocem.										
Pumped 339.7 bbls of fresh water displacement with 10 gallons MMCR in the first 20 bbls, 10 gallons of MMCR in the last 70 bbls, 20 gallons of Clay web, and 3 lbs of BE3 throughout.										
Pumped a 6 bbl wet shoe.										
2.5 bbls back on the floats.										

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/min)	PS Pump Press (psi)	Pump Stg Tot (bbl)	Comments
Event	1	Call Out	Call Out	7/23/2019	18:30:00	USER					CREW CALLED OUT AT 18:30, REQUESTED ON LOCATION 01:00. CREW PICKED UP CEMENT, CHEMICALS, AND PLUG CONTAINER FROM FT. LUPTON, CO. BULK 660, 11633846, 11633848, AND PUMP 11189145.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/23/2019	22:30:00	USER					CREW DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW.
Event	3	Crew Leave Shop	Crew Leave Shop	7/23/2019	22:40:00	USER					STARTED JOURNEY MANAGEMENT.
Event	4	Arrive at Location from Service Center	Arrive at Location from Service Center	7/23/2019	23:40:00	USER					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB; SURFACE CASING- 9/58" 36 LB/FT @ 1,825', 5.5" CASING: 20 LB/FT TOTAL 15,407', 8 1/2" HOLE, TD 15,428', 106' SHOE TRAC, TVD- 7,114'. PUMP FRESH WATER DISPLACEMENT. CASING LANDED @ 01:45 7/24/2019.
Event	5	Safety Meeting - Assessment of Location	Safety Meeting - Assessment of Location	7/23/2019	23:50:00	USER					HAZARD HUNT. DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.
Event	6	Rig-Up Equipment	Rig-Up Equipment	7/24/2019	00:00:00	USER					RIG UP BULK AND MIXING EQUIPMENT.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	7/24/2019	02:30:00	USER					MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event	8	Rig-Up Completed	Rig-Up Completed	7/24/2019	02:40:00	USER					
Event	9	Start Job	Start Job	7/24/2019	02:53:46	COM4					BEGIN RECORDING JOB DATA.
Event	10	Test Lines	Test Lines	7/24/2019	03:05:42	COM4			6982.00		PRESSURE TESTED IRON TO 6,500 PSI. KICKOUTS SET @ 500 PSI, KICKED OUT @ 750 PSI, 5TH GEAR STALL OUT @ 2,186 PSI. 6,500 PRESSURE TEST KICKED OUT @ 6,100 PSI

Event	11	Pump Spacer 1	Pump Spacer 1	7/24/2019	03:11:07	COM4	11.5	6	400	80	PUMP 80 BBLS OF TUNED PRIME @ 11.5 LB/GAL, 3.84 CUFT/SK, 23.9 GALL/SK. 20 GALS D-AIR, 40 GALLONS OF DUAL B, 40 GALLONS OF MUSOL A. 80 BBLS CALCULATED TO RETURN TO SURFACE. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 6 BBLS/MIN @ 400 PSI.
Event	12	Pump Lead Cement	Pump Lead Cement	7/24/2019	03:28:16	COM4	13.2	8	530	351.4	PUMPED 1,233 SKS OF ELASTICEM @ 13.2 LB/GAL, 1.6 FT3/SK, 7.8 GAL/SK. 351.4 BBLS. HOL CALCULATED @ 7,634.9', 15.2 BBLS CALCULATED TO SURFACE. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 530 PSI
Event	13	Check Weight	Check Weight	7/24/2019	03:30:34	COM4	13.25				
Event	14	Pump Tail Cement	Pump Tail Cement	7/24/2019	04:15:03	COM4	13.2	8.10	300	317.1	PUMP 856 SKS OF NEOCEM @ 13.2 LB/GAL, 2.08 FT3/SK, 10.18 GAL/SK, 317.1 BBLS. HOT CALCULATED @ 7,772.1', TOT CALCULATED @ 7,634.9'. DENSITY VERIFIED BY PRESSURIZED MUD SCALES. PUMP RATE 8 BBLS/MIN @ 300 PSI.
Event	15	Other	Other	7/24/2019	04:56:53	COM4					SHUTDOWN TO WASH LINES.
Event	16	Drop Top Plug	Drop Top Plug	7/24/2019	05:09:23	COM4					PLUG LEFT CONTAINER, VERIFIED BY CO. MAN.
Event	17	Pump Displacement	Pump Displacement	7/24/2019	05:09:56	COM4	8.33	6	3050	339.7	BEGIN CALCULATED DISPLACEMENT OF 339.7 BBLS WITH FRESH WATER. 10 GALLONS OF MMCR IN THE FIRST 20 BBLS, 10 GALLONS OF MMCR IN THE LAST 70 BBLS, 3 LBS OF BE3, AND 20 GALLONS OF CLAYWEB THROUGHOUT. PUMP RATE 6 BPM @ 3,050 PSI. CAUGHT CEMENT @ 20 BBLS INTO DISPLACEMENT. SPACER TO SURFACE @ 230 BBLS INTO DISPLACEMENT. 80 BBLS OF TUNED SPACER TO SURFACE. SLOW RATE TO 3 BPM @ 320 BBLS INTO DISPLACEMENT.
Event	18	Bump Plug	Bump Plug	7/24/2019	06:01:22	COM4			2974.00		PLUG BUMPED AT CALCULATED DISPLACEMENT. 2,474 PSI PRESSURED 500 PSI OVER BUMP. SHUTDOWN FOR 3 MINUTES.

Event	19	Shift Tool - Lower	Shift Tool - Lower	7/24/2019	06:07:27	USER	5436.00	SHEARED @ 5,436 PSI FOLLOWED BY A 6 BBL WET SHOE.
Event	20	Check Floats	Check Floats	7/24/2019	06:11:59	USER		RELEASED PRESSURE, FLOATS HELD, 2.5 BBLS BACK.
Event	21	End Job	End Job	7/24/2019	06:13:32	COM4		STOP RECORDING JOB DATA.
Event	22	Post-Job Safety Meeting (Pre Rig-Down)	Post-Job Safety Meeting (Pre Rig-Down)	7/24/2019	06:15:00	USER		DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event	23	Rig-Down Equipment	Rig-Down Equipment	7/24/2019	06:25:00	USER		RIG DOWN BULK AND MIXING EQUIPMENT.
Event	24	Rig-Down Completed	Rig-Down Completed	7/24/2019	08:40:00	USER		
Event	25	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	7/24/2019	08:50:00	USER		CREW DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	26	Crew Leave Location	Crew Leave Location	7/24/2019	09:00:00	USER		THANK YOU FOR USING HALLIBURTON – PRINCE PEREZ AND CREW.

3.0 Attachments

3.1 SRC Energy Golden Eagle 25N-1B-M-Custom Results (1).png

