

HALLIBURTON

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URSA RESOURCES GROUP II LLC-EBUS

United States of America, COLORADO

Date: Thursday, January 3, 2019

Boies Ranch C-240 21C-25-2-98 Surface

URSA Boies Ranch C-240 FED 21C-25-2-98 MULTI STAGE SURFACE

API# 436412

Job Date: Tuesday, December 11, 2018

Sincerely,

Grand Junction Cement Engineering

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Graph Label	Date	Time	Source	PS Pump Press <i>(psi)</i>	DH Density <i>(ppg)</i>	Comb Pump Rate <i>(bbl/min)</i>	Pump Stg Tot <i>(bbl)</i>	Comments
Event	1	Call Out	12/10/2018	19:30:00	USER					CREW CALLED OUT TO CYCLONE 17 FOR URSA MULTI STAGE SURFACE JOB. REQUESTED ON LOCATION AT 04:00.
Event	2	Pre-Convoy Safety Meeting	12/10/2018	22:45:00	USER					WITH ALL HES PERSONNEL
Event	3	Crew Leave Yard	12/10/2018	23:00:00	USER					
Event	4	Arrive at Location	12/11/2018	01:30:00	USER					RIG WAS RUNNING CASING UPON HES ARRIVAL
Event	5	Assessment of Location Safety Meeting	12/11/2018	01:35:00	USER					WITH ALL HES PERSONNEL
Event	6	Spot Equipment	12/11/2018	01:40:00	USER					SPOT EQUIPMENT
Event	7	Pre-Rig Up Safety Meeting	12/11/2018	01:50:00	USER					WITH ALL HES PERSONNEL
Event	8	Rig-Up Equipment	12/11/2018	02:00:00	USER					1-RCM ELITE PUMP TRUCK, 2-660 FT3 BULK TRUCK, 2-1,200 FT3 SILOS, 1-PICKUP
Event	9	Rig-Up Completed	12/11/2018	03:00:00	USER					RIG UP COMPLETED. WAIT FOR RIG TO FINISH RUNNING CASING.
Event	10	Pre-Job Safety Meeting	12/11/2018	05:10:00	USER	-1.00	0.00	0.00	0.00	WITH ALL PERSONNEL ON LOCATION

Event	11	Check Weight	12/11/2018	05:35:00	USER	456.00	8.32	10.50	5.40	PRESSURIZED MUD SCALES CALIBRATED USING FRESH WATER PRIOR TO JOB. ALL DENSITIES VERIFIED USING PRESSURIZED MUD SCALES THROUGHOUT JOB.
Event	12	Start Job	12/11/2018	05:42:30	USER	19.00	8.37	0.00	0.00	
Event	13	Pump Water	12/11/2018	05:43:51	USER	33.00	8.33	0.00	0.00	PUMP 2 BBL H2O AHEAD TO PRIME LINES. PUMPED AT 1 BPM WITH 50 PSI
Event	14	Shutdown	12/11/2018	05:44:33	USER	42.00	8.33	0.00	0.30	SHUTDOWN TO LINE OUT VALVES ON MANIFOLD FOR PRESSURE TEST
Event	15	Pressure Test	12/11/2018	05:46:10	USER	3564.00	8.37	0.00	0.30	SET KICKOUTS TO 500 PSI FOR LOW TEST TO ENSURE KICKOUTS ARE FUNCTIONING PROPERLY. BROUGHT PRESSURE UP TO 3565 PSI FOR HIGH TEST.
Event	16	Pump Spacer	12/11/2018	05:50:00	USER	45.00	8.27	0.00	0.00	PUMP 20 BBL H2O SPACER. PUMPED AT 4 BPM WITH 180 PSI.
Event	17	Pump Cement	12/11/2018	05:57:30	USER	163.00	8.84	3.80	0.60	PUMP 231.8 BBL VRESACEM CEMENT. 664 SKS AT 12.5 PPG, 1.96 FT3/SK, 10.18 GAL/SK. PUMPED AT 8 BPM WITH 485 PSI
Event	18	Shutdown	12/11/2018	06:29:16	USER	195.00	13.35	1.80	240.90	SHUTDOWN TO DROP FIRST STAGE SHUTOFF PLUG.
Event	19	Drop Shutoff Plug	12/11/2018	06:32:00	USER	25.00	13.25	0.00	240.90	REMOVE PLUG CONTAINER CAP TO DROP HES FIRST STAGE SHUTOFF PLUG. PLUG LAUNCHED. WITNESSED BY CUSTOMER REP.
Event	20	Pump H2O Displacement	12/11/2018	06:34:00	USER	59.00	12.97	2.90	0.30	PUMP 150 BBL H2O DISPLACEMENT TO DISPLACE BELOW STAGE TOOL AT 8 BPM WITH 250 PSI.
Event	21	Slow Rate	12/11/2018	06:54:38	USER	288.00	8.43	8.00	147.10	SLOW RATE TO 4 BPM 10 BBL PRIOR TO STAGE TOOL FOR SHUTOFF PLUG TO PASS THROUGH.
Event	22	Slow Rate	12/11/2018	06:56:31	USER	127.00	8.43	3.10	155.10	SLOWED RATE TO 1 BPM DUE TO DIFFICULTIES GETTING MUD TO PUMP TRUCK.
Event	23	Resume Rate	12/11/2018	07:07:28	USER	187.00	8.36	3.50	166.40	RESUME PUMPING DISPLACEMENT AT 8 BPM AFTER GETTING MUD TO TRUCK.
Event	24	Pump WBM Displacement	12/11/2018	07:10:00	USER	640.00	9.55	8.00	186.10	PUMP 121.6 BBL WBM DISPLACEMENT TO DISPLACE ABOVE THE STAGE TOOL. PUMPED AT 8 BPM WITH 9 PSI.

Event	25	Slow Rate	12/11/2018	07:21:09	USER	887.00	9.53	8.00	275.40	SLOW RATE TO 2 BPM 20 BBL PRIOR TO CALCULATED DISPLACEMENT TO BUMP PLUG.
Event	26	Bump Plug	12/11/2018	07:29:00	USER	1113.00	9.50	0.40	292.50	PLUG BUMPED AT 2 BPM. FCP 580-PSI. BROUGHT PRESSURE UP TO 1,170 PSI. TOTAL DISPLACEMENT-291.6 BBL.
Event	27	Check Floats	12/11/2018	07:32:17	USER	1171.00	9.47	0.00	292.50	FLOATS HOLDING. RETURNED 1 BBL FLUID TO TRUCK
Event	28	Drop Opening Device For Multiple Stage Cementer	12/11/2018	07:36:00	USER	28.00	9.46	0.00	292.50	DROP OPENING DEVICE. WITNESSED BY CUTOMER REP.
Event	29	Open Multiple Stage Cementer	12/11/2018	07:48:00	USER	33.00	9.49	1.00	292.60	PRESSURE UP TO 290 PSI TO OPEN STAGE TOOL. PUMPED 15 BBL MUD THROUGH STAGE TOOL TO VERIFY CIRCULATION.
Event	30	Rig Circulate Well	12/11/2018	07:54:00	USER	101.00	9.30	0.00	310.60	SHUTDOWN AND TURN WELL OVER TO RIG TO CIRCULATE CEMENT OUT FROM ABOVE STAGE TOOL. RIG CIRCULATE AT 10 BPM WITH 320 PSI. CIRCULATED 88 BBL CEMENT OUT FROM ABOVE TOOL.
Event	31	Pump Water	12/11/2018	11:33:08	USER	48.00	8.24	0.00	0.00	PUMP 2 BBL H2O TO PRIME LINES. PUMPED AT 2 BPM WITH 50 PSI.
Event	32	Shutdown	12/11/2018	11:34:00	USER	52.00	8.25	0.00	0.90	SHUTDOWN TO LINE OUT VALVES FOR PRESSURE TEST.
Event	33	Pressure Test	12/11/2018	11:36:10	USER	3672.00	8.34	0.00	0.00	SET KICKOUTS TO 500 PSI TO ENSURE KICKOUTS ARE FUNCTIONING PROPERLY. BROUGHT PRESSURE UP TO 3,690 PSI FOR HIGH TEST.
Event	34	Pump Spacer	12/11/2018	11:39:48	USER	21.00	8.24	0.00	0.00	PUMP 20 BBL H2O SPACER. PUMPED AT 4 BPM WITH 100 PSI.
Event	35	Pump Cement	12/11/2018	11:46:26	USER					PUMP 246.1 BBL VARICEM GJ5 CEMENT. 564 SKS AT 12.3 PPG, 2.45 FT3/SK, 14.18 GAL/SK. PUMPED AT 8 BPM WITH 300 PSI.
Event	36	Shutdown	12/11/2018	12:21:42	USER	152.00	12.53	2.10	262.60	SHUTDOWN TO DROP CLOSING DEVICE.
Event	37	Drop Plug	12/11/2018	12:25:00	USER	23.00	14.69	0.00	262.60	REMOVE PLUG CONTAINER CAP TO DROP MSC CLOSING DEVICE. CLOSING DEVICE LAUNCHED. WITNESSED BY CUSTOMER REP.

Event	38	Pump H2O Displacement	12/11/2018	12:27:00	USER	39.00	12.78	1.80	0.10	PUMP 139.8 BBL H2O DISPLACEMENT. PUMPED AT 8 BPM WITH 530 PSI.
Event	39	Slow Rate	12/11/2018	12:48:10	USER	567.00	8.48	7.50	146.70	SLOW RATE TO 2 BPM 10 BBL PRIOR TO CALCULATED DISPLACEMENT TO BUMP PLUG.
Event	40	Close Multiple Stage Cementer	12/11/2018	12:51:08	USER	422.00	8.48	2.00	153.00	BUMP CLOSING DEVICE AT 2 BPM. FCP-390 PSI. BROUGHT PRESSURE UP TO 1,270 PSI TO CLOSE STAGE TOOL. TOTAL DISPLACEMENT-149.8 BBL.
Event	41	Release Casing Pressure	12/11/2018	12:53:41	USER	1073.00	8.50	0.00	153.30	RELEASE PRESSURE TO ENSURE STAGE TOOL CLOSED PROPERLY. TOOL CLOSED. RETURNED 1 BBL FLUID TO TRUCK.
Event	42	End Job	12/11/2018	12:56:00	USER	15.00	8.49	0.00	153.30	PIPE WAS STATIC DURING JOB. GOOD CIRCULATION THROUGHOUT JOB.
Event	43	Pre-Rig Down Safety Meeting	12/11/2018	13:00:00	USER	89.00	8.49	1.00	16.60	WITH ALL HES PERSONNEL
Event	44	Rig-Down Equipment	12/11/2018	13:10:00	USER	9.00	0.01	0.00	48.20	
Event	45	Rig-Down Completed	12/11/2018	13:50:00	USER					
Event	46	Pre-Convoy Safety Meeting	12/11/2018	13:55:00	USER					WITH ALL HES PERSONNEL
Event	47	Crew Leave Location	12/11/2018	14:00:00	USER					
Event	48	Well Info	12/11/2018	14:01:00	USER					TD-3,835', TP-3,815.08', SHOE-42.45', STAGE TOOL AT 1,938', HOLE 13 1/2", MUD-9.3 PPG WBM, CSG-9 5/8" 36 LB/FT J-55, 35 CENTRALIZERS USED
Event	49	Rig Info	12/11/2018	14:02:00	USER					RIG ON BOTTOM AT 04:00, CIRCULATED AT 10 BPM WITH 150 PSI, 540 BBL CIRCULATED
Event	50	Job Info	12/11/2018	14:03:00	USER					CIRCULATED 88 BBL CEMENT OFF OF TOP OF TOOL AFTER FIRST STAGE. RETURNED 80 BBL CEMENT TO SURFACE ON SECOND STAGE. NO SUGAR WAS USED IN CEMENT RETURNS.
Event	51	Comment	12/11/2018	14:04:00	USER					THANK YOU FO USING HALLIBURTON CEMENT DEPARTMENT. JEREMY YOUNG AND CREW