

# HALLIBURTON

iCem<sup>®</sup> Service

**URSA RESOURCES GROUP II LLC**

United States of America, COLORADO

**For: Ursa**

Date: Saturday, September 22, 2018

**BR 22D-19-2-97 Surface**

API# 05-103-12299

Sincerely,

**Grand Junction Cement Engineering**

## 1.0 Real-Time Job Summary

## 1.1 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)	Comments
Event	1	Call Out	9/21/2018	17:00:00						Requested on Location @ 23:00
Event	2	Pre-Convoy Safety Meeting	9/21/2018	19:00:00						
Event	3	Crew Leave Yard	9/21/2018	19:10:00						1 Elite, 1 660, 1 pickups,
Event	4	Arrive At Loc	9/21/2018	23:00:00						Rig on bottom with casing
Event	5	Assessment Of Location Safety Meeting	9/21/2018	23:10:00						JSA completed - Customer offered/received SDS - water test pH 7.0, CI <200, temp 63 degrees
Event	6	Pre-Rig Up Safety Meeting	9/21/2018	23:20:00						
Event	7	Rig-Up Equipment	9/21/2018	23:25:00						DME iron to standpipe. Water hoses to both uprights, bulk hose to silos.
Event	8	Other	9/22/2018	00:20:00						Rig Circulated 2 hrs prior to cement job at 5 bpm 500 psi. Mud scales calibrated to drinking water prior to job.
Event	9	Pre-Job Safety Meeting	9/22/2018	00:30:00						All HES personnel, rig crew, and company rep.
Event	10	Start Job	9/22/2018	01:46:47						TD 3705', TP 3685', SJ 46', OH 13.5'', Csg 9.5/8" 36 lb/ft J-55, Mud 9.6 ppg. dv tool @ 1998'.
Event	11	Fill Lines	9/22/2018	01:47:32		8.33	2	110	5	Fresh Water
Event	12	Test Lines	9/22/2018	01:50:52				3380		Held pressure 2 minutes
Event	13	Pump Spacer	9/22/2018	01:56:35		8.33	4	180	15	Fresh Water
Event	14	Check Weight	9/22/2018	01:59:56						Density verified via mud cup
Event	15	Pump Tail Cement	9/22/2018	02:03:41		12.5	8	410	208.8	598 sks, 12.5 ppg, 1.96 Yield, 10.18 gal/sk
Event	16	Shutdown	9/22/2018	02:38:44						Wash up on plug

Event	17	Drop Plug	9/22/2018	02:41:18					Drop First Stage Plug. Co-Rep Verify Plug Launched
Event	18	Pump Displacement	9/22/2018	02:43:16	8.33	8	285	140	140 bbl of Fresh Water
Event	19	Pump Displacement	9/22/2018	03:06:24	9.6	8	870	141.4	141.4 bbls of 9.6 ppg mud displacement
Event	20	Slow Rate	9/22/2018	03:26:12	9.6	2	650	260	Slow Rate 20 bbls to Calculated Displacement
Event	21	Bump Plug	9/22/2018	03:35:16			1200		Plug Bumped at 650 psi, Brought up to 1200 psi
Event	22	Check Floats	9/22/2018	03:38:27					Floats held – 1.5 bbl back to the truck
Event	23	End Job	9/22/2018	03:39:38					Good returns throughout first stage.
Event	24	Drop Opening Device For Multiple Stage Cementer	9/22/2018	03:43:56					
Event	25	Pressure Up Well	9/22/2018	03:58:17	9.6	5.5	380		Tool Opened @ 400 psi.
Event	26	Circulate Well	9/22/2018	04:01:27					20 bbl of WBM
Event	27	Shut Down	9/22/2018	04:06:02					rig to circulate well till 07:30. 80 bbl of cement to surface
Event	28	Safety Meeting - Pre Job	9/22/2018	06:56:57					
Event	29	Start Job	9/22/2018	07:31:55					Tool @ 1998'
Event	30	Pump Spacer 1	9/22/2018	07:34:35	8.33	4	125	20	Fresh Water
Event	31	Pump 2nd Stage Tail Slurry	9/22/2018	07:43:41	12.3	8	320	259.6	595 sks, 12.3 ppg, 2.45 Yield, 14.18 gal/sk
Event	32	Shut Down	9/22/2018	08:20:16					
Event	33	Drop Top Plug	9/22/2018	08:23:46					Drop Second Stage Closing Plug. Co-Rep Verify Plug Launched
Event	34	Pump Displacement - Start	9/22/2018	08:26:19	8.33	8	450	154.5	Fresh Water
Event	35	Close Multiple Stage Cementer	9/22/2018	09:03:33			1430		Plug Bumped at 450 psi, Brought up to 1430 psi
Event	36	Check Tool	9/22/2018	09:07:38					Tool Closed, 1.5 bbl back to truck, 90 bbl of cement to surface. rig up to top out other wells.

Event	37	Pump Cap Cement	9/22/2018	13:57:39	Fed 33C-19-2-97 well, 262 sks, 15.6 ppg, 1.2 yield, 5.24 gal/sk
Event	38	Pump Cap Cement	9/22/2018	14:06:19	Fed 23A-19-2-97 well, 28 sks, 15.6 ppg, 1.2 yield, 5.24 gal/sk
Event	39	Pump Cap Cement	9/22/2018	14:13:41	Fed 23B-19-2-97 well, 42 sks, 15.6 ppg, 1.2 yield, 5.24 gal/sk
Event	40	Pump Cap Cement	9/22/2018	14:28:27	Fed 43C-19-2-97 well, 20 sks, 15.6 ppg, 1.2 yield, 5.24 gal/sk
Event	41	Pump Cap Cement	9/22/2018	14:40:11	33B-19-2-97 well, 23 sks, 15.6 ppg, 1.2 yield, 5.24 gal/sk
Event	42	Pump Cap Cement	9/22/2018	14:52:56	22D-19-2-97 well, 9 sks, 15.6 ppg, 1.2 yield, 5.24 gal/sk
Event	43	Pump Cap Cement	9/22/2018	14:55:38	Fed 43D-19-2-97 well, 36 sks, 15.6 ppg, 1.2 Yield, 5.24 gal/sk
Event	44	Pump Cap Cement	9/22/2018	14:59:20	No top out needed, cement to surface.
Event	45	End Job	9/22/2018	15:00:00	384 sks of top out used
Event	46	Pre-Rig Down Safety Meeting	9/22/2018	15:04:00	No sugar, HES MSC plug set used, 8 add hours,
Event	47	Rig-Down Equipment	9/22/2018	15:16:00	
Event	48	Pre-Convoy Safety Meeting	9/22/2018	15:48:00	
Event	49	Crew Leave Location	9/22/2018	16:00:00	Thanks for using Halliburton Cement, Chris Martinez and crew.