# iCem® Service

#### **TAPSTONE ENERGY LLC**

For:

Date:Tuesday, December 23, 2014

HARRY 4-35-10 1H

HARRY 4-35-10 1H Case 1

Sincerely,

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1.0	Real-Time Job Summary
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1.2	Stage Summary - Pump Pressure & ECD
1.3	Stage Summary - Pump Rate & Nitrogen Rate
1.4	Shutdown Summary

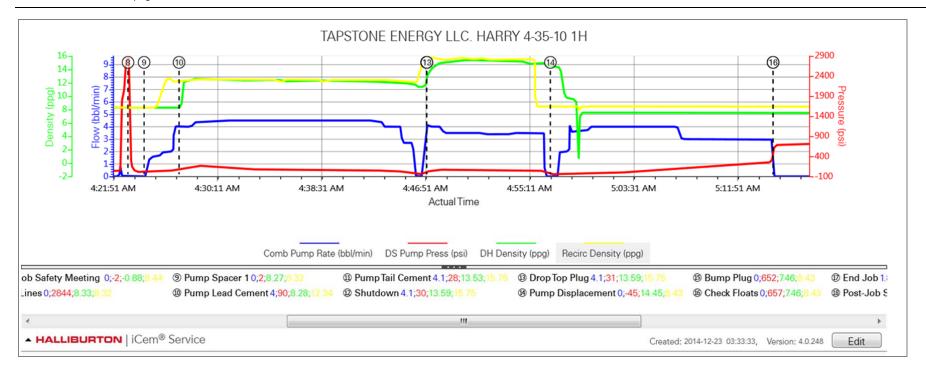
#### 1.5 Job Event Log

Туре	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	DH Density (ppg)	Recirc Density (ppg)	Comments
Event	1	Call Out	Call Out	12/22/2014	18:00:00	USER					CALLED OUT BY ARS, OKC,OK
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	12/22/2014	19:00:00	USER					DISCUSSED ROUTEE TO LOCATION AND SAFE DRIVING
Event	3	Depart Home for Location	Depart Home for Location	12/22/2014	19:15:00	USER					DEPARTED BLACKWELL YARD
Event	4	Arrive At Loc	Arrive At Loc	12/22/2014	21:00:00	USER					ARRIVED ON LOCATION REQUESTED BY 0000
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	12/23/2014	02:30:00	USER					DISCUSSED RIG UP PROCEDURES AND SAFETY
Event	6	Rig-Up Equipment	Rig-Up Equipment	12/23/2014	03:00:00	USER					RIG UP EQUIPMENT
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	12/23/2014	04:00:00	USER	0.00	-2.00	-0.88	8.43	DISCUSSED SAFETY NEAREST HOSPITAL AND JOB PROCEDURES
Event	8	Test Lines	Test Lines	12/23/2014	04:23:10	COM4	0.00	2847.00	8.32	8.35	TESTED LINES TO 3000 PSI
Event	9	Pump Spacer 1	Pump Spacer 1	12/23/2014	04:24:27	COM4	0.00	2.00	8.27	8.32	PUMPED 10 BBLS WATER SPACER
Event	10	Pump Lead Cement	Pump Lead Cement	12/23/2014	04:27:15	COM4	4.00	90.00	8.28	12.34	PUMPED 87 BBLS OF LEAD CEMENT @ 12.4 4.5 BBLS 150 PSI
Event	11	Pump Tail Cement	Pump Tail Cement	12/23/2014	04:47:04	COM4	4.10	25.00	13.48	15.75	PUMPED 32 BBLS OF TAIL CEMENT @ 15.6 4.5 BBLS 160 PSI
Event	12	Shutdown	Shutdown	12/23/2014	04:47:05	USER	4.10	30.00	13.59	15.75	SHUTDOWN
Event	13	Drop Top Plug	Drop Top Plug	12/23/2014	04:47:06	USER	4.10	31.00	13.59	15.75	DROP TOP PLUG
Event	14	Pump Displacement	Pump Displacement	12/23/2014	04:56:59	COM4	0.00	-45.00	14.44	8.39	PUMPED 59 BBLS OF FRESH WATER DISPLACEMENT CIRCULATED 45 BBLS OF CEMENT TO THE

Туре	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	DH Density (ppg)	Recirc Density (ppg)	Comments
											SURFACE
Event	15	Bump Plug	Bump Plug	12/23/2014	05:14:49	COM4	0.00	652.00	7.46	8.43	BUMPED PULG @ 800 PSI HOLD 5 MINUTES
Event	16	Check Floats	Check Floats	12/23/2014	05:14:50	USER	0.00	657.00	7.46	8.43	FLOATS HELD
Event	17	End Job	End Job	12/23/2014	05:24:59	USER	1.80	61.00	7.60	8.43	JOB ACTIVITIES COMPLETE
Event	18	Post-Job Safety Meeting (Pre Rig- Down)	Post-Job Safety Meeting (Pre Rig-Down)	12/23/2014	05:25:50	USER	0.00	-17.00	7.45	8.44	DISCUSSED ROUTE HOME AND SAFE DRIVING
Event	19	End Job	End Job	12/23/2014	05:27:00	COM4	0.00	-28.00	7.43	8.43	
Event	20	Rig-Down Equipment	Rig-Down Equipment	12/23/2014	05:30:00	USER	0.00	-27.00	-1.03	8.43	RIG DOWN EQUIPMENT
Event	21	Depart Location for Home	Depart Location for Home	12/23/2014	06:30:00	USER					DEPRT LOCATION FOR BLACKWELL
Event	22	Arrive at Home	Arrive at Home	12/23/2014	09:00:00	USER		•			ARRIVED AT BLACKWELL

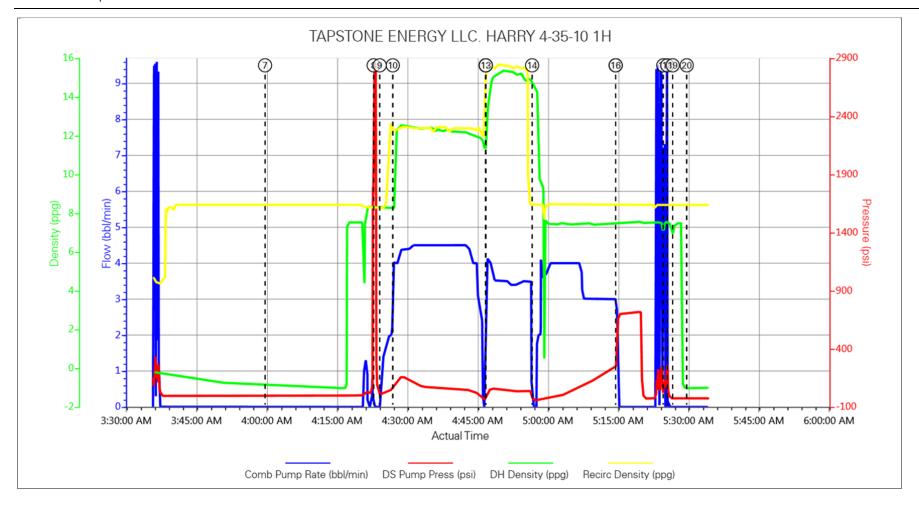
#### 2.0 Attachments

#### 2.1 HARRY 4-35-10 1H.png



#### 3.0 Custom Graphs

#### 3.1 Custom Graph



#### 4.0 Appendix

#### 4.1 One-Minutes Real-Time Data Listing

Time	Truck 1 Slurry Rate (bbl/min)	Stage Slurry Volume (bbl)	Truck 1 Density (ppg)	Truck 1 Pressure (psi)	Backside Pressure (psi)	Truck 1 Water Rate (bbl/min)
03:36:11	0.00	0.0	0.00	0.00	0.00	0.00
03:37:50	03:37:50 0.00		-0.32	8.00	-8.00	4.10
03:39:31	0.00	3.7	-0.40	2.00	-5.00	0.00
03:41:11	0.00	3.7	-0.48	1.00	-1.00	0.00
03:42:51	0.00	3.7	-0.46	2.00	-1.00	0.00
03:44:31	0.00	3.7	-0.51	3.00	-1.00	0.00
03:46:10	0.00	3.7	-0.53	3.00	-2.00	0.00
03:47:51	0.00	3.7	-0.62	4.00	-2.00	0.00
03:49:31	0.00	3.7	-0.73	4.00	-2.00	0.00
03:51:10	0.00	3.7	-0.75	5.00	-2.00	0.00
03:52:51	0.00	3.7	-0.77	6.00	-2.00	0.00
03:54:31	0.00	3.7	-0.76	6.00	-2.00	0.00
03:56:11	0.00	3.7	-0.81	6.00	-2.00	0.00
03:57:50	0.00	3.7	-0.81	6.00	-2.00	0.00
03:59:31	0.00	3.7	-0.87	6.00	-2.00	0.00
04:01:11	0.00	3.7	-0.85	6.00	-2.00	0.00
04:02:50	0.00	3.7	-0.86	7.00	-2.00	0.00
04:04:31	0.00	3.7	-0.84	7.00	-1.00	0.00
04:06:11	0.00	3.7	-0.95	7.00	-1.00	0.00
04:07:51	0.00	3.7	-0.95	7.00	-1.00	0.00
04:09:30	0.00	3.7	-0.94	8.00	-1.00	0.00
04:11:11	0.00	3.7	-1.02	8.00	-1.00	0.00
04:12:51	0.00	3.7	-0.99	8.00	-1.00	0.00
04:14:31	0.00	3.7	-1.01	8.00	-1.00	0.00
04:16:11	0.00	3.7	-1.05	8.00	0.00	0.00
04:17:51	0.00	3.7	7.51	6.00	-2.00	0.00
04:19:30	0.00	3.7	7.53	8.00	0.00	0.00
04:21:11	1.30	4.5	8.26	42.00	34.00	0.00
04:22:51	0.00	4.8	8.30	2,774.00	2,771.00	0.00
04:24:31	0.80	4.8	8.25	12.00	2.00	0.00
04:26:10	2.00	7.6	8.27	55.00	45.00	0.00
04:27:51	4.00	13.3	12.38	137.00	122.00	3.14
04:29:30	4.40	20.5	12.59	136.00	150.00	3.02
04:31:10	4.50	27.9	12.46	125.00	114.00	3.10
04:32:50	4.50	35.4	12.38	126.00	79.00	3.14
04:34:30	4.50	42.9	12.31	140.00	70.00	3.24

Time	Truck 1 Slurry Rate (bbl/min)	Stage Slurry Volume (bbl)	Truck 1 Density (ppg)	Truck 1 Pressure (psi)	Backside Pressure (psi)	Truck 1 Water Rate (bbl/min)
04:36:11	4.50	50.4	12.36	139.00	59.00	3.36
04:37:50	4.50	57.9	12.20	135.00	54.00	3.60
04:39:30	4.50	65.4	12.22	133.00	51.00	3.36
04:41:11	4.50	72.9	12.19	138.00	51.00	2.98
04:42:50	4.40	80.4	12.18	138.00	46.00	2.76
04:44:30	4.00	87.3	12.00	120.00	23.00	2.45
04:46:10	0.00	91.6	11.38	50.00	-37.00	1.52
04:47:51	4.00	96.1	14.86	154.00	61.00	2.29
04:49:31	3.50	102.1	15.18	134.00	47.00	2.00
04:51:10	3.50	108.0	15.31	136.00	47.00	1.88
04:52:51	3.40	113.7	15.19	128.00	36.00	2.07
04:54:30	3.50	119.4	15.20	136.00	43.00	0.00
04:56:10	3.50	125.2	14.96	133.00	39.00	0.00
04:57:50	2.00	126.6	11.39	69.00	-29.00	0.00
04:59:30	3.70	131.8	7.44	85.00	-17.00	0.00
05:01:10	4.00	138.4	7.45	80.00	-13.00	0.00
05:02:50	4.00	145.0	7.43	93.00	1.00	0.00
05:04:30	4.00	151.7	7.44	120.00	30.00	0.00
05:06:10	4.00	158.4	7.44	160.00	60.00	0.00
05:07:50	3.00	164.3	7.44	183.00	99.00	0.00
05:09:31	3.00	169.3	7.42	220.00	129.00	0.00
05:11:10	3.00	174.3	7.49	260.00	174.00	0.00
05:12:50	3.00	179.3	7.45	297.00	215.00	0.00
05:14:30	3.00	184.3	7.52	330.00	251.00	0.00
05:16:10	0.00	184.6	7.48	784.00	708.00	0.00
05:17:50	0.00	184.6	7.51	788.00	714.00	0.00
05:19:30	0.00	184.6	7.54	791.00	718.00	0.00
05:21:10	0.00	184.6	7.50	41.00	-29.00	0.00
05:22:50	0.00	184.6	7.51	48.00	-22.00	0.00
05:24:30	5.00	191.5	7.37	80.00	6.00	0.00
05:26:10	0.00	197.1	7.54	42.00	-26.00	0.00
05:27:50	0.00	197.1	7.51	38.00	-28.00	0.00
05:29:30	0.00	197.1	-1.03	37.00	-28.00	0.00
05:31:10	0.00	197.1	-1.04	37.00	-27.00	0.00
05:32:50	0.00	197.1	-1.11	36.00	-27.00	0.00
05:34:25	0.00	197.1	-1.06	36.00	-26.00	0.00