

# HALLIBURTON

iCem<sup>®</sup> Service

**ENCANA OIL & GAS (USA) INC**

**For:**

Date: Wednesday, June 04, 2014

**EF 02B-32 G29 595**

Case 1

Sincerely,

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## 1.0 Real-Time Job Summary

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### 1.1 Stage Summary - Liquid Volume, Density, & Design Shutdown

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### 1.2 Stage Summary - Pump Pressure & ECD

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### 1.3 Stage Summary - Pump Rate & Nitrogen Rate

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### 1.4 Shutdown Summary

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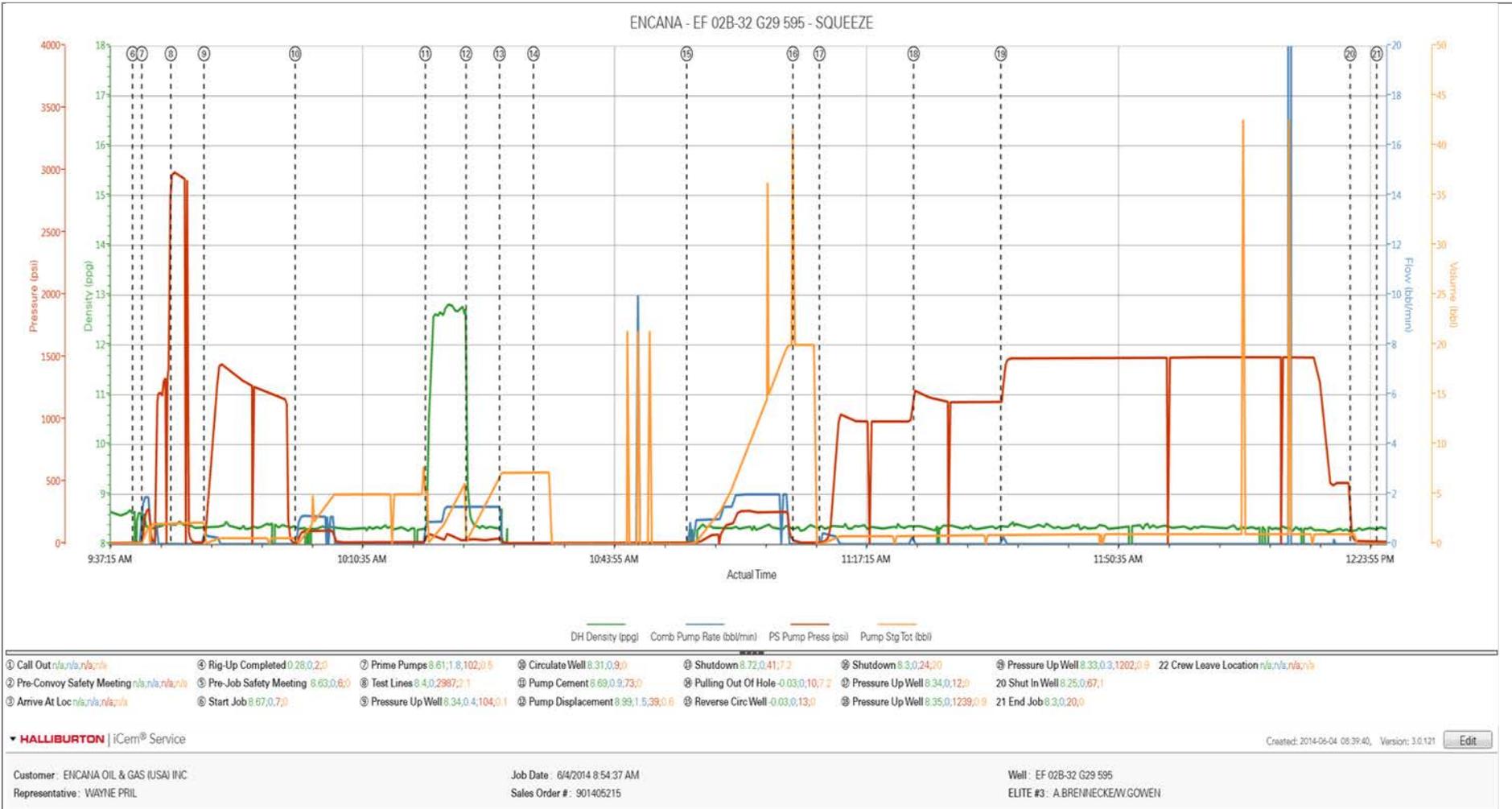
## 1.1 Job Event Log

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)	Comment
Event	1	Call Out	Call Out	6/4/2014	02:00:00	USER					
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/4/2014	04:55:00	USER					ALL HES PRESENT
Event	3	Arrive At Loc	Arrive At Loc	6/4/2014	06:30:00	USER					RIG PULLING TUBING.
Event	4	Rig-Up Completed	Rig-Up Completed	6/4/2014	09:05:00	USER	0.28	0.00	2.00	0.0	1-ELITE, 1-400 BODY LOAD, 2" PUMP IRON, 1 SQUEEZE MANIFOLD.
Event	5	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/4/2014	09:25:00	USER	8.63	0.00	6.00	0.0	ALL HES AND ENCANA PERSONEL PRESENT
Event	6	Start Job	Start Job	6/4/2014	09:40:25	COM5	8.35	0.00	7.00	0.0	TP-3157.12', PLUG-6695, TUBE-2.375", 4.7#, CSG-4.5", 11.6#, MUD- 8.5 H2O
Event	7	Prime Pumps	Prime Pumps	6/4/2014	09:41:39	COM5	8.33	2.00	270.00	2.0	FRESH WATER
Event	8	Test Lines	Test Lines	6/4/2014	09:45:29	COM5	8.40	0.00	2987.00	2.1	PRESSURE HELD AT 2987 PSI
Event	9	Pressure Up Well	Pressure Up Well	6/4/2014	09:49:53	COM5	8.34	0.40	1278.00	0.5	PRESSURED WELL TO 1450PSI, BLED BACK TO 1161 AFTER 10 MINS.
Event	10	Circulate Well	Circulate Well	6/4/2014	10:01:56	COM5	8.31	1.10	109.00	5.0	CIRCULATED 5 BBLS H2O AHEAD. RETURNS @1.5 AWAY.
Event	11	Pump Cement	Pump Cement	6/4/2014	10:19:09	COM5	12.72	1.50	88.00	7.6	50SKS, 12.7 PPG, .86FT3/SK, 4.46 GAL/SK
Event	12	Pump Displacement	Pump Displacement	6/4/2014	10:24:32	COM5	8.40	1.50	39.00	10.0	FRESH WATER. FINISHED PUMPING 10BBLS WITH 6X5 PUMP.
Event	13	Shutdown	Shutdown	6/4/2014	10:28:58	USER	8.42	0.00	41.00	10.0	OPENED RELEASE WELL WAS ON A SUCK
Event	14	Pulling Out Of Hole	Pulling Out Of Hole	6/4/2014	10:33:27	USER	-0.03	0.00	10.00	0.0	RIG PULLED 20 STANDS, ALL DRY.
Event	15	Reverse Circ Well	Reverse Circ Well	6/4/2014	10:53:43	COM5	8.35	2.00	268.00	20.0	REVERSED AND ONLY SAW DIRTY WATER.
Event	16	Shutdown	Shutdown	6/4/2014	11:07:46	USER	8.30	0.00	24.00	20.0	

Event	17	Pressure Up Well	Pressure Up Well	6/4/2014	11:11:17	COM5	8.34	0.4	1050.00	0.8	PRESSURED WELL UP TO 1050PSI, LEVELED OUT AT 985PSI. HELD FOR 10 MINS.
Event	18	Pressure Up Well	Pressure Up Well	6/4/2014	11:23:44	USER	8.35	0.30	1239.00	0.9	PRESSURED WELL UP TO 1240PSI, LEVELED OUT AT 1135PSI. HELD FOR 10 MINS.
Event	19	Pressure Up Well	Pressure Up Well	6/4/2014	11:35:17	USER	8.33	0.30	1496.00	1.0	PRESSURED UP WELL UP TO 1496 PSI HELD FOR 43 MINS. FINAL PSI 1501.
Event	20	Shut In Well	Shut In Well	6/4/2014	12:21:30	USER	8.25	0.00	507.00	1.0	BLD PRESSURE BACK TO 500 PSI AND SHUT IN WELL. .25 BBL BACK TO DISPLACEMENT TANK.
Event	21	End Job	End Job	6/4/2014	12:25:00	COM5	8.30	0.00	20.00	0.0	
Event	22	Crew Leave Location	Crew Leave Location	6/4/2014	13:30:00	USER					THANK YOU FOR CHOOSING HALLIBURTON, ANDREW BRENNECKE AND CREW.

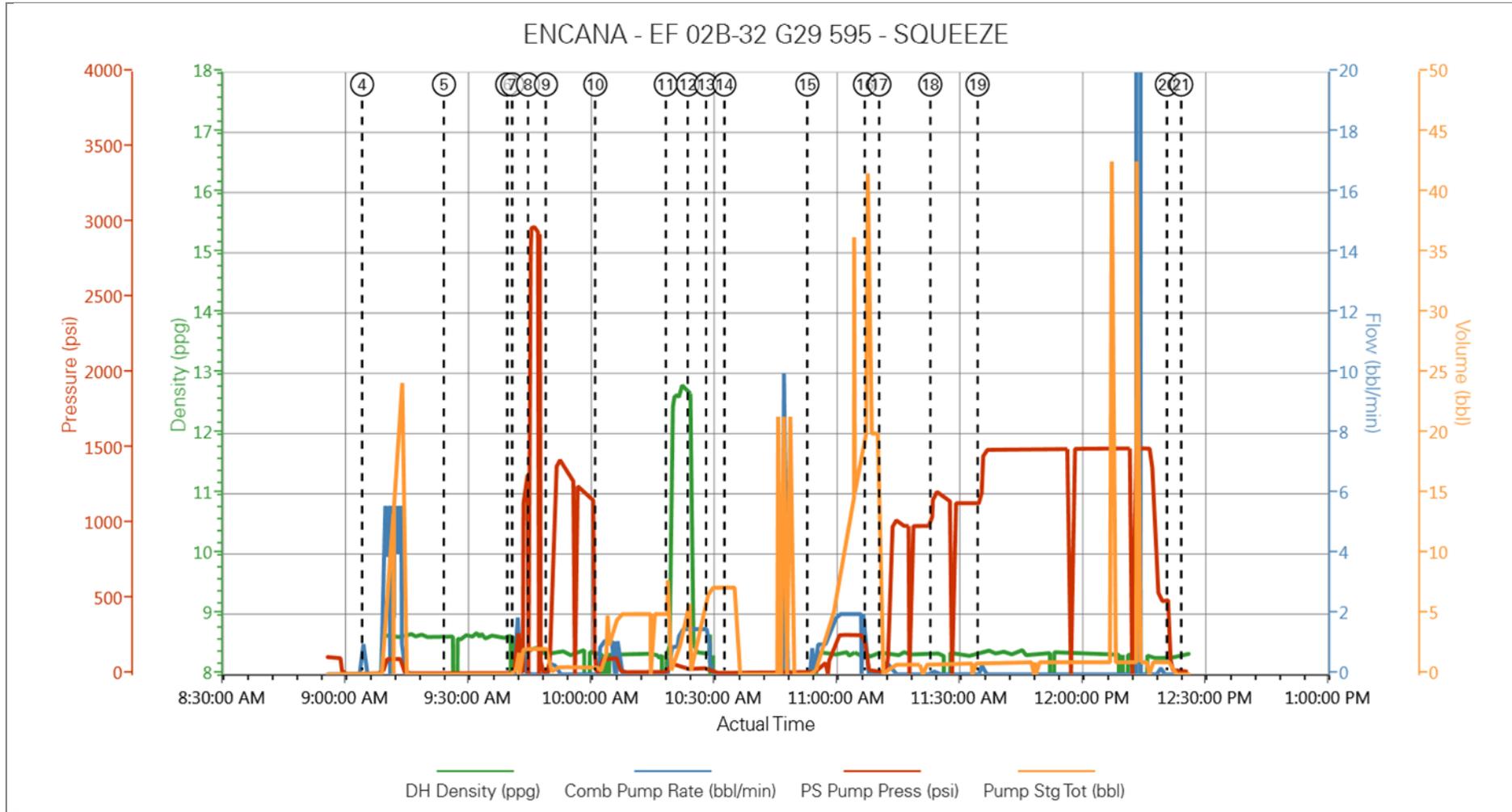
## 2.0 Attachments

### 2.1 Case 1-Custom Results.png



3.0 Custom Graphs

3.1 Custom Graph



4.0 Appendix

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4.1 One-Minutes Real-Time Data Listing

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