

HALLIBURTON

iCem® Service

K P KAUFFMAN CO INC-EBUS

Ft. Lupton District, CO

For: Rick Ramos

Date: Tuesday, August 27, 2019

Chaplin Amaco F 1

Weld

Operator Geoff Miller Tiger 11542778

Job Date: Tuesday, August 27, 2019

Sincerely,

Steve Markovich

1.0 Real-Time Job Summary

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	PS Pump Press (psi)	Pump Stg Tot (bbbl)	PS Pump Rate (bbbl/min)	Comments
Event	1	Call Out	Call Out	8/27/2019	02:30:00	USER					Job called out with an on location time of 07:00.
Event	2	Crew Leave Yard	Crew Leave Yard	8/27/2019	06:15:00	USER					JSA with HES on driving safety and route to rig.
Event	3	Arrive at Location from Service Center	Arrive at Location from Service Center	8/27/2019	06:50:00	USER					Arrived on location, rig crew was just arriving to get set up.
Event	4	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	8/27/2019	07:00:00	USER					JSA and hazard hunt with HES crew.
Event	5	Safety Meeting	Safety Meeting	8/27/2019	08:21:20	USER	8.63	2.00	31.10	0.00	Eric Barranco led safety meeting with HES and rig crew on job safety and procedure.
Event	6	Start Job	Start Job	8/27/2019	08:25:50	COM4	8.50	7.00	31.10	0.00	1st squeeze Retainer at 2450' perfs at 2500', 2 3/8" 4.7# Tubing 4 1/2" 11.6# Casing. 2nd squeeze Retainer at 650' Perfs at 700', 2 3/8" 4.7# Tubing 4 1/2" 11.6# Casing. 3rd Balanced plug at 650' 5bbls (25skgs) 322' TOC @ 375' (tagged at)
Event	7	Test Lines	Test Lines	8/27/2019	08:28:45	COM4	8.55	905.00	0.10	0.00	Set Kick outs to 500psi and check low pressure kick outs, then bring pressure up to 3500psi and hold.
Event	8	Pump Spacer 1	Pump Spacer 1	8/27/2019	08:37:52	COM4	8.51	65.00	0.00	0.90	Pump to gain circulation, After 1bbl we gained circulation.



(v. 5.1.101.0)

Created: Tuesday, August 27, 2019

HALLIBURTON

Customer: K P KAUFFMAN CO INC-EBUS
 Job: KPK Chaplin Amaco F 1 2141892
 Case: Operator Geoff Miller Tiger 11542778 | SO#: 905931093

Event 9	Circulate Well	Circulate Well	8/27/2019	08:40:14	COM4	8.51	76.00	0.00	0.50	Injection test. 1bbbl/min 80psi, 2bbbl/min 200psi.
Event 10	Pump Cement	Pump Cement	8/27/2019	08:57:08	COM4	8.48	46.00	0.00	0.00	Pump 8.19bbls (40sks) of 15.8ppg 1.15yield Cement. Pumped at 2bbbl/min 200psi.
Event 11	Pump Displacement	Pump Displacement	8/27/2019	09:02:11	COM4	15.96	118.00	0.00	2.50	Pump 8.5bbls fresh H2O leaving 1bbl on top of retainer.
Event 12	Shutdown	Shutdown	8/27/2019	09:06:19	COM4	7.97	-1.00	8.10	0.00	Shutdown and clean pumps and lines
Event 13	Circulate Well	Circulate Well	8/27/2019	11:01:54	COM4	8.28	9.00	46.80	0.00	Circulate to get returns.
Event 14	Pump Cement	Pump Cement	8/27/2019	11:07:24	COM4	8.20	2.00	0.00	0.00	Pump 50sks of 15.8ppg 1.15 yield Cement. Pumped at 2bbl/min 28psi.
Event 15	Pump Displacement	Pump Displacement	8/27/2019	11:17:33	COM4	15.86	124.00	0.00	2.50	Pumped 2.5bbls of H2O to displace to the retainer.
Event 16	Circulate Well	Circulate Well	8/27/2019	11:52:08	COM4	8.35	11.00	0.00	1.10	Pumped 10bbls of fresh water to circulate the well clean before balanced plug.
Event 17	Pump Cement	Pump Cement	8/27/2019	12:05:07	COM4	8.22	22.00	0.00	1.10	Pump 5bbls (25sks) of 15.8ppg 1.15yield Cement. Pumped at 2.5bbls/min 99psi. Added 50lbs or 2% CC on the fly.
Event 18	Pump Displacement	Pump Displacement	8/27/2019	12:07:10	COM4	16.52	95.00	0.00	2.50	Pump 1.3bbls of H2O to balance plug.
Event 19	Shutdown	Shutdown	8/27/2019	12:26:55	COM4	8.21	10.00	38.00	0.00	
Event 20	Circulate Well	Circulate Well	8/27/2019	14:21:16	COM4	8.17	12.00	38.00	0.00	Pumped 1.5bbls to gain circulation. Shut in 4.5 and pressured up immediately. Shutdown as there was a leak coming to surface.
Event 21	Circulate Well	Circulate Well	8/27/2019	14:56:47	COM4	8.13	14.00	2.10	0.00	Pumped 1.75bbl in and pressure came up to 223psi

ICem Service

(v. 5.1.101.0)

Created: Tuesday, August 27, 2019

HALLIBURTON

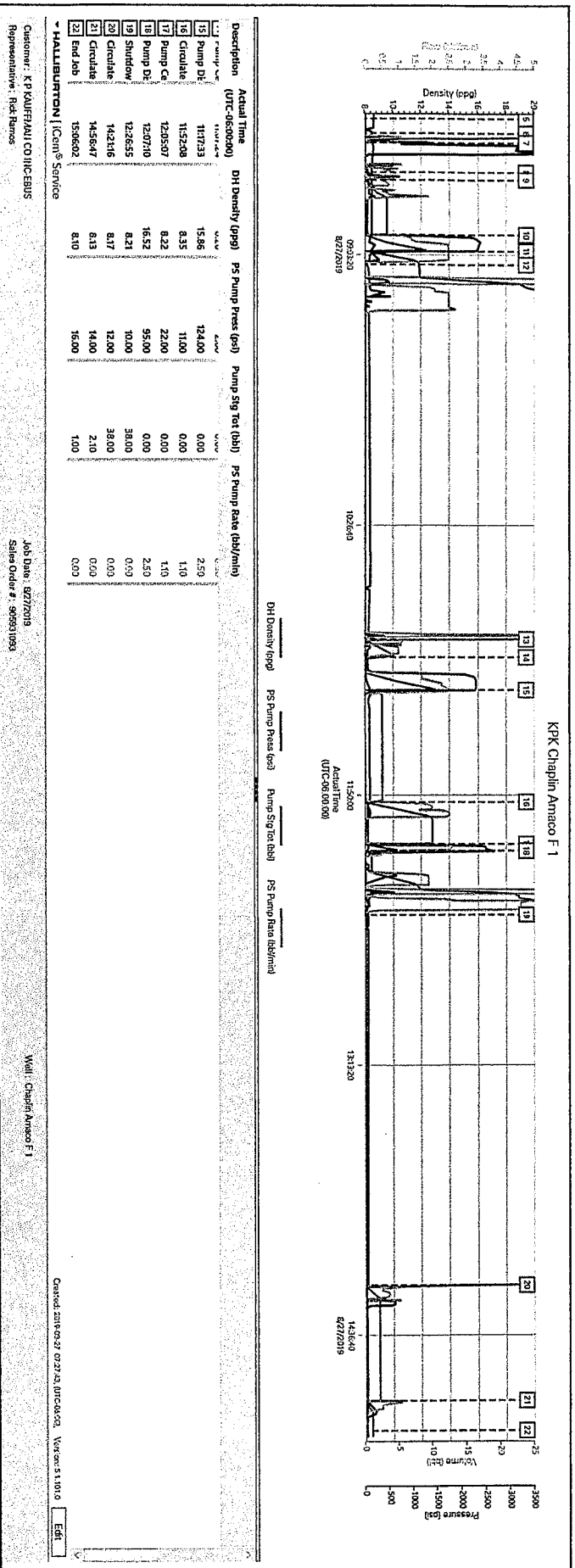
Customer: K P KAUFFMAN CO INC-EBUS
Job: KPK Chaplin Amaco F 1 2141892
Case: Operator Geoff Miller Tiger 11542778 | SO#: 905931093

and held. Released pressure
and got back 1.5bbls. Shut
in well and put a gauge on it
to monitor pressure over
night.

Event	22	End Job	End Job	8/27/2019	15:06:02	COM4	8.10	16.00	1.00	0.00
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2.0 Attachments

2.1 Operator Geoff Miller Tiger 11542778-Custom Results.png



HALLIBURTON

iCem[®] Service

K P KAUFFMAN CO INC-EBUS

United States of America, COLORADO

For: Rick Ramos

Date: Thursday, September 19, 2019

KPK Squeeze Champlin Amoco F1 214892

ADAMS, KPK Squeeze Champlin Amoco F1 214892

Sincerely,

Thomas Haas and Crew

2.0 Real-Time Job Summary

2.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)	DH Density (ppg)	Comments
Event	1	Call Out	Call Out	9/19/2019	04:00:00	USER					CREW CALLED OUT AT 04:00 9/19/2019, REQUESTED ON LOCATION 010:00 9/19/2019, CREW PICKED UP CEMENT, CHEMICALS (200 LBS OF CALCIUM CHLORIDE, 100 LBS SUGAR FROM FORT LUPTON, CO. Bulk 660: 12644833/11566182 PUMP ELITE: 11897034/11645460.
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/19/2019	08:45:00	USER					DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW
Event	3	Crew Leave Yard	Crew Leave Yard	9/19/2019	09:00:00	USER					STARTED JOURNEY MANAGEMENT.
Event	4	Arrive At Loc	Arrive At Loc	9/19/2019	10:00:00	USER					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB, RETAINER SET AT 1050', PERFERATIONS AT 1100', 2.875 4.7# TUBING, 4.5" 10.5# CASING. 8.4 PPG WELL FLUID, FRESH WATER DISPLACEMENT.
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	9/19/2019	10:05:00	USER					HAZARD HUNT, DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH LOCATION, RIG UP AND WEATHER.

Event 6	Rig-Up Equipment	Rig-Up Equipment	9/19/2019	10:15:00	USER							CREW STAGED EQUIPMENT AND RIGGED UP BULK IRON, AND WATER HOSES TO PERFORM JOB.
Event 7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	9/19/2019	10:45:00	USER	0.00	12.00	0.00		8.53		MEETING WITH HALLIBURTON AND RIG PERSONNEL. COMMUNICATED POTENTIAL SAFETY HAZARDS AND JOB DETAILS.
Event 8	Start Job	Start Job	9/19/2019	10:49:41	COM4	0.00	10.00	0.00		8.53		START JOB DATA RECORDING.
Event 9	Test Lines	Test Lines	9/19/2019	10:51:48	COM4	0.00	148.00	0.30		8.32		PRESSURE TESTED IRON TO 3400 PSI, 500 PSI K/O OUT @ 1000 PSI, 5TH GEAR STALL AT 2100 PSI.
Event 10	Break Formation	Break Formation	9/19/2019	10:54:40	COM4	0.00	12.00	0.30		8.37		CIRCULATE FULL CAPACITY OF TUBING, 4 BBL
Event 11	Break Formation	Break Formation	9/19/2019	10:58:14	COM4	0.00	19.00	1.10		8.29		INJECTION RATE TEST, 5 BBL MIN 650 PSI, PUMPED 15 BBL.
Event 12	Pump Cement	Pump Cement	9/19/2019	11:10:44	COM4	0.00	17.00	15.00		8.28		PUMP 16.3 BBL OF CEMENT, 80 SKS, 1.15 YIELD, 5.0 GAL/SK, ADDED 2% CC ON FLY, 150 LBS.
Event 13	Pump Displacement	Pump Displacement	9/19/2019	11:18:58	COM4	0.00	11.00	0.00		17.79		PUMP 3.3 BBL OF FRESH WATER DISPLACEMENT TO SPOT CEMENT 50' ON TOP OF RETAINER.
Event 14	End Job	End Job	9/19/2019	11:20:13	USER	0.00	27.00	2.20		7.96		END JOB DATA RECORDING.
Event 15	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	9/19/2019	14:00:00	USER							DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.

HALLIBURTON

Customer: K P KAUFFMAN CO INC-EBUS
Job: KPK Squeeze Champlin Amoco F1 214892
Case: KPK Squeeze | SO#: 905989032

Event	16	Rig-Down Completed	Rig-Down Completed	9/19/2019	14:10:00	USER	ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL
Event	17	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/19/2019	14:20:00	USER	DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event	18	Crew Leave Location	Crew Leave Location	9/19/2019	14:30:00	USER	THANK YOU FOR USING HALLIBURTON - THOMAS HAAS AND CREW.

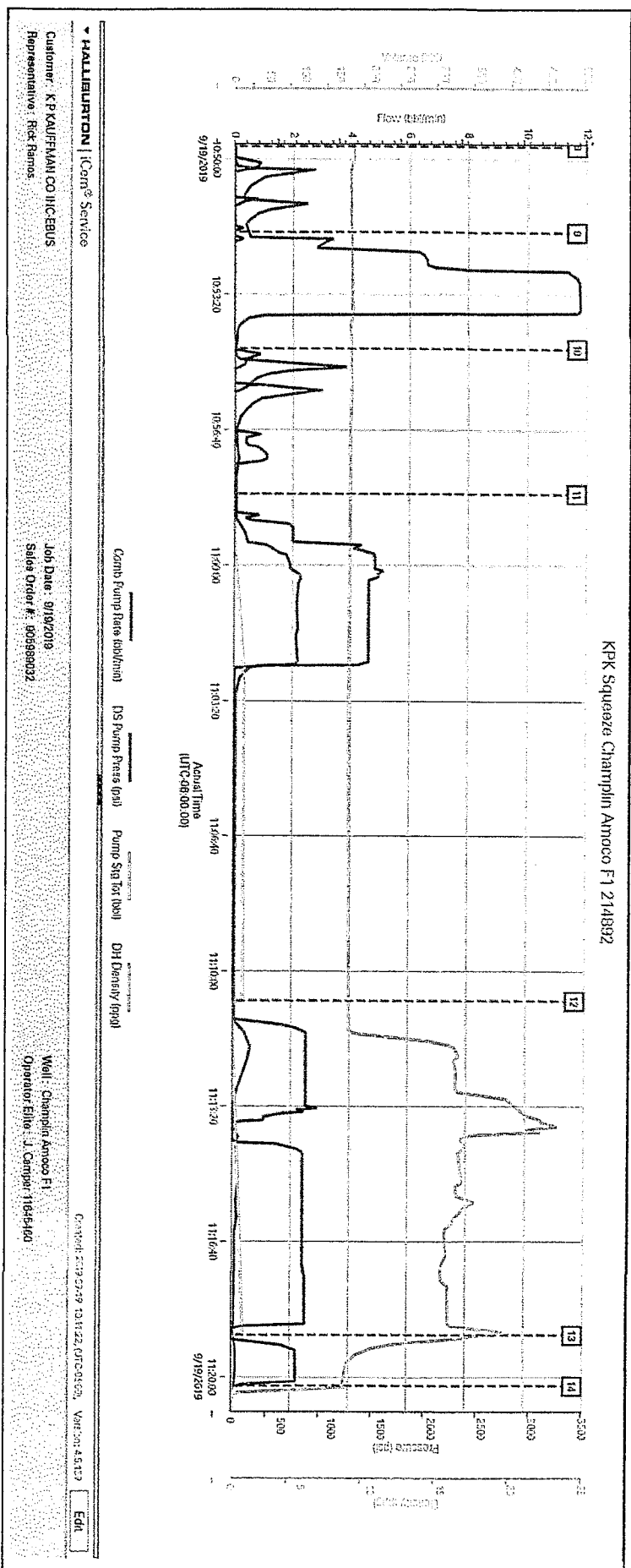
3.0 Attachments

3.1 KPK Squeeze -Custom Results (1).png

KPK Squeeze Champlin Amoco F1 214892

Description	Actual Time (UTC-05:00:00)	Comb Pump Rate (bbl/min)	DS Pump Press (psf)	Pump Sig Tot (bbl)	DI Density (ppg)
8 Start Job	10:49:41	0.00	10.00	0.00	8.50
9 Test Lines	10:51:48	0.00	140.00	0.00	8.50
10 Break Formation	10:54:40	0.00	12.00	0.00	8.50
11 Break Formation	10:58:14	0.00	19.00	0.00	8.50
12 Pump Cement	11:01:44	0.00	17.00	0.00	8.50
13 Pump Displacement	11:08:58	0.00	14.00	0.00	8.50
14 End Job	11:20:13	0.00	27.00	0.00	7.50

3.2 KPK Squeeze -Custom Results (2).png



Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 303209	Ship To #: 2141892	Quote #:	Sales Order #: 0905989032
Customer: K P KAUFFMAN CO INC-EBUS		Customer Rep: Rick Ramos	
Well Name: Chaplin Amaco F 1	Well #: 2141892	API/UWI #:	
Field:	City (SAP): BENNETT	County/Parish: ADAMS	State: COLORADO
Legal Description:			
Contractor: UNKNOWN		Rig/Platform Name/Num: WORKOVER RIG	
Job BOM: 7526 7526			
Well Type: GAS			
Sales Person: HALAMERICA\H120097		Srcv Supervisor: Thomas Haas	
Job			

Formation Name			
Formation Depth (MD)	Top	Bottom	
Form Type		BHST	
Job depth MD	1100ft	Job Depth TVD	1100
Water Depth		Wk Ht Above Floor	4
Perforation Depth (MD)	From	To	

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
Tubing		2.375	1.995	4.7		J-55	0	1050		0
Casing		4.5	4.052	10.5		N-80	0	6980		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Retainer	4.5	1	KPK	1100				

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	PLUG 1	HALCEM (TM) SYSTEM	80	sack	15.8	1.15	5	4	400	
	5 Gal									FRESH WATER
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	PLUG 2	HALCEM (TM) SYSTEM		sack	15.8	1.15		2	5	
	5 Gal									FRESH WATER

Cementing Job Summary

Cement Left In Pipe	Amount	ft 50	Reason	Shoe Joint	
Mix Water:	pH 7	Mix Water Chloride:	<300 ppm	Mix Water Temperature:	60 °F
Cement Temperature:	N/A	Plug Displaced by:	8.4 lb/gal F.W	Disp. Temperature:	60 °F
Plug Bumped?	N/A	Bump Pressure:	N/A	Floats Held?	N/A
Cement Returns:	N/A	Returns Density:	N/A	Returns Temperature:	N/A
Comment Injection rate, 5 bbl/min 650 psi, .8 bbl on top of retainer displaced with 3.3 bbl of fresh water.					

HALLIBURTON

iCem Service

K P KAUFFMAN CO INC-EBUS

United States of America, COLORADO

For: Rick Ramos

Date: Tuesday, September 24, 2019

KPK Squeeze Champlin 86 Amoco F 1

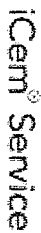
Sincerely,

Thomas Haas and Crew

2.0 Real-Time Job Summary

2.1 Job Event Log

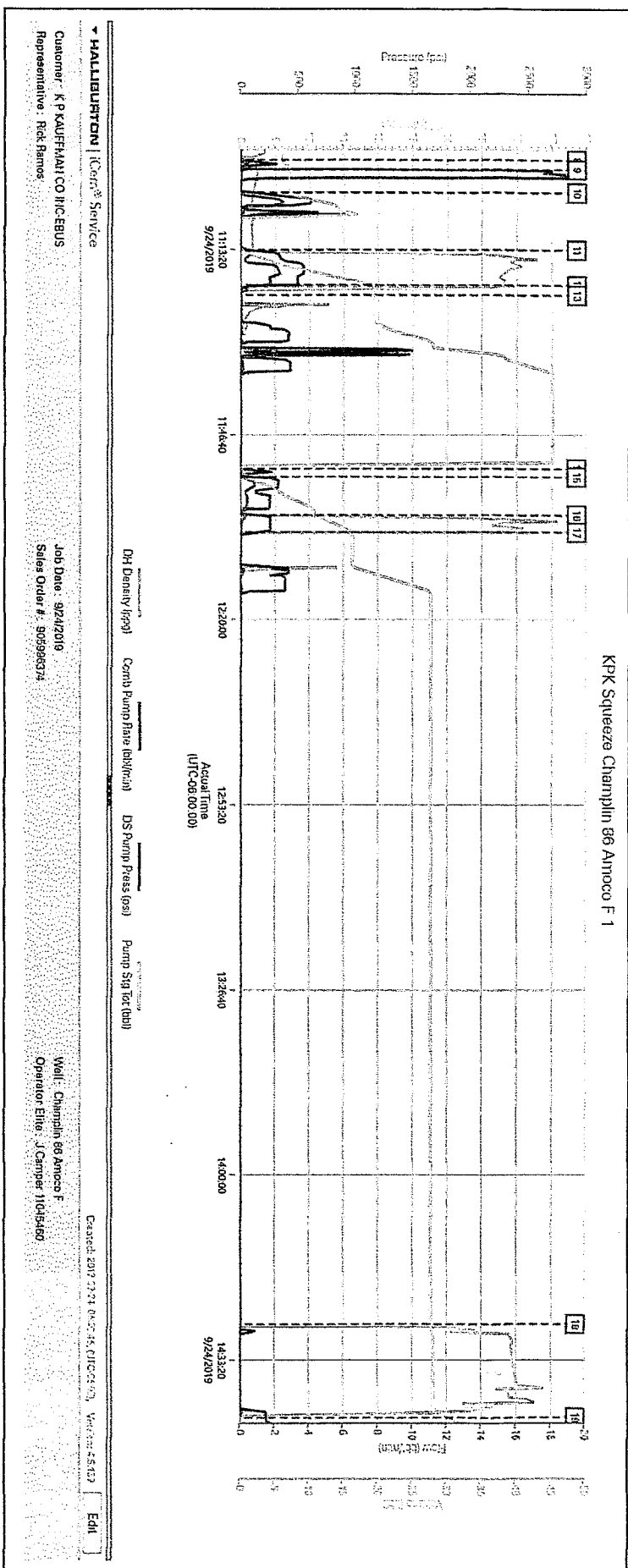
Type	Seq. No.	Activity	Graph Label	Date	Time	Source	DH Density (ppg)	Comb Pump Rate (bbl/mh)	DS Pump Press (psf)	Pump Sig Tot (bbl)	Comments
Event	1	Call Out	Call Out	9/24/2019	03:00:00	USER					CREW CALLED OUT AT 21:30 4/11/2018, REQUESTED ON LOCATION 5:30 4/12/2018. CREW PICKED UP CEMENT, CHEMICALS (25 GAL MUSOL, 25 GAL DUAL SPACER B, 10 GAL D-AIR), 100 LBS SUGAR, AND PLUG CONTAINER FROM FORT LUPTON, CO. BULK 660: 11027125/10867096 Bulk 660: 11062210/11527037 PUMP ELITE: 1264847/11512092
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/24/2019	07:15:00	USER					DISCUSSED ROUTES, HAZARDS, AND COMMUNICATION WITH CREW
Event	3	Crew Leave Yard	Crew Leave Yard	9/24/2019	07:30:00	USER					STARTED JOURNEY MANAGEMENT.
Event	4	Arrive At Loc	Arrive At Loc	9/24/2019	08:00:00	USER					END JOURNEY MANAGEMENT. MEET WITH CO. MAN TO DISCUSS JOB: SURFACE CASING: 9.625" 36# @ 1556', CASING: 5.5" 20# @ 14817', 5' SHOE JOINT, 8.5" OPEN HOLE, TVD @ 6936', 9.7 PPG WELL FLUID, FRESH WATER DISPLACEMENT.



Event 16	Pump Cement	Pump Cement	9/24/2019	12:01:08	USER	7.59	1.70	47.00	11.00	PUMP 20 SACKS 4, BBL, 15.8 PPG, 1.17 YIELD, 4.99 GAL/SKS, ADDED 20 LBS OF CC, HOC PO 2711, TOC PO 3891, CEMENT WAS TAGGED AT 300'.
Event 17	Pump Displacement	Pump Displacement	9/24/2019	12:04:12	USER	15.42	1.70	11.00	16.30	PUMP .8 BBL OF FRESH WATER TO BALANCE WELL.
Event 18	Other	Other	9/24/2019	14:26:54	COM4	7.09	0.00	-6.00	27.70	PUMP 10 SACKS 2 BBL, 15.8 PPG, 1.17 YIELD, 4.99 GAL/SKS, TO TOP OF SURFACE.
Event 19	End Job	End Job	9/24/2019	14:43:42	USER	7.77	1.50	-26.00	30.30	END JOB DATA RECORDING.
Event 20	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	9/24/2019	14:45:00	USER					DISCUSSED POSSIBLE HAZARDS ASSOCIATED WITH WEATHER, LOCATION AND RIGGING DOWN IRON AND HOSES.
Event 21	Rig-Down Completed	Rig-Down Completed	9/24/2019	15:10:00	USER					ALL HALLIBURTON ITEMS WERE STOWED FOR TRAVEL.
Event 22	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	9/24/2019	15:20:00	USER					DISCUSSED ROUTES HAZARDS AND COMMUNICATION WITH CREW.
Event 23	Crew Leave Location	Crew Leave Location	9/24/2019	15:30:00	USER					THANK YOU FOR USING HALLIBURTON - THOMAS HAAS AND CREW.

3.0 Attachments

3.1 KPK Squeeze-Custom Results.png



3.2 KPK Squeeze-Custom Results (1).png

KPK Squeeze Champlin 86 Amoco F 1

Description	Actual Time (UTC-06:00:00)	DH Density (ppg)	Comb Pump Rate (bbl/min)	DS Pump Press (psi)	Pump Stg Tot (bbl)
8 Start Job	10:57:09	6.76	0.00	-6.00	6.76
9 Pressure Test	10:58:54	6.41	0.00	503.00	7.79
10 Break Formation	11:03:04	6.40	0.00	-8.00	8.60
11 Pump Cement	11:13:23	6.86	0.00	6.00	9.69
12 Pump Displacement	11:19:46	66.64	3.30	258.00	10.99
13 Pull Tubing	11:21:34	-0.29	0.00	-9.00	10.69
14 Start Of Plug 2	11:52:51	7.00	0.00	0.00	6.69
15 Circulate Well	11:54:17	7.01	0.00	13.00	6.69
16 Pump Cement	12:01:08	7.50	1.70	47.00	11.69
17 Pump Displacement	12:04:12	28.49	1.70	11.00	16.19
18 Other	14:26:54	7.80	0.00	-6.00	27.70
19 End Job	14:43:42	7.77	1.50	-26.00	30.20

HALLIBURTON | iCem® Service

Customer: K P KAUFFMAN CO INC-EBUS
 Representative: Rick Ramos

Job Date: 9/24/2018
 Sales Order #: 905996374

Well: Champlin 86 Amoco F
 Operator/Elite: J Camper 11464580

Created: 25/09/24 01:24:50 (UTC-07:00) Ver: 4.5.139

EDIT

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 303209	Ship To #: 3994968	Quote #:	Sales Order #: 0905996374
Customer: K P KAUFFMAN CO INC-EBUS		Customer Rep: Rick Ramos	
Well Name: CHAMPLIN 86 AMOCO F	Well #: 1	API/UWI #: 05-123-10460	
Field:	City (SAP): ERIE	County/Parish: WELD	State: COLORADO
Legal Description:			
Contractor: UNKNOWN		Rig/Platform Name/Num: WORKOVER RIG	
Job BOM: 7526 7526			
Well Type: GAS			
Sales Person: HALAMERICA\H120097		Srcv Supervisor: Thomas Haas	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	660ft		Job Depth TVD 660
Water Depth			Wk Ht Above Floor 4
Perforation Depth (MD)	From		To

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
Tubing		2.375	1.995	4.7		J-55	0	660		0
Casing		4.5	4.052	10.5		N-80	0	6980		

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Retainer	4.5	1	KPK	660				

Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/min	Total Mix Fluid Gal	
1	PLUG 1	HALCEM (TM) SYSTEM	70	sack	15.8	1.174	5.15	4	350	
5.15 Gal		FRESH WATER								
Cement Left In Pipe		Amount	ft	Reason				Shoe Joint		

Cementing Job Summary

Mix Water:pH 7	Mix Water Chloride:<300 ppm	Mix Water Temperature:63 °F

Comment Plug 1: 70 SACKS RETAINER AT 660', PERFS AT 700' DISPLACED 2BBL. LEFT .6 BBL ON RETAINER.
PLUG 2: PUMP 20 SACKS, TUBING AT 630 FT, DISPLACED .8 BBL TO BALANCE WELL. TAGGED CEMENT AT 300'.
PLUG 3: PUMP 10 SACKS CEMENT TO SURFACE, TOP WELL OFF.