

The Road to Excellence Starts with Safety

Sold To #: 372073	Ship To #: 2974010	Quote #: 0021943490	Sales Order #: 0901810968
Customer: TAPSTONE ENERGY LLC		Customer Rep: Dale James	
Well Name: KAUP -3407-	Well #: 16-2H	API/UWI #: 15-077-21886-01	
Field: COOPER CREEK	City (SAP): ANTHONY	County/Parish: HARPER	State: KANSAS
Legal Description: W2 SE SW SW-16-34S-7W-330FSL-870FWL			
Contractor: NOMAC		Rig/Platform Name/Num: NOMAC 245	
Job BOM: 7521			
Well Type: HORIZONTAL OIL			
Sales Person: HALAMERICA\HX25353		Srvc Supervisor: Andrew Chambers	
Job			

Formation Name			
Formation Depth (MD)	Top		Bottom
Form Type			BHST
Job depth MD	800ft		Job Depth TVD
Water Depth			Wk Ht Above Floor
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
Open Hole Section			12.25				0	800	0	800
Casing	3	9.625	8.921	36	LTC	J-55	0	800	0	800

Tools and Accessories

Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty	Make
Guide Shoe	7			5425	Top Plug	7		HES
Float Shoe	7				Bottom Plug	7		HES
Float Collar	7				SSR plug set	7		HES
Insert Float	7				Plug Container	7		HES
Stage Tool	7				Centralizers	7		HES

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty

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	Water Spacer	Water Spacer	10	bbl	8.33				

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
2	Lead Cement	EXTENDACEM (TM) SYSTEM	225	sack	12.4	2.132			11.86

0.25 lbm		POLY-E-FLAKE (101216940)							
3 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
3	Tail Cement	SWIFTCEM (TM) SYSTEM	145	sack	15.6	1.207			5.39
2 %		CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
0.1250 lbm		POLY-E-FLAKE (101216940)							
Fluid #	Stage Type	Fluid Name	Qty	Qty UoM	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal	Rate bbl/mi n	Total Mix Fluid Gal
4	Displacement	Displacement	58.6	bbl	8.33				
Cement Left In Pipe	Amount	42 ft			Reason			Shoe Joint	
Mix Water:	pH ##	Mix Water Chloride: ## ppm			Mix Water Temperature: ## °F °C				
Cement Temperature:	## °F °C	Plug Displaced by: ## lb/gal kg/m3 XXXX			Disp. Temperature: ## °F °C				
Plug Bumped?	Yes/No	Bump Pressure: ##### psi MPa			Floats Held?			Yes/No	
Cement Returns:	## bbl m3	Returns Density: ## lb/gal kg/m3			Returns Temperature: ## °F °C				
Comment									

1.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Downhole Density (ppg)	Combined Pump Rate (tbb/min)	Driv-Side Pump Pressure (psi)	Comment
Event	1	Call Out	Call Out	11/11/2014	07:35:00	USER				Andrew Chambers, Scott Aplebee, Levi Stoops, Will Nelson requested time on location 13:30
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	11/11/2014	08:15:00	USER				Disssused safe driving
Event	3	Depart from Service Center or Other Site	Depart from Service Center or Other Site	11/11/2014	08:30:00	USER				Andrew Chambers, Scott Aplebee, Levi Stoops, Will Nelson Met with customer rep went over where to spot equipment, muster area's, and calculations
Event	4	Arrive At Loc	Arrive At Loc	11/11/2014	11:30:00	USER				Identified trip hazards, red zones overhead hazards, pressurized pumping area's, and red zones
Event	5	Assessment Of Location Safety Meeting	Assessment Of Location Safety Meeting	11/11/2014	13:00:00	USER				Discussed trip hazards, red zones overhead hazards, pressurized pumping area's, and red zones, all equipment on location
Event	6	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	11/11/2014	13:30:00	USER				Rigged up ground
Event	7	Rig-Up Equipment	Rig up equipment	11/11/2014	14:00:00	USER				Rig up completed safely
Event	8	Rig-Up Completed	Rig-Up Completed	11/11/2014	14:30:00	USER				Discussed trip hazards, red zones overhead hazards, pressurized pumping area's, and red zones
Event	9	Pre-Job Safety Meeting	Pre-Job Safety Meeting	11/11/2014	15:01:15	USER	1.23	0.00	170.00	Tested lines to 3000 PSI test successful
Event	10	Test Lines	Test Lines	11/11/2014	16:24:42	COM6	8.44	0.00	3000.00	

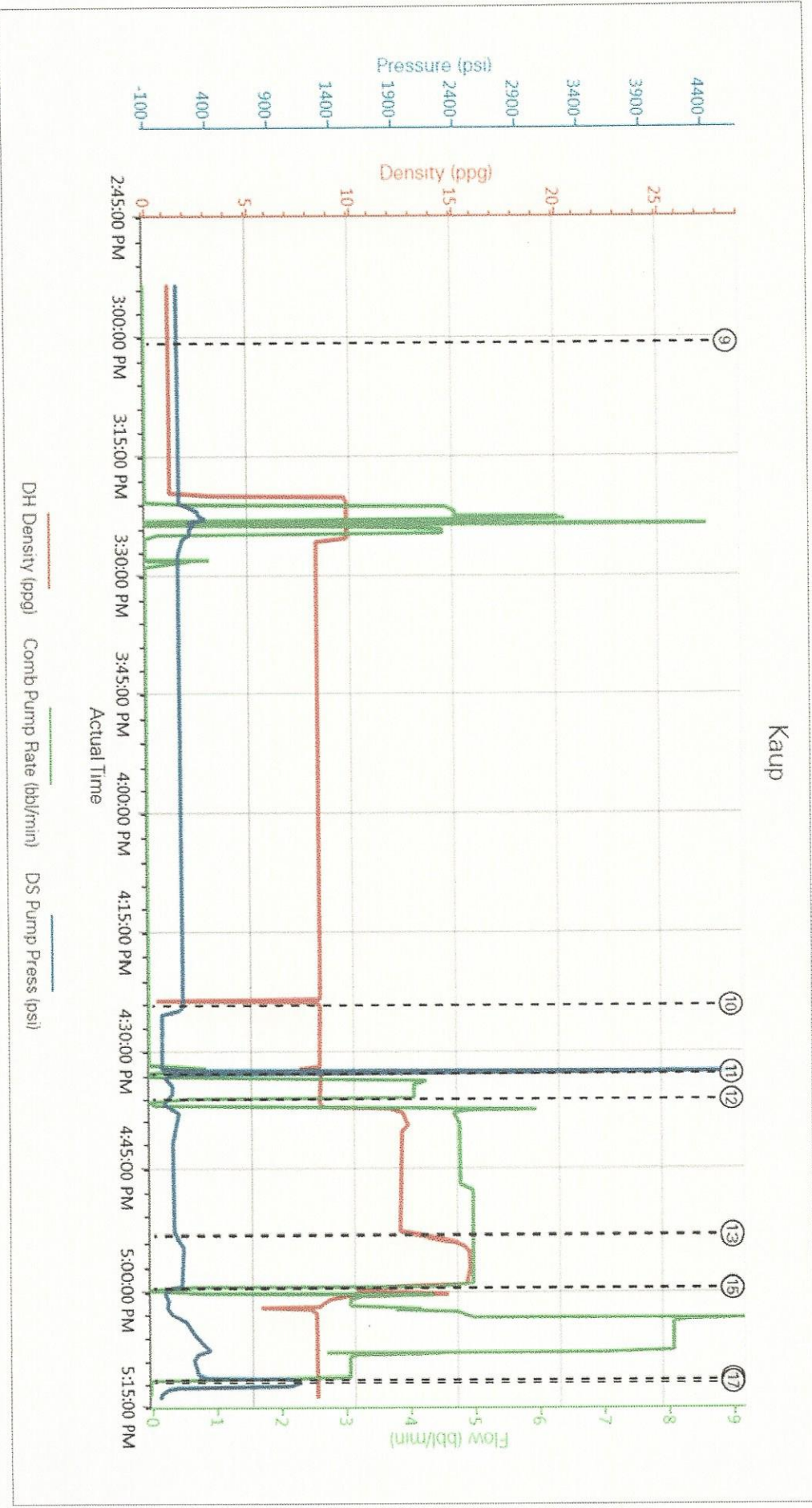
HALLIBURTON

ADVANCED PUMPING UNITS & EQUIP Cement Surface Casing Tapstone Energy

Event 11	Pump Spacer 1	Pump Spacer 1	11/11/2014	16:33:13	COM6	8.37	0.00	21.00	Pumped 10 bbl fresh water spacer
Event 12	Pump Lead Cement	Pump Lead Cement	11/11/2014	16:36:33	COM6	12.31	0.00	19.00	Pumped 85 bbl of Extendacem(12.4lb/gal,2.13cu.ft/sk,11.86lb/gal)
Event 13	Pump Tail Cement	Pump Tail Cement	11/11/2014	16:53:46	COM6	15.51	5.00	144.00	Pumped 31bbl of Swiftcem(15.6lb/gal,1.2cu.ft/sk,5.39 gal/sl)
Event 14	Drop Top Plug	Drop Top Plug	11/11/2014	17:00:00	COM6	10.06	0.00	6.00	Halliburton top plug left cementing head
Event 15	Pump Displacement	Pump Displacement	11/11/2014	17:00:02	COM6	10.02	0.00	5.00	Pumped 58 bbl fresh water displacement
Event 16	Bump Plug	Bump Plug	11/11/2014	17:11:49	COM6	8.19	0.00	1119.00	Bumped plug at calculated displacement
Event 17	Other	Check floats	11/11/2014	17:12:15	COM6	8.15	0.00	1005.00	Floats held 1 bbl bled back,38 bbls cement returns to surface
Event 18	Pre-Rig Down Safety Meeting	Pre-Rig Down Safety Meeting	11/11/2014	18:00:00	USER				Discussed trip hazards,red zones overhead hazards,pressurized pumping areas,and red zones
Event 19	Rig-Down Equipment	Rig-Down Equipment	11/11/2014	18:30:00	USER				Rigged down ground
Event 20	Rig-Down Completed	Rig-Down Completed	11/11/2014	19:00:00	USER				Rig down completed safely
Event 21	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	11/11/2014	19:30:00	USER				Discussed safe driving
Event 22	Depart Location for Home	Depart Location for Home	11/11/2014	20:00:00	USER				Andrew Chambers,Scott Aplebee,Levi Stoops,Will Nelson

2.0 Custom Graphs

2.1 Custom Graph



Tapstone Kaup

SLURRY	SKS	LB/GAL	YIELD	B.F.	CU.FT.	BBL	GAL/SK	H2O REQ		
WELL FLUID	8.6	LB/GAL		0.8686						
SPACER	8.33	LB/GAL				30		20		
DISPLACEMENT FLUID	8.33	LB/GAL								
Lead Cement	225	SKS	2.13	CU.FT.	479.25	85.35443	11.86	63.53571		
LB/GAL	12.4									
Tail Cement	145	SKS	1.2	CU.FT.	174	30.9894	5.39	18.60833		
LB/GAL	15.6									
WELL INFORMATION	TD	804	FEET	HOLE SIZE	12.25	INCHES				
PREVIOUS CASING INFO	TD	0	FEET	OD	12.715	INCHES	ID	13.375	INCHES	
WEIGHT AND GRADE	SIZE	13.375	LB/FT	48	GRADE	OH FACTOR	ID	0.05578	BBL/FT	
CASING INFORMATION	TD	804	FEET	OD	9.625	INCHES	ID	8.921	INCHES	
WEIGHT AND GRADE	SIZE	9.625	LB/FT	36	GRADE	J-55				
SHOE INFORMATION	TD	45.15	FEET							
WEIGHT AND GRADE	SIZE	9.625	LB/FT	36	GRADE	J-55				
DISPLACEMENT	758.85	FEET	0.077308	BBL/FT	58.66528	BBLs				
SHOE	45.15	FEET	0.077308	BBL/FT	3.490462	BBLs				
HEIGHTS										
OUTSIDE										
TAIL	492.9927	FEET	15.6	LB/GAL	399.5311	PSI				
LEAD	311.0073	FEET	12.4	LB/GAL	200.3447	PSI	OUTSIDE HYDROSTATIC			
								599.8758	PSI	
SPACER	0	FEET	8.33	LB/GAL	0	PSI				
INSIDE										
DISPLACEMENT	758.85	FEET	8.33	LB/GAL	328.3874	PSI	INSIDE HYDROSTATIC	364.9779	PSI	
SHOE	45.15	FEET	15.6	LB/GAL	36.59046	PSI				
PSI TO BUMP PLUG	234.898	PSI								
PSI TO LIFT CASING	345.5302	PSI			Top of Lead		0	Feet		
RESULTING FORCE	8049.595	POUNDS			Top of Tail		311.0073	Feet		
WATER REQUIREMENTS	160.8093	BBLs								
CALC CMT RETURNS	71.49702	BBLs								