

CEMENTING LOG

STAGE NO.

Date: 5/12/14 District: Mod. Loc. KS
 Company: Topstone Chain Bond
 Lease: Harper
 County: Harper
 Location: W. Harkston KS
 State: KS
 Well No.: 3509 1-2
 Rig: Nomal #14
 Ticket No.: 62386
 Casing Depths: Top 818 Bottom
 Drill Pipe: Size 12 1/4 Weight Collars
 Open Hole: Size T.D. ft. P.B. to ft.
 CAPACITY FACTORS:
 Casing: Bbs/Lin. ft. .0773 Lin. ft./Bbl. 12.93
 Open Holes: Bbs/Lin. ft. Lin. ft./Bbl.
 Drill Pipe: Bbs/Lin. ft. Lin. ft./Bbl. 17.9272
 Annulus: Bbs/Lin. ft. .0558 Lin. ft./Bbl.
 Perforations: From ft. to ft. Amt.

CEMENT DATA:
 Spacer Type: Fresh H₂O
 Amt.: Skts Yield ft³/sk Density PPG
 LEAD: Pump Time hrs. Type 65:35:6% Goh
 Excess
 Amt.: Skts Yield 255 1.87 ft³/sk Density PPG
 TAIL: Pump Time hrs. Type Class A + 2% cc +
 Excess
 Amt.: Skts Yield 150 1.20 ft³/sk Density PPG
 WATER: Lead 1005 gals/sk Tail 5.22 gals/sk Total
 Pump Trucks Used 892/555
 Bulk Equip. 702
 Float Equip: Manufacturer Weatherford
 Shoe: Type Saw Tooth
 Depth: Seal float collar
 Centralizers: Quantity Plugs Top Bm.
 Stage Collars
 Special Equip. Fresh H₂O
 Disp. Fluid Type Amt. Bbs. Weight PPG
 Mud Type Weight PPG
 COMPANY REPRESENTATIVE: *Myron Dyer*
 CENTER: Jason Thimersch

TIME	AM/PM	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	Bbls Min. RATE	REMARKS
6:30 AM							on location, spot in Rig up. Safety meetings
7:00 AM							Rig Casers Run casing Rig Casers down circ on bottom
12:00 AM							Safety meetings
2:00 PM							Riser test
12:35 PM		350		1088L	10	5%	Ramp Rtk'd
12:38 PM		190		8588L	5%	5%	Mix + Pump 1d cement slurry TOC 5. face
12:58 PM		200		3288L	5	5	Mix + Pump 1d cement slurry TOC 304ft
10:5 PM							Slut down / Release Plug
10:8 PM		400			10		Start displacement
5:00		500		2508L	10		
5:50		550		4488L	10		
3:50		350		4588L	2		Slow to Bump Plug
12:0 PM		900		5788L	0		Bump Plug
							Float did hold
							Cement did circulate
							Circulated 45 Bbls to surface

CEMENTING LOG

STAGE NO.

Date: 5/14
 District: Mad. Lp. KS
 Ticket No.: 62389
 Company: Tapscon
 Lease: Chard
 Well No.: 3509 1-2
 State: KS
 Field: 1-35-9

CASING DATA:
 Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size: 7" Type: P-110 Weight: 26 Collar

Casing Depths: Top: Bottom: 5367

Drill Pipe: Size: 8 3/4 Weight: 5290 T.D. P.B. to: ft.

CAPACITY FACTORS:
 Casing: Bbls/Lin. ft. Lin. ft./Bbl.
 Open Holes: Bbls/Lin. ft. Lin. ft./Bbl.
 Drill Pipe: Bbls/Lin. ft. Lin. ft./Bbl.
 Annulus: Bbls/Lin. ft. Lin. ft./Bbl.
 Perforations: From: ft. to: ft. Amt.

COMPANY REPRESENTATIVE: *Shelton Stone*

TIME AM/PM PRESSURES PSI ANNULLUS TOTAL FLUID Pumped Per Time Period Bbls Min. RATE

TIME	AM/PM	PRESSURES PSI	ANNULUS	TOTAL FLUID	Pumped Per Time Period	Bbls Min. RATE	REMARKS
9:00 PM							On line spot in Rig up running casing safety valves
2:00 AM	3:50			20 BBL	10		Lead filling plug
2:05 AM	4:40			20 BBL	10		Press test
2:10 AM	4:50			35 BBL	5 1/2		Ramp Profit
2:18 AM	3:00			19 BBL	5		Mix of Pump 4 cement slurry TOC 4770
2:26 AM							Shut down Release Plug Top
2:30 AM	3:20			30 BBL	10		Start displacement
3:70				30 BBL	10		
5:20				70 BBL	10		
5:70				70 BBL	10		
6:20				100 BBL	10		
6:70				120 BBL	10		
7:70				40 BBL	10		
9:30				160 BBL	10		
7:50				185 BBL	3		Stop to Bump Plug
8:90				199 BBL	3		Bump Plug
14:00				199 1/2 BBL			Block 1 BBL

CEMENT DATA:
 Spacer Type: Super Flash
 Amt: Sks Yield: ft³/sk Density: PPG
 LEAD: Pump Time: hrs. Type: 50:50:29G+1.4%
 Excess: 30%
 Amt: 140 Sks Yield: 1.4 ft³/sk Density: PPG
 TALL: Pump Time: hrs. Type: FL-160+1% C-51 (Class A)
 Excess: 30%
 Amt: 90 Sks Yield: 1.18 ft³/sk Density: PPG
 WATER: Lead: 6.75 gals/sk Tail: 5.17 gals/sk Total
 Pump Trucks Used: 548/345
 Bulk Equip: 381/252

Float Equip: Manufacturer: *Dann 301 float shoe*
 Shoe: Type: *301 float shoe* Depth: *301 float shoe*
 Float: Type: *301 float shoe* Depth: *301 float shoe*
 Centralizers: Quantity: *301 float shoe* Plugs Top: *301 float shoe* Btm.
 Stage Collars: *301 float shoe*
 Special Equip: *301 float shoe*
 Disp. Fluid Type: *301 float shoe* Amt: *301 float shoe* Bbls. Weight: PPG
 Mud Type: *301 float shoe* Weight: PPG

CEMENTER: *Sutton Throck*

The Road to Excellence Starts with Safety

Sold To #:	372073	Ship To #:	2965150	Quote #:	0021881013	Sales Order #:	0901419706
Customer:	TAPSTONE ENERGY LLC	Customer Rep:	DANIEL MILLER	Well #:	1-2H	API/UMI #:	15-077-21875-01
Well Name:	CHAIN LAND -3509-	City (SAP):	ANTHONY	County/Parish:	HARPER	State:	KANSAS
Field:	WILDCAT	Legal Description:	W2 SE SW SW-1-35S-9W-330FSL-975FWL				
Contractor:	NOMAC	Rig/Platform Name/Num:	NOMAC 14				
Job BOM:	7524	Well Type:	HORIZONTAL OIL				
Sales Person:	HALAMERICA\HX25353	Srvc Supervisor:	Daniel Brisco				
Job							
Formation Name		Formation Depth (MD)	Top	Bottom			
Form Type		Form Type		BHST		134 degF	
Job depth MD		Job depth MD	11600ft	Job Depth TVD			
Water Depth		Water Depth		WK Ht Above Floor			
Perforation Depth (MD)	From	To					
Well Data							
Description	New / Used	Size in	ID in	Weight lbm/ft	Grade	Top MD ft	Bottom MD ft
Drill Pipe		4	3.34	14		5045	
Casing	3	7	6.276	26	P-110	0	5388
Casing		4.5	4	11.6	N-80	5045	11600
Open Hole Section			6.125				
Tools and Accessories							
Type	Size in	Qty	Make	Depth ft	Type	Size in	Qty
Guide Shoe	4.5	1	BKR	11600	Top Plug	4.5	1
Float Shoe					Bottom Plug		
Float Collar	4.5	1	BKR	11549.2	SSR plug set		
Insert Float					Plug Container	4.5	1
Stage Tool					Centralizers		
Miscellaneous Materials							
Gelling Agt	Conc		Surfactant		Conc	Acid Type	Qty
Treatment Fid	Conc		Inhibitor		Conc	Sand Type	Qty
Fluid Data							
Fluid #	Stage Type	Fluid Name	Qty	Qty Uom	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal
1	9.2 lb/gal Tuned Spacer III	Tuned Spacer III	0	bbl	9.2		
Stage/Plug #: 1							
Fluid #	Stage Type	Fluid Name	Qty	Qty Uom	Mixing Density lbm/gal	Yield ft3/sack	Mix Fluid Gal
20.23 lbm/bbl		BARITE, BULK (100003681)					
39.73 gal/bbl		FRESH WATER					
1 lbm/bbl		FE-2 (100001615)					

Stephen Brown

Fluid #	Stage Type	Fluid Name	Qty	Qty UOM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi	Total Mix Fluid Gal
2	Primary Cement	50/50 Poz Standard		sack	13.6	1.513		4	7.33
4%		HALLIBURTON GEL, 50 LB SK (100064040)							
0.50%		D-AIR 5000, 50 LB SACK (102068797)							
0.10%		SA-1015, 50 LB SACK (102077046)							
0.50%		HALAD(R)-9, 50 LB (100001617)							
47 lbm		CMT - STANDARD - CLASS A REG OR TYPE I, BULK (100003684)							
41.50 lbm		POZMIX A FLYASH (100003690)							
7.32 Gal		FRESH WATER							
Fluid #	Stage Type	Fluid Name	Qty	Qty UOM	Mixing Density lbm/gal	Yield ft ³ /sack	Mix Fluid Gal	Rate bbl/mi	Total Mix Fluid Gal
3	BE-9 + CLAWEB Displacement	BE-9 + CLAWEB Displacement	138.7	bbl	8.33				
									Cement Left in Pipe
									Amount 50.84 ft
									Reason Shoe Joint
									Comment

HALLIBURTON

Cementing Job Summary


HALLIBURTON

HALLIBURTON ENERGY INSTITUTE

Tapstone Chain Land 1-2H liner

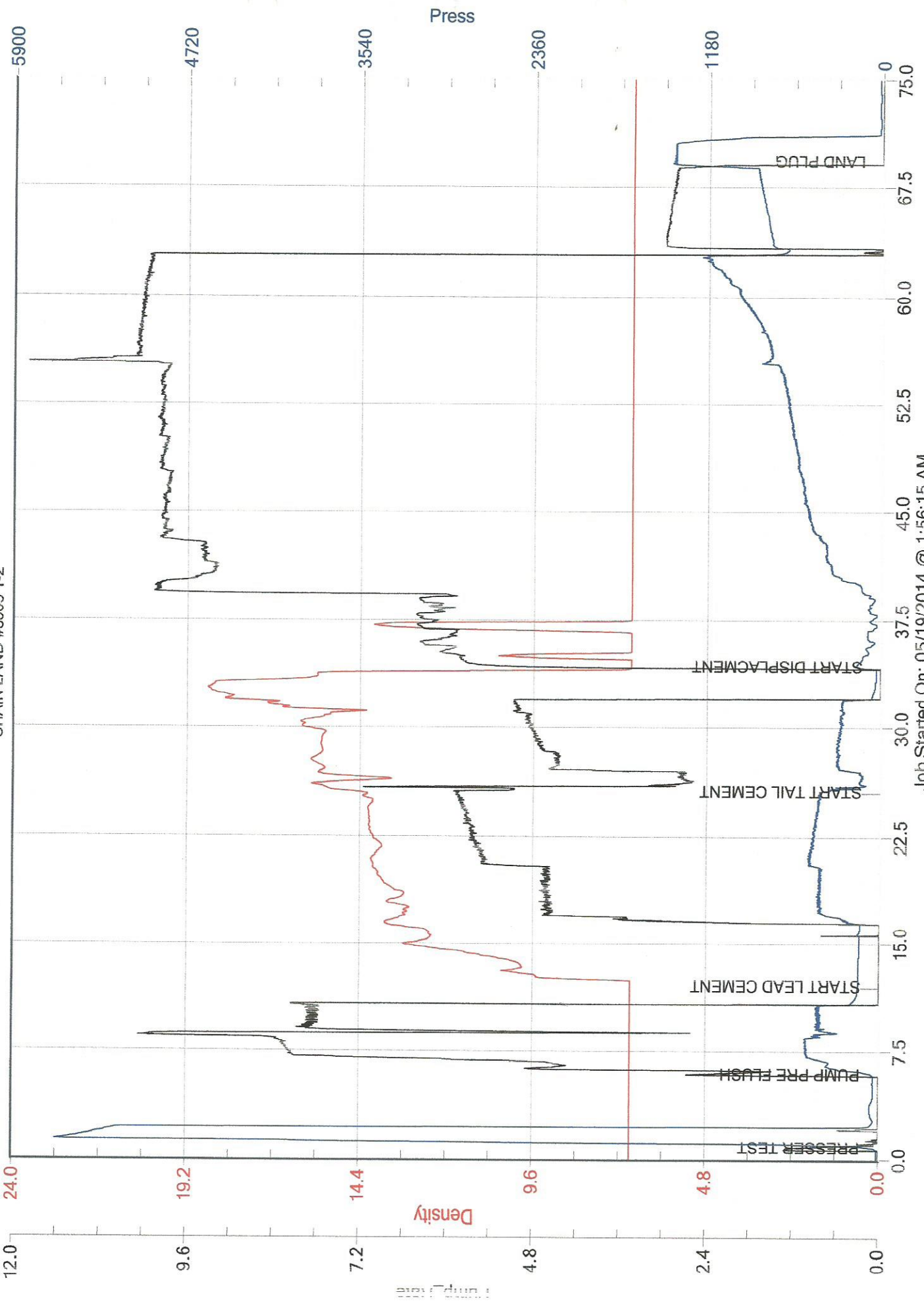
Case 1

3.1 Job Event Log

Type	Seq. No.	Activity	Graph Label	Date	Time	Source	Pass-Side Pump Pressure (psi)	Downhole Density (ppg)	Combined Pump Rate (bbl/min)	Comment
Event	1	Call Out	Call Out	6/11/2014	20:00:00	USER				
Event	2	Pre-Convoy Safety Meeting	Pre-Convoy Safety Meeting	6/11/2014	23:00:00	USER				TALKED ABOUT THE ROUTE WE WERE GOING TO TAKE ANMD ANY STOPS WE WERE GOING TO MAKE. ALSO TALKED ABOUT THE WEATHER BECAUSE WE ARE SUPPOSE TO GET STORMS.
Event	3	Depart Location for Service Center or Other Site	Depart Location for Service Center or Other Site	6/11/2014	23:15:00	USER				
Event	4	Arrive At Loc	Arrive At Loc	6/12/2014	01:30:00	USER				REQUESTED ON LOCATION AT 2:00
Event	5	Pre-Rig Up Safety Meeting	Pre-Rig Up Safety Meeting	6/12/2014	02:00:00	USER				WENT OVER THE JSA AND TALKED ABOUT HOW WE WERE GOING TO RIG UP THE JOB. EXPLAINED TO THE GUYS TO WATCH THEIR STEPS WITH ALL THE MUD.
Event	6	Rig-Up Equipment	Rig-Up Equipment	6/12/2014	02:15:00	USER				TALKED TO THE COMPANY MAN ABOUT OUR SAFETY PROCEDURES AND THE JOB DETAILS. EVERYONE WAS ON THE SAME PAGE.
Event	7	Pre-Job Safety Meeting	Pre-Job Safety Meeting	6/12/2014	03:45:00	USER	6.00	-0.07	0.00	
Event	8	Rig-Up Completed	Rig-Up Completed	6/12/2014	03:54:00	USER	6.00	-0.07	0.00	TESTED LINES TO 500 AND THEN 6000
Event	9	Test Lines	Test Lines	6/12/2014	03:57:43	COM7	2461.00	-0.09	0.00	30 BBL OF TUNE 3 SPACER AT 9.2 LB/GAL AND WE HAD 63 PSI
Event	10	Pump Spacer 1	Pump Spacer 1	6/12/2014	04:10:08	COM7	12.00	8.39	1.80	

TAPSTONE ENERGY

CHAIN LAND #3509 1-2



Job Started On: 05/19/2014 @ 1:56:15 AM