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# **CHEVRON - MID-CONTINENT EBIZ**

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**SKR 698-09-AV-13  
SKINNER RIDGE  
Garfield County , Colorado**

**Cement Production Casing**  
**04-Apr-2009**

**Job Site Documents**

## The Road to Excellence Starts with Safety

Sold To #: 338668	Ship To #: 2713356	Quote #:	Sales Order #: 6585509
Customer: CHEVRON - MID-CONTINENT EBIZ	Customer Rep: MEIER, DAN		
Well Name: SKR	Well #: 698-09-AV-13	API/UWI #: 05-045-17290	
Field: SKINNER RIDGE	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Contractor: CHEVRON	Rig/Platform Name/Num: H&P 318		
Job Purpose: Cement Production Casing			
Well Type: Development Well	Job Type: Cement Production Casing		
Sales Person: DUNNING, DUSTIN	Srv Supervisor: STILLSON, ERIC	MBU ID Emp #: 393789	

## Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CLARKE, GERALD C	5	441763	CRONKHITE, KENT Alan	5	336769	HANSEN, TED Lance	5	396847
STILLSON, ERIC W	5	393789	WEAVER, CARLTON Russell	5	457698	WHITE, EDWARD W	5	424173
WILKE, ANDREW	5	398822						

## Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10025034	120 mile	10719776	120 mile	10804487	120 mile	10872429	120 mile
10897909	120 mile	6334	120 mile				

## Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
04-04-09	5	2						

TOTAL	Total is the sum of each column separately							
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## Job

Formation Name	Top	Bottom	Job Times	Date	Time	Time Zone
Formation Depth (MD)			Called Out	04 - Apr - 2009	10:00	MST
Form Type		BHST	On Location	04 - Apr - 2009	14:30	MST
Job depth MD	6238. ft	Job Depth TVD	Job Started	04 - Apr - 2009	17:05	MST
Water Depth		Wk Ht Above Floor	Job Completed	04 - Apr - 2009	18:41	MST
Perforation Depth (MD)	From	To	Departed Loc	04 - Apr - 2009	21:30	MST

## Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
OPEN HOLE				7.875				1018.	6238.		
PRODUCTION CSG	Unknown		4.5	4.	11.6				6238.		
SURFACE CSG	Unknown		8.625	8.097	24.				1018.		

Sales/Rental/3<sup>rd</sup> Party (HES)

Description	Qty	Qty uom	Depth	Supplier
PLUG,CMTG,TOP,4 1/2,HWE,3.65 MIN/4.14 MA	1	EA		
ADC (AUTO DENSITY CTRL) SYS, /JOB,ZI	1	JOB		
PORT. DAS W/CEMWIN;ACQUIRE W/HES, ZI	1	JOB		

## Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer			
Float Shoe					Bridge Plug			
Float Collar					Retainer			
Insert Float								
Stage Tool								
					Top Plug	4.5	1	
					Bottom Plug			
					SSR plug set			
					Plug Container	4.5	1	
					Centralizers			



**HALLIBURTON****Cementing Job Summary**

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 <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk				
1	Dyed Polyflake Spacer		40.00	bbl	8.33	.0	.0	4.0					
2	Lead Cement	VARICEM (TM) CEMENT (452009)	320.0	sacks	12.8	1.6	7.31	6.0					
3	Tail Cement	VARICEM (TM) CEMENT (452009)	660.0	sacks	13.2	1.47	6.32	6.0					
4	KCL DISPLACEMENT		96.00	bbl	8.45	.0	.0	10.0					
Calculated Values			Pressures			Volumes							
Displacement	95.9	Shut In: Instant		Lost Returns	0	Cement Slurry	264	Pad					
Top Of Cement		5 Min		Cement Returns	0	Actual Displacement	95.9	Treatment					
Frac Gradient		15 Min		Spacers	40	Load and Breakdown		Total Job					
Rates													
Circulating	RIG	Mixing	6	Displacement	10	Avg. Job	8						
Cement Left In Pipe	Amount 48 ft	Reason	Shoe Joint										
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID						
The Information Stated Herein Is Correct				Customer Representative Signature									

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Customer: CHEVRON - MID-CONTINENT EBIZ		Customer Rep: MEIER, DAN	
Well Name: SKR	Well #: 698-09-AV-13	API/UWI #: 05-045-17290	
Field: SKINNER RIDGE	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Legal Description:			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: CHEVRON	Rig/Platform Name/Num: H&P 318		
Job Purpose: Cement Production Casing		Ticket Amount:	
Well Type: Development Well	Job Type: Cement Production Casing		
Sales Person: DUNNING, DUSTIN	Srv Supervisor: STILLSON, ERIC	MBU ID Emp #: 393789	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	04/04/2009 10:00							SAFETY PERSON FOR JOB WAS ED WHITE
Pre-Convoy Safety Meeting	04/04/2009 12:45							ENTIRE CREW
Arrive At Loc	04/04/2009 14:30							ON TIME
Assessment Of Location Safety Meeting	04/04/2009 14:35							RIG RUNNING CASING
Pre-Rig Up Safety Meeting	04/04/2009 14:55							ENTIRE CREW,
Rig-Up Equipment	04/04/2009 15:00							1 PICK UP, 1 HT400 PUMP TRUCK, 1 660 BULK CEMENT TRUCK, 1 BULK CEMENT SILO, IRON TO FLOOR AND PIT, 1 COMPACT HEAD PRELOADED WITH PLUG
Pre-Job Safety Meeting	04/04/2009 16:30							ENTIRE CREW AND RIG CREW
Start Job	04/04/2009 17:05							TD 6260 TP 6238 SJ 48 FC 6190 MW 10.4 PPG, 4.5" 11.6# CSG IN 7.875" HOLE, 8.625" 24 # SURFACE CSG @ 1018'.
Pump Water	04/04/2009 17:06		1	1			190.0	FILL LINES BEFORE TESTING, 6X5 GAUGE READ 12 PSI ON WATER AND 17 PSI ON CEMENT, 4X4 GAUGE READ 100 PSI.
Pressure Test	04/04/2009 17:07		0.5	0.2			4500.0	PRESSURE HELD NO LEAKS



## Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Spacer 1	04/04/2009 17:09		4	40			550.0	FRESH WATER, POLYFLAKE IN LAST 20 BBLS OF SPACER, PUMPED FIRST 10 BBLS AT 2 BPM UNTIL CEMENT TUB UP AND WEIGHED WITH SCALES, THEN SPED TO 4 BPM.
Pump Lead Cement	04/04/2009 17:25		6	91.2			750.0	320 SKS VARICEM 12.8 PPG, 1.6 CUFT/SK, 7.31 GAL/SK, STARTED AT 4 BPM THEN HAD TO ADJUST RATE BETWEEN 2 AND 4 BPM BECAUSE PUMP CAVITATING, SPED RATE TO 6 BPM AT 20 BBLS GONE AND REMAINED.
Pump Tail Cement	04/04/2009 17:45		6	172.8			320.0	660 SKS VARICEM 13.2 PPG, 1.47 CUFT/SK, 6.32 GAL/SK
Shutdown	04/04/2009 18:18							
Clean Lines	04/04/2009 18:19							CLEAN LINES AND PUMP BEFORE DROPPING PLUG
Drop Top Plug	04/04/2009 18:24							VERIFIED PLUG LEFT
Pump Displacement	04/04/2009 18:25		10	95.9			2000.0	KCL WATER, 1.5 SKS PER 10 BBLS. STARTED AT 8 BPM PER CO REP, THEN WALKED RATE UP TO 10 BPM BY 30 BBLS GONE. CAUGHT PRESSURE AT 16 BBLS GONE.
Slow Rate	04/04/2009 18:34		2	85			1450.0	SLOW RATE TO BUMP PLUG
Bump Plug	04/04/2009 18:39		2	95.9			2495.0	PLUG LANDED AT 1450 PSI, BUMPED 1000 PSI OVER AND HELD FOR 1 MINUTE PER CO REP.

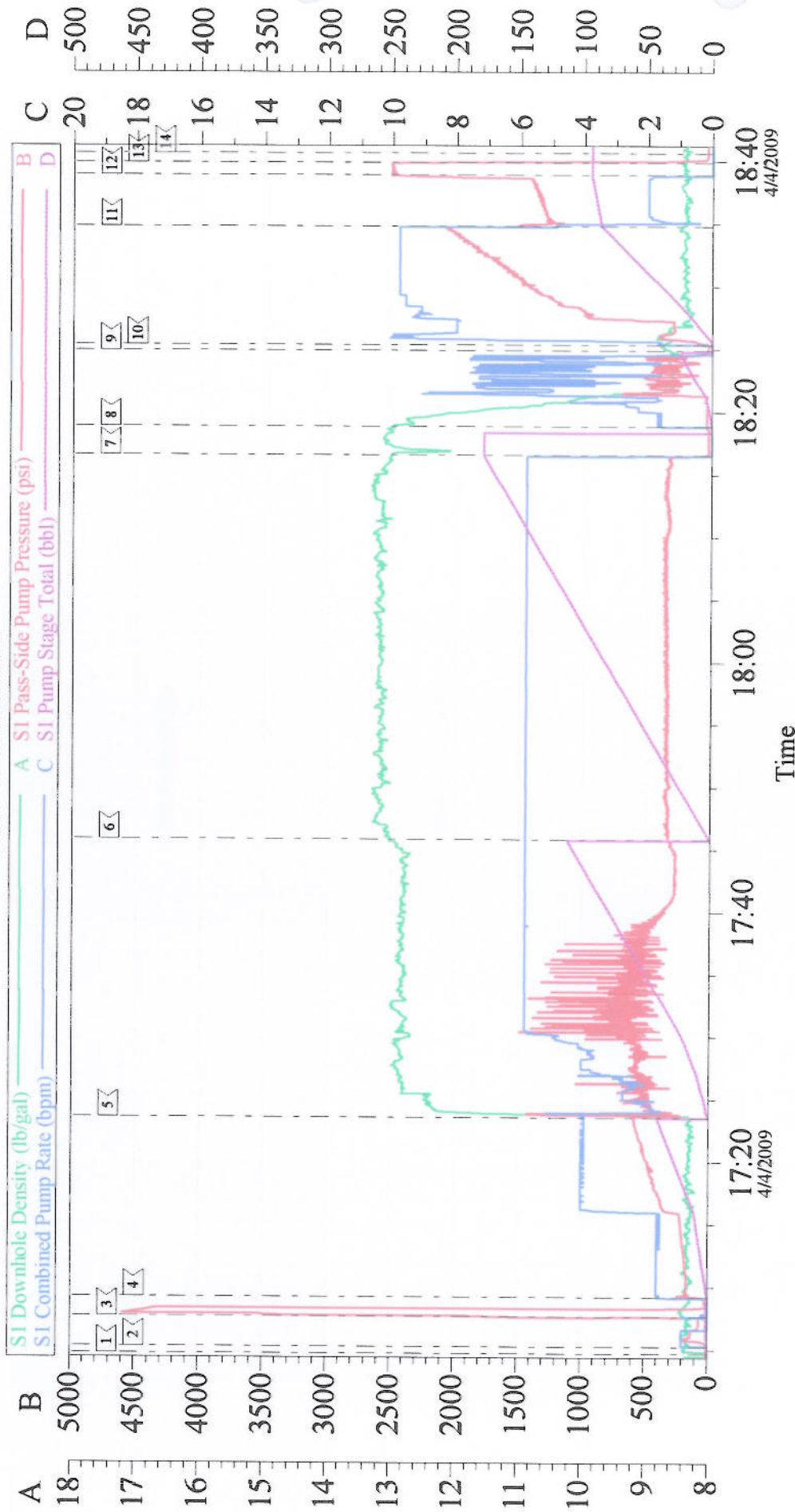
## Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Check Floats	04/04/2009 18:40							FLOATS HELD, GOOD RETURNS THROUGHOUT JOB, DID NOT MOVE PIPE. WHEN RELEASED PRESSURE GOT 1 BBL OF WATER BACK TO TRUCK.
End Job	04/04/2009 18:41							SIGNS OF POLYFLAKE SPACER BACK TO SURFACE BUT NO CEMENT. CALCULATED 6.5 BBLS OF CEMENT BACK.
Post-Job Safety Meeting (Pre Rig-Down)	04/04/2009 18:45							ENTIRE CREW
Rig-Down Equipment	04/04/2009 19:00							BLEW DOWN SILO AND BULK TRUCK, BLEW DOWN PUMP AND LINE TO PIT.
Pre-Convoy Safety Meeting	04/04/2009 20:25							ENTIRE CREW
Crew Leave Location	04/04/2009 20:30							THANK YOU FOR USING HALLIBURTON, ERIC STILLSON AND CREW.



# Chevron

## 4 1/2" Production



Customer: CHEVRON - MID-CONTINENT  
Well Description: Skinner Ridge 598-36-BV-06  
Company Rep: Dan Meier

Job Date: 04-Apr-2009  
Job Type: Production  
Cement Supervisor: Eric Stillson

Sales Order #: 6585509  
ADC Used: Yes  
Elite #/Operator: #11/Ted Hanson