
CHEVRON - MID-CONTINENT EBIZ

**SKR 598-08-BV-02
SKINNER RIDGE
Garfield County , Colorado**

Cement Surface Casing
09-Sep-2013

Post Job Report

The Road to Excellence Starts with Safety

Sold To #: 338668	Ship To #: 3097910	Quote #:	Sales Order #: 900728816
Customer: CHEVRON - MID-CONTINENT EBIZ		Customer Rep: Geiser, Greg	
Well Name: SKR		Well #: 598-08-BV-02	API/UWI #: 05-045-22132
Field:	City (SAP): PARACHUTE	County/Parish: Garfield	State: Colorado
Lat: N 39.622 deg. OR N 39 deg. 37 min. 18.109 secs.		Long: W 108.414 deg. OR W -109 deg. 35 min. 8.959 secs.	
Contractor: Ensign		Rig/Platform Name/Num: Ensign 122	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: GROFF, THEODORE	Srvs Supervisor: PONDER, THOMAS		MBU ID Emp #: 427112

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ANDERSON, ADAM S	11	456683	CAMPBELL, DAVID K	7	522599	EICKHOFF, ROBERT Edward	11	495311
PONDER, THOMAS Lynn	11	427112	ROMKEE, DALE Alan	11	488215			

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10565341	120 mile	10744549	120 mile	10867531	120 mile	10872429	120 mile
10989685	120 mile	10995025	120 mile	10995027	120 mile	11583931	120 mile
11808847	120 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
09/09/2013	11	3						

TOTAL Total is the sum of each column separately

Job

Formation Name					Date				Time	Time Zone		
Formation Depth (MD)		Top	Bottom		Called Out				09 - Sep - 2013	07:30	MST	
Form Type			BHST		On Location				09 - Sep - 2013	12:00	MST	
Job depth MD		1018. ft		Job Depth TVD		1000. ft		Job Started		09 - Sep - 2013	20:08	MST
Water Depth				Wk Ht Above Floor		5. ft		Job Completed		09 - Sep - 2013	21:23	MST
Perforation Depth (MD)		From	To		Departed Loc				09 - Sep - 2013	23:00	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 SECTION				12.25				.	1035.		
8.625 IN SURFACE CASING	Unknown		8.625	8.097	24.		K-55	.	1018.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe	8 5/8	1	HES	1018	Packer					Top Plug	8 5/8	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar	8 5/8	1	HES	977	Retainer					SSR plug set			
Insert Float										Plug Container	8 5/8	1	HES
Stage Tool										Centralizers			

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 /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Water Spacer with Dye		30.00	bbl	8.34	.0	.0	4.0	
	0.0625 lbm/bbl	RHODAMINE RED LIQUID DYE # 2 (101201084)							
	1 lbm/bbl	POLY-E-FLAKE (101216940)							
2	VariCem GJ1 Lead Cement	VARICEM (TM) CEMENT (452009)	193.0	sacks	12.3	2.38	13.75	6.0	13.75
	13.75 Gal	FRESH WATER							
3	VariCem GJ1 Tail Cement	VARICEM (TM) CEMENT (452009)	215.0	sacks	12.8	2.11	11.75	6.0	11.75
	11.75 Gal	FRESH WATER							
4	Displacement		62.00	bbl	8.34	.0	.0	8.0	
5	HalCem Top Out Cement	HALCEM (TM) SYSTEM (452986)		sacks	15.8	1.15	5.01		5.01
	5.01 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	62.1	Shut In: Instant		Lost Returns	10	Cement Slurry	162.6	Pad	
Top Of Cement	SURFACE	5 Min		Cement Returns	70	Actual Displacement	62.1	Treatment	
Frac Gradient		15 Min		Spacers	20	Load and Breakdown		Total Job	244.7
Rates									
Circulating	RIG	Mixing	6	Displacement	6	Avg. Job	6		
Cement Left In Pipe	Amount	42 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					

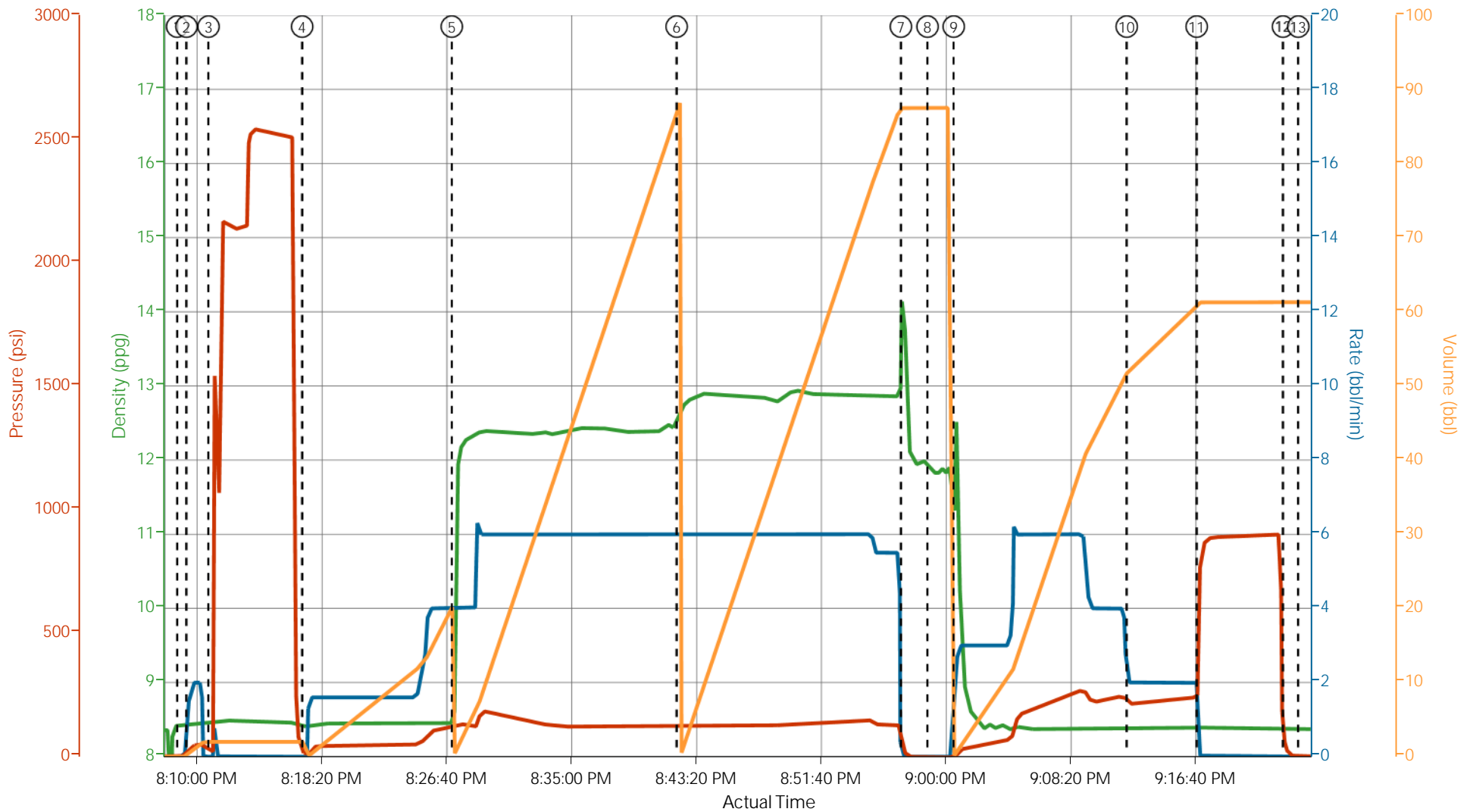
The Road to Excellence Starts with Safety

Sold To #: 338668		Ship To #: 3097910		Quote #:		Sales Order #: 900728816	
Customer: CHEVRON - MID-CONTINENT EBIZ				Customer Rep: Geiser, Greg			
Well Name: SKR			Well #: 598-08-BV-02			API/UWI #: 05-045-22132	
Field:		City (SAP): PARACHUTE		County/Parish: Garfield		State: Colorado	
Legal Description:							
Lat: N 39.622 deg. OR N 39 deg. 37 min. 18.109 secs.				Long: W 108.414 deg. OR W -109 deg. 35 min. 8.959 secs.			
Contractor: Ensign			Rig/Platform Name/Num: Ensign 122				
Job Purpose: Cement Surface Casing						Ticket Amount:	
Well Type: Development Well			Job Type: Cement Surface Casing				
Sales Person: GROFF, THEODORE			Srv Supervisor: PONDER, THOMAS			MBU ID Emp #: 427112	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/09/2013 07:30							
Assessment Of Location Safety Meeting	09/09/2013 08:54							TD- 1035', TP- 1018', SJ- 42', MUD- 9.1 PPG, HOLE- 12 1/4", SURFACE CASING- 8 5/8" 24# K-55
Crew Leave Yard	09/09/2013 10:00							ALL HES PRESENT FOR PRE-CONVOY SAFETY HUDDLE
Arrive At Loc	09/09/2013 12:00							RIG WAS STILL PULLING DRILL PIPE WHEN THE CREW ARRIVED ON LOCATION
Safety Meeting	09/09/2013 19:00							ALL HES PRESENT, RIG CREW PRESENT, RIG STARTED CIRCULATING ON BOTTOM @ 1830, WENT OVER JSA'S FOR RIG UP/DOWN AND PUMPING PRIOR TO RIGGING UP LOCATION WITH EVERYONE
Rig-Up Equipment	09/09/2013 19:15							1-550 PICKUP, 1-ELITE PUMP, 2-660 CUFT BULK TRUCK
Start Job	09/09/2013 20:08		2	2			53.0	FILL LINES
Test Lines	09/09/2013 20:11		0.1	0.1			2540.0	GOOD PRESSURE TEST, NO LEAKS IN LINES
Pump Spacer 1	09/09/2013 20:17		4	20			113.0	FRESH WATER, 5# RED DYE, 25# POLYFLAKE

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	09/09/2013 20:27		6	81.8			182.0	193 SKS 12.3 PPG 2.38 FT3/SK 13.77 GAL/SK
Pump Tail Cement	09/09/2013 20:42		6	80.8			140.0	215 SKS 12.8 PPG 2.11 FT3/SK 11.77 GAL/SK
Shutdown	09/09/2013 20:57							
Drop Plug	09/09/2013 20:59							PLUG DROP VERIFIED VIA TATTLE TELL BY CUSTOMER REP
Pump Displacement	09/09/2013 21:00		6	52.1			270.0	FRESH WATER, WASHED UP MIXING TUB WITH FIRST 10 BBL OF DISPLACEMENT
Slow Rate	09/09/2013 21:12		2	10	62.1		220.0	GOOD CIRCULATION THROUGH OUT THE JOB, 70 BBL CEMENT CIRCULATED TO SURFACE
Bump Plug	09/09/2013 21:16				62.1		242.0	PLUG BUMPED
Check Floats	09/09/2013 21:22						812.0	FLOATS HELD, 1/2 BBL BACK TO THE DISPLACEMENT TANKS, WITHIN 1 HR OF BUMPING PLUG CEMENT FELL 8 FT, CUSTOMERS SAID THAT WE WERE GOOD, WILL CHECK AGAIN IN THE MORNING, DID NOT USE ANY TOP OUT CEMENT
End Job	09/09/2013 21:23							THANK YOU FOR CHOOSING HALLIBURTON, THOMAS PONDER AND CREW

CHEVRON - SKR 598-08-BV-02 - 8 5/8" SURFACE



Downhole Density (ppg) 8.37 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 0 Pump Stg Tot (bbl) 86.1

- Test Lines 8.41;0;1;0
- Pump Spacer 1 8.41;0;8;0
- Shutdown 13.91;0;18;87.5
- Slow Rate 8.36;2;213;52.2
- End Job 8.37;0;1;61.3
- Fill Lines 8.44;1.7;34;0.4
- Pump Lead Cement 9.59;4;116;0.6
- Drop Top Plug 11.91;0;3;87.5
- Bump Plug 8.4;0;785;61.3
- Test Lines 8.45;0;21;2
- Pump Tail Cement 12.65;6;124;0.1
- Pump Displacement 11.97;3;11;0.5
- Check Floats 8.37;0;25;61.3

▼ HALLIBURTON | iCem® Service

Created: 2013-09-09 14:33:36, Version: 2.0.606

Edit

Customer: CHEVRON - MID-CONTINENT EBIZ

Job Date: 9/9/2013 7:24:08 PM

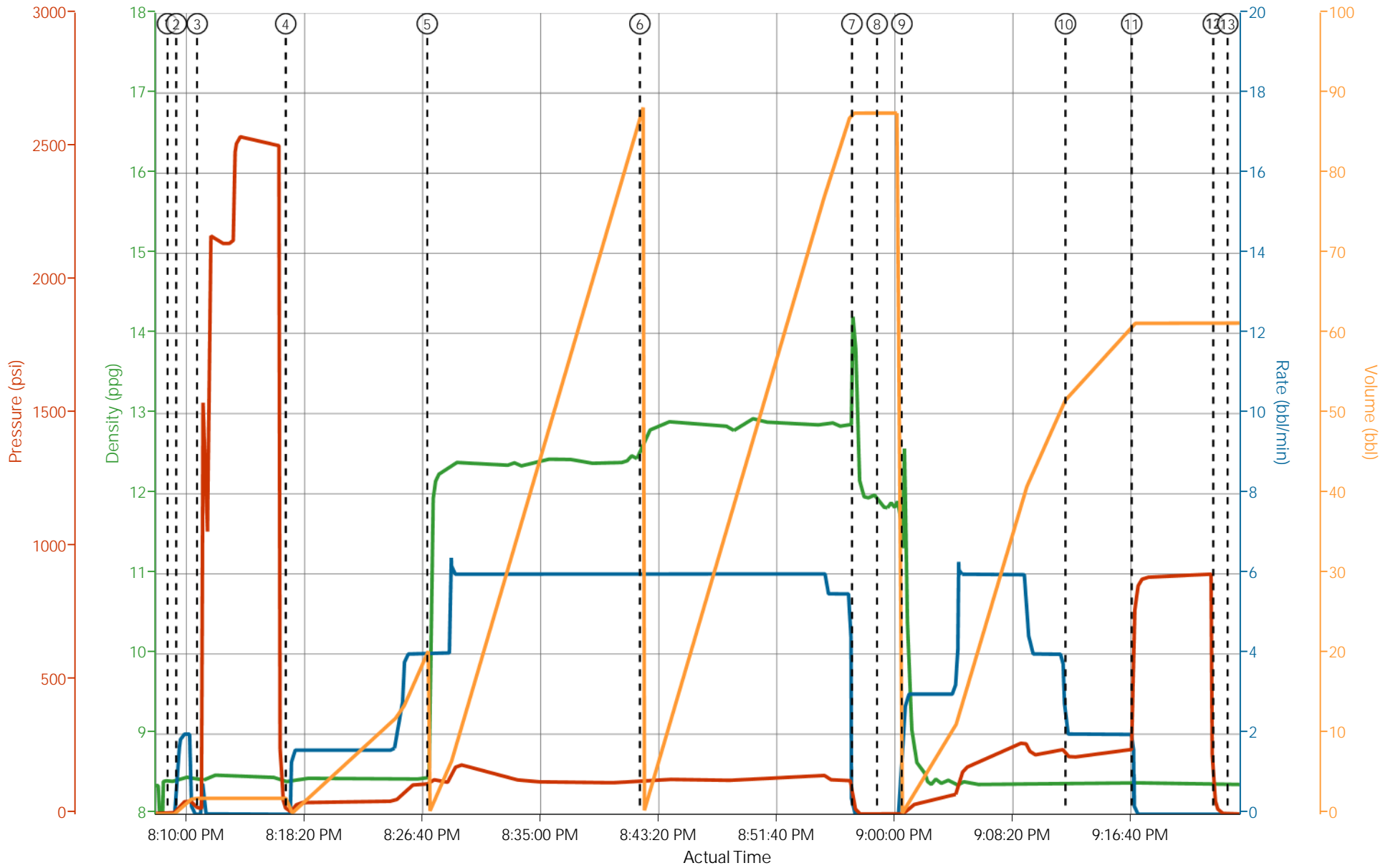
Well: SKR 598-08-BV-02

Representative: BRENT SWANK

Sales Order #: 900728816

ELITE #7: THOMAS PONDER / ROB EICHKOFF

CHEVRON - SKR 598-08-BV-02 - 8 5/8" SURFACE



Downhole Density (ppg) 8.37 Comb Pump Rate (bbl/min) 0 PS Pump Press (psi) 0 Pump Stg Tot (bbl) 86.1

▼ HALLIBURTON | iCem® Service

Created: 2013-09-09 14:33:36, Version: 2.0.606

Edit

Customer: CHEVRON - MID-CONTINENT EBIZ

Job Date: 9/9/2013 7:24:08 PM

Well: SKR 598-08-BV-02

Representative: BRENT SWANK

Sales Order #: 900728816

ELITE #7: THOMAS PONDER / ROB EICHKOFF

HALLIBURTON

Company:	<u>CHEVRON</u>	Date:	<u>9/9/2013</u>
Submitted by:	<u>THOMAS PONDER</u>	Date Rec.:	<u>9/9/2013</u>
Attention:	<u>LARRY COOKSEY</u>	S.O.#	<u>900728816</u>
Lease	<u>SKR</u>	Job Type:	<u>SURFACE</u>
Well #	<u>598-08-BV-02</u>		

Specific Gravity	<i>MAX</i>	<i>1</i>
pH	<i>8</i>	<i>7</i>
Potassium (K)	<i>5000</i>	<i>0</i> Mg / L
Calcium (Ca)	<i>500</i>	<i>120</i> Mg / L
Iron (FE2)	<i>300</i>	<i>10</i> Mg / L
Chlorides (Cl)	<i>3000</i>	<i>0</i> Mg / L
Sulfates (SO ₄)	<i>1500</i>	<i><200</i> Mg / L
Carbonates hardness		
Temp	<i>40-80</i>	<i>57</i> Deg
Total Dissolved Solids		<i>215</i> Mg / L

Respectfully: THOMAS PONDER

Title: CEMENTING SUPERVISOR

Location: GRAND JCT, CO

Sales Order #: 900728816	Line Item: 10	Survey Conducted Date: 9/10/2013
Customer: CHEVRON - MID-CONTINENT EBIZ		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BRENT SWANK		API / UWI: (leave blank if unknown) 05-045-22132
Well Name: SKR		Well Number: 598-08-BV-02
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

Dear Customer,

We hope that you were satisfied with the service quality of this job performed by Halliburton. It is the aim of our management and service personnel to deliver equipment and service of a standard unmatched in the service sector of the energy industry.

Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

CUSTOMER SATISFACTION SURVEY

CATEGORY	CUSTOMER SATISFACTION RESPONSE	
Survey Conducted Date	The date the survey was conducted	9/10/2013
Survey Interviewer	The survey interviewer is the person who initiated the survey.	THOMAS PONDER (HX41187)
Customer Participation	Did the customer participate in this survey? (Y/N)	Yes
Customer Representative	Enter the Customer representative name	BRENT SWANK
HSE	Was our HSE performance satisfactory? Circle Y or N	Yes
Equipment	Were you satisfied with our Equipment? Circle Y or N	Yes
Personnel	Were you satisfied with our people? Circle Y or N	Yes
Customer Comment	Customer's Comment	CREW DID AN EXCELLENT JOB WITH SAFETY, TAKING THEIR TIME TO DO IT RIGHT

CUSTOMER SIGNATURE

Sales Order #: 900728816	Line Item: 10	Survey Conducted Date: 9/10/2013
Customer: CHEVRON - MID-CONTINENT EBIZ		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BRENT SWANK		API / UWI: (leave blank if unknown) 05-045-22132
Well Name: SKR		Well Number: 598-08-BV-02
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

KEY PERFORMANCE INDICATORS

General	
Survey Conducted Date The date the survey was conducted	9/10/2013

Cementing KPI Survey	
Type of Job Select the type of job. (Cementing or Non-Cementing)	0
Select the Maximum Deviation range for this Job What is the highest deviation for the job you just completed? This may not be the maximum well deviation.	Vertical
Total Operating Time (hours) Total Operating Hours Including Rig-up, Pumping, Rig-down. Enter in decimal format.	3
HSE Incident, Accident, Injury HSE Incident, Accident, Injury. This should be recordable incidents only.	No
Was the job purpose achieved? Was the job delivered correctly as per customer agreed design?	Yes
Operating Hours (Pumping Hours) Total number of hours pumping fluid on this job. Enter in decimal format.	1
Customer Non-Productive Rig Time (hrs) Lost time due to Halliburton in the start, execution, or completion of an ordered service or product, or delays in a follow-on service. Enter in decimal format. 0 if none.	0
Type of Rig Classification Job Was Performed Type Of Rig (classification) Job Was Performed On	Drilling Rig (Portable)
Number Of JSAs Performed Number Of Jsas Performed	6
Number of Unplanned Shutdowns Unplanned shutdown is when injection stops for any period of time.	0
Was this a Primary Cement Job (Yes / No)	Yes

Sales Order #: 900728816	Line Item: 10	Survey Conducted Date: 9/10/2013
Customer: CHEVRON - MID-CONTINENT EBIZ		Job Type (BOM): CMT SURFACE CASING BOM
Customer Representative: BRENT SWANK		API / UWI: (leave blank if unknown) 05-045-22132
Well Name: SKR		Well Number: 598-08-BV-02
Well Type: Development Well	Well Country: United States of America	
H2S Present:	Well State: Colorado	Well County: Garfield

Primary Cement Job= Casing job, Liner job, or Tie-back job.	
Did We Run Wiper Plugs? Did We Run Top And Bottom Casing Wiper Plugs?	Top
Mixing Density of Job Stayed in Designed Density Range (0-100%) Density Range defined as +/- .20 ppg. Calculation: Total BBLs cement mixed at designed density divided by total BBLs of cement multiplied by 100	100
Was Automated Density Control Used? Was Automated Density Control (ADC) Used ?	Yes
Pump Rate (percent) of Job Stayed At Designed Pump Rate Pump Rate range defined as +/- 1bbl/min. Calculation: Total BBLs of fluid pumped at the designed rate divided by Total BBLs of fluid pumped, multiplied by 100	100
Nbr of Remedial Sqz Jobs Rqd - Competition Number Of Remedial Squeeze Jobs Required After Primary Job Performed By Competition	0
Nbr of Remedial Plug Jobs Rqd - HES Number Of Remedial Plug Jobs Needed After Primary Plug Pumped By HES	0
Nbr of Remedial Sqz Jobs Rqd - HES Number Of Remedial Squeeze Jobs Required After Primary Job Performed By HES	0