

# **Chama Oil and Minerals – Sors 1P Surface**

Sales Order: 90005362

## **Cementing Post Job Report**

Date: Monday, December 24, 2012

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**HALLIBURTON**

### Table of Contents

1.0	Design.....	3
1.1	Customer Information.....	3
2.0	Job .....	4
2.1	Job Event Log.....	4
	Date.....	5
	Operating Hours .....	5
2.1.1	Conc .....	6
3.0	Job Information .....	7
4.0	Attachments.....	9
4.1	Job Summary Chart .....	9

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**1.0 DESIGN****1.1 Customer Information**

<b>Customer</b>	Chama Oil & Minerals
<b>Sales Order</b>	90005362
<b>Job Configuration</b>	Conventional Cement
<b>Well Name</b>	Sors
<b>Well Number</b>	1P
<b>Start Time</b>	Monday, December 24, 2012
<b>County</b>	Washington
<b>State</b>	Colorado
<b>UWI/API</b>	
<b>Country</b>	USA
<b>H2S Present</b>	Unknown
<b>CO2 Present</b>	Unknown
<b>Customer Representative</b>	Rodney Wilson
<b>Service Representative</b>	Jonathan Snyder
<b>Job Name</b>	CHAMA OIL & MINERAL Sors 1P Surface
<b>Injection Path</b>	Casing

### 2.0 JOB

#### 2.1 Job Event Log

#### Job Log

Date/Time	Chart #	Activity Code	Pump Rate	Cum Vol	Pump	Pressure (psig)	Comments
12/25/2012 14:00		Arrive at Location from Service Center					ARRIVED AND CONDUCTED A HAZARD HUNT AND FOUND NO HAZARDS THAT CONFLICT WITH US RIGGING UP EQUIPMENT.
12/26/2012 18:30		Pre-Job Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES AND ALL THIRD PARTY PERSONEL PRIOR TO PUMPING THE CEMENT JOB.
12/26/2012 19:27		Start Job					
12/26/2012 19:50		Test Lines					PRESSURE TEST LINES TO 2864 PSI
12/26/2012 19:52		Drop Bottom Plug					PRELOADED THE PLUG IN THE CASING PRIOR TO STABBING THE PLUG CONTAINER.
12/26/2012 19:53		Pump Spacer 1	4	20		44.3	W/ FRESH WATER
12/26/2012 19:59		Pump Cement	5	138		82.3	390 SKS SWIFTCEM MIXED @ 13 PPG W/ RIG WATER
12/26/2012 20:47		Shutdown					
12/26/2012 20:47		Drop Top Plug					PLUG PRELOADED, DROPPED PRIOR TO PUMPING DISPLACEMENT
12/26/2012 20:47		Pump Displacement	4	72		98.3	W/ FRESH WATER
12/26/2012 21:07		Bump Plug	3			157.3	GOOD RETURNS THROUGHOUT THE JOB. WE GOT CEMENT BACK TO SURFACE WITH 47 BBLs OF DISPLACEMENT AWAY SO WE GOT 25 BBLs BACK TO SURFACE.
12/26/2012 21:10		Check Floats				855.3	W/ FRESH WATER, WE GOT 0.5 BBLs OF WATER BACK IN THE DISPLACEMENT TANKS WHEN WE CHECKED FLOATS.
12/26/2012 21:12		End Job					ENDED JOB AND STARTED TO RIG DOWN BUT THE CEMENT FELL IN THE ANNULUS SO WE HAD TO RIG BACK UP AND DO A TOP OUT JOB.
12/26/2012 23:45		Start Job					ONCE WE RIGGED UP WE STARTED THE TOP OUT JOB.
12/26/2012 23:48		Pump Cement	2	8		-2.7	40 SKS PREMIUM G NEAT MIXED @ 15.8#, PUMPED CEMENT UNTIL THE COMPANY MAN WAS HAPPY WITH WHERE IT IS AND WE SHUTDOWN AND WASHED UP THE TRUCK.
12/26/2012 23:52		Shutdown					SHUTDOWN AND MADE SURE THE CEMENT DIDNT DROP.
12/27/2012 00:00		End Job					
12/27/2012 00:15		Pre-Rig Down Safety Meeting					HELD SAFETY MEETING WITH ALL EMPLOYEES PRIOR TO RIGGING DOWN AND DISCUSSED ALL HAZARDS WHILE RIGGING DOWN EQUIPMENT.
12/27/2012 03:00		Depart Location for Service Center or Other Site					HELD SAFETY MEETING PRIOR TO LEAVING LOCATION AND DISCUSSED ALL POTENTIAL HAZARDS WHILE DRIVING BACK TO THE SERVICE CENTER.

*The Road to Excellence Starts with Safety*

<b>Sold To #:</b> 368226	<b>Ship To #:</b> 2970310	<b>Quote #:</b>	<b>Sales Order #:</b> 900095362
<b>Customer:</b> CHAMA OIL & MINERALS LLC - EBUS		<b>Customer Rep:</b> Wilson, Rodney	
<b>Well Name:</b> Sors		<b>Well #:</b> 1P	<b>API/UWI #:</b> 05-121-11018
<b>Field:</b>	<b>City (SAP):</b> KIMBALL	<b>County/Parish:</b> Washington	<b>State:</b> Colorado
<b>Lat:</b> N 40.279 deg. OR N 40 deg. 16 min. 45.808 secs.		<b>Long:</b> W 103.394 deg. OR W -104 deg. 36 min. 19.814 secs.	
<b>Contractor:</b> chama oil and gas		<b>Rig/Platform Name/Num:</b> precision706	
<b>Job Purpose:</b> Cement Surface Casing			
<b>Well Type:</b> Development Well		<b>Job Type:</b> Cement Surface Casing	
<b>Sales Person:</b> AARON, WESLEY		<b>Srvc Supervisor:</b> SNYDER, JONATHAN	
<b>MBU ID Emp #:</b> 435616			

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
BROOM, KENDALL L	8.5	524682	CARPENTER, JACOB P	8.5	499500	DIRKS, RICHARD E	8.5	485940
JEWELL, WILLIAM Uris	36.0	503358	LAVALLEY, LARRY P	8.5	419296	MULLER, MICHEL B	36.0	529830
ROMERO, JOSEPH M	36.0	512137	SINCLAIR, RICHARD	0.0	368195	SNYDER, JONATHAN Leroy	36.0	435616

**Equipment**

HES Unit #	Distance-1 way						
10248053C	86 mile	10867419C	86 mile	11410470C	86 mile	11488570C	86 mile
11518549	86 mile	11526488	86 mile				

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
<b>TOTAL</b>								

*Total is the sum of each column separately*

**Job**

**Job Times**

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
					25 - Dec - 2012	10:00	MST
<b>Form Type</b>			<b>BHST</b>	<b>On Location</b>	25 - Dec - 2012	14:00	MST
<b>Job depth MD</b>	550. ft		<b>Job Depth TVD</b>	550. ft	<b>Job Started</b>	26 - Dec - 2012	19:27
<b>Water Depth</b>			<b>Wk Ht Above Floor</b>	6. ft	<b>Job Completed</b>	26 - Dec - 2012	21:12
<b>Perforation Depth (MD)</b>	From		To		<b>Departed Loc</b>	27 - Dec - 2012	02:00

**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
17 1/2" Open Hole Section				17.5				.	530.		
13 3/8" Surface Casing	Unknown		13.375	12.515	61.		J-55	.	530.		

**Tools and Accessories**

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

**Miscellaneous Materials**

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc %

Treatment Fld	Conc	Inhibitor	Sand Type	Size	Qty				
<b>Fluid Data</b>									
<b>Stage/Plug #: 1</b>									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	WATER SPACER		20.00	bbl	8.33	.0	42.0	5.0	
2	SWIFTCEM	SWIFTCEM (TM) SYSTEM (452990)	390.0	sacks	13.	1.99	10.9	5.0	10.9
	10.9 Gal	FRESH WATER							
3	DISPLACEMENT		72.00	bbl	8.34	.0	42.0	5.0	
4	HalCem	HALCEM (TM) SYSTEM (452986)	40.0	sacks	15.8	1.17	5.02	1.0	5.02
	5.019 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	81 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					

**3.0 JOB INFORMATION**

<b>Job Start Date</b>	12/24/2012	<b>Mud loss while Circulating</b>	
<b>Job MD</b>	530 ft	<b>Pipe Movement During Hole Circulation</b>	None
<b>Job TVD</b>	530 ft	<b>Pipe Movement During Cementing</b>	None
<b>Height of Plug Container/Swage Above Rig Floor</b>	5.0 ft	<b>Calculated Displacement</b>	
<b>Surface Temperature at Time of Job</b>	32 degF	<b>Job Displaced by (rig/halco)</b>	Cement Unit HP Pumps
<b>Mud Type</b>	Spud Mud	<b>Annular flow Before Job? (Water/Gas)</b>	Unknown
<b>Actual Mud Density</b>		<b>Annular flow After Job? (Water/Gas)</b>	Unknown
<b>Time Circulated before job</b>			
<b>Mud Volume Circulated</b>			
<b>Rate at Which Well was Circulated</b>			

**Cementing Equipment**

<b>Pipe Centralization</b>	Through Entire Cement Column
<b>Brand of Float Equipment Used</b>	Halliburton
<b>Did Float Equipment Hold?</b>	Yes
<b>Plug set used?</b>	Unknown
<b>Did Plugs Bump?</b>	Yes

***Pumping Schedule***

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Job Tubulars					MD		Shoe Joint Length ft
Type	Description	Size in	ID in	Wt lbm/ft	Top ft	Bottom ft	
Casing	13 3/8" Surface Casing	13.38	12.515	61.00	0.00	530.00	81.00
Open Hole Section	17 1/2" Open Hole Section		17.500		0.00	530.00	0.00

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## Fluids Pumped

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**Stage/Plug # 1**      **Fluid 1:**      WATER SPACER  
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

Fluid Density: 8.33 lbm/gal  
Fluid Volume: 20.00 bbl  
Pump Rate: 5.00 bbl/min

**Stage/Plug # 1**      **Fluid 2:**      SWIFTCEM  
SWIFTCEM (TM) SYSTEM

Fluid Weight: 13.00 lbm/gal  
Slurry Yield: 1.99 ft<sup>3</sup>/sack  
Total Mixing Fluid: 10.90 Gal  
Surface Volume: 390.0 sacks  
Sacks: 390.0 sacks  
Calculated Fill: 530.00 ft  
Calculated Top of Fluid: 0.00 ft  
Pump Rate: 5.00 bbl/min

**Stage/Plug # 1**      **Fluid 3:**      DISPLACEMENT  
DUMMY MUD / FLUSH / SPACER SBC MATERIAL

Fluid Density: 8.34 lbm/gal  
Fluid Volume: 72.00 bbl  
Pump Rate: 5.00 bbl/min

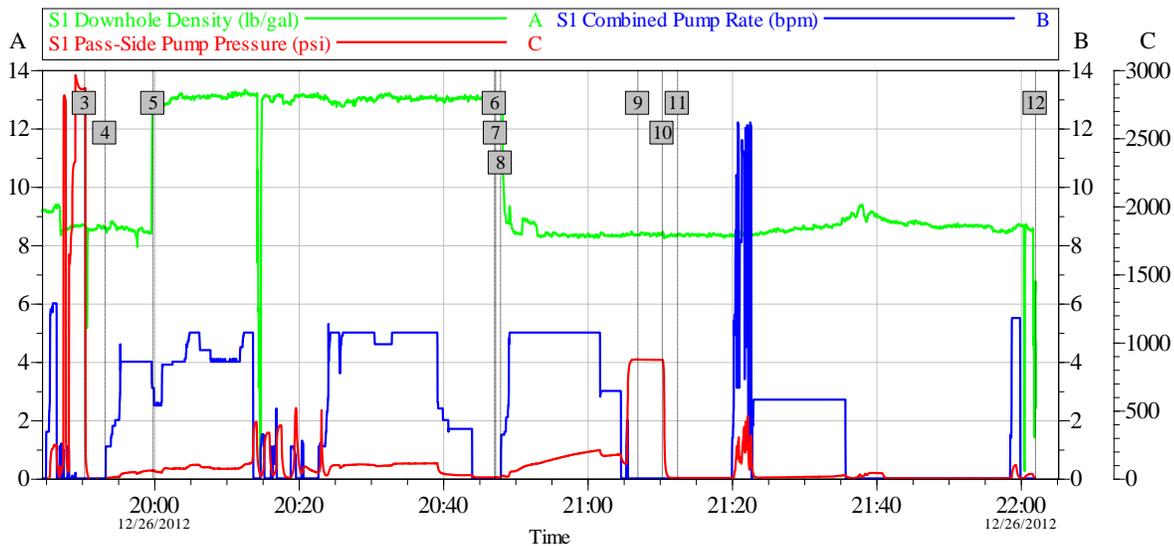
**Stage/Plug # 1**      **Fluid 4:**      HalCem  
HALCEM (TM) SYSTEM

Fluid Weight: 15.80 lbm/gal  
Slurry Yield: 1.17 ft<sup>3</sup>/sack  
Total Mixing Fluid: 5.02 Gal  
Surface Volume: 40.0 sacks  
Sacks: 40.0 sacks  
Estimated Top of Fluid:  
Pump Rate: 1.00 bbl/min

## 4.0 ATTACHMENTS

### 4.1 Job Summary Chart

#### Chama Oil and Minerals Sors 1P Surface



3	Test Lines	19:50:23	4	Pump Water Spacer	19:53:13	5	Pump Lead Cement @ 13#	19:59:52
6	Shutdown	20:47:10	7	Drop Top Plug	20:47:19	8	Pump Displacement	20:47:59
9	Bump Plug	21:07:00	10	Check Floats	21:10:23	11	End Job	21:12:30
12	Ending Job	22:02:04						

Customer:	Job Date: 26-Dec-2012	Sales Order #: 9000095362
Well Description:	UWI:	

OptiCem v6.4.10  
03-Jan-13 17:57



**HALLIBURTON**

**Field Ticket**

<b>Field Ticket Number:</b> 900095362		<b>Field Ticket Date:</b> Thursday, December 27, 2012	
<b>Bill To:</b> CHAMA OIL & MINERALS LLC - EBUS DONOTMAIL - PO BOX 50203 MIDLAND, TX 79710		<b>Job Name:</b> Sors <b>Order Type:</b> Streamline Order (ZOH) <b>Well Name:</b> Sors 1P <b>Company Code:</b> 1100 <b>Customer PO No.:</b> NA <b>Shipping Point:</b> Brighton, CO, USA <b>Sales Office:</b> Rocky Mountains BD <b>Well Type:</b> Gas <b>Well Category:</b> Development	
<b>Ship To:</b> CHAMA SORS 1P,CHEYENNE SORS 1P 2970310 KIMBALL, NE 69145			

Material	Description	QTY	UOM	Base Amt	Unit Amt	Gross Amount	Discount	Net Amount
7521	CMT SURFACE CASING BOM	1	JOB	0.00	0.00	0.00	65%	0.00
16091	ZI - PUMPING CHARGE	1	EA	0.00	4,935.00	4,935.00	65%	1,727.25
	DEPTH	550						
	FEET/METERS (FT/M)		FT					
452990	SWIFTCEM (TM) SYSTEM	390	SK			24,740.91	65.0%	8,659.32
432904	CMT, ROCKIES SG SETUP	1	EA			11,579.00	52.43%	5,508.65
432905	CMT, ROCKIES SG MILEAGE	172	MI			5,655.36	61.48%	2,178.38
	Number of Units	2						
432906	CMT, ROCKIES SG DELIVERY	546	TNM			12,292.45	62.52%	4,607.23
	NUMBER OF TONS	24.79						
16092	ADDITIONAL HOURS (PUMPING EQUIPMENT), ZI	1	EA	0.00	1,071.00	32,130.00	65%	11,245.50
	HOURS	30						
452986	HALCEM (TM) SYSTEM	100	SK			1,550.40	65.0%	542.64
45	100 FEET 1 INCH TOP OUT PIPE	1	EA	0.00	486.00	486.00		486.00
87605	ZI FUEL SURCHG-CMT & CMT ADDITIVES	86	MI	0.00	0.22	53.35		53.35
	NUMBER OF TONS	2.82						
76400	ZI MILEAGE,CMT MTLs DEL/RET MIN	86	MI	0.00	3.35	812.44	65%	284.35
	NUMBER OF TONS	2.82						
				<b>Totals</b>	<b>USD</b>	<b>94,234.91</b>	<b>58,942.24</b>	<b>35,292.67</b>

Halliburton Rep: JONATHAN SNYDER  
 Customer Agent: Rodney Wilson  
 Halliburton Approval:

THIS OUTPUT DOES NOT INCLUDE TAXES. APPLICABLE SALES TAX WILL BE BILLED ON THE FINAL INVOICE. CUSTOMER HEREBY ACKNOWLEDGES RECEIPT OF THE MATERIALS AND SERVICES DESCRIBED ABOVE AND ON THE ATTACHED DOCUMENTS.

X \_\_\_\_\_ FIELD TICKET TOTAL: USD 35,292.67  
 Customer Signature

Was our HSE performance satisfactory? **Y or N** (Health, Safety, Environment)      Were you satisfied with our Equipment? **Y or N**      Were you satisfied with our people? **Y or N**

Comments