

**HALLIBURTON**

**Cementing Job Summary**

*The Road to Excellence Starts with Safety*

Sold To #: 346707	Ship To #: 2872491	Quote #:	Sales Order #: 8411533
Customer: QUICKSILVER RESOURCES INC-EBUSINESS		Customer Rep: Hord, Ryan	
Well Name: Perlaw Partners Ltd		Well #: 1-3	API/UWI #:
Field:	City (SAP): HAYDEN	County/Parish: Routt	State: Colorado
Contractor: DHS		Rig/Platform Name/Num: 6	
Job Purpose: Cement Production Casing			
Well Type: Exploratory / Wildcat		Job Type: Cement Production Casing	
Sales Person: SCOTT, KYLE		Srvc Supervisor: PAUU, SEMISI	MBU ID Emp #: 445202

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
HERNANDEZ, AARON Matthew	7.5	489820	PAUU, SEMISI Tu'a	7.5	445202	STILL, MICHEAL Wayne	7.5	258213
THOMAS, STEPHEN Troy	7.5	490352	WEYERMAN, JEREMY Todd	7.5	477287	RNI DRIVER	7.5	

**Equipment**

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
11526496	180 MILE	11338215	180 MILE	10872113	180 MILE	1107174	180 MILE
10816259	180 MILE	10994447	180 MILE	11056349	180 MILE	RNI TANKR	180 MILE

**Job Hours**

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
8-25-2011	7.5	3.5						
<b>TOTAL</b>			<i>Total is the sum of each column separately</i>					

**Job**

**Job Times**

Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
Form Type			BHST	On Location	24 - Aug - 2011	22:00	MST
Job depth MD	7772. ft		Job Depth TVD	Job Started	25 - Aug - 2011	03:00	MST
Water Depth			Wk Ht Above Floor	Job Completed	25 - Aug - 2011	07:30	MST
Perforation Depth (MD)	From		To	Departed Loc	25 - Aug - 2011	09:00	MST
					25 - Aug - 2011	10:30	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
Production Open Hole				6.125				5750.	7450.		
Intermediate Casing	Unknown		7.	6.276	26.		L-80		5750.		
Production Casing	Unknown		4.5	3.92	13.5		P-110		7450.		

**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		

**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 Flid	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

**Fluid Data**

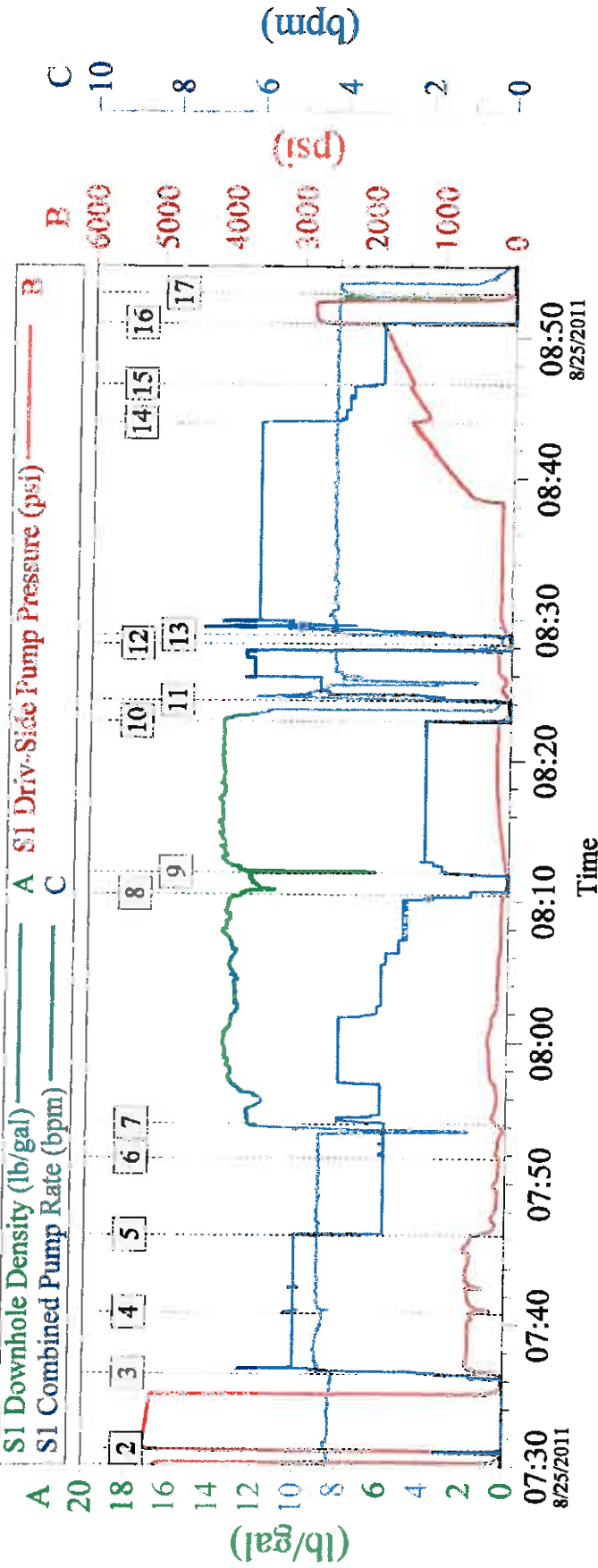
**HALLIBURTON**

**Cementing Job Summary**

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/ek	Rate bbl/min	Total Mix Fluid Gal/sk
1	TUNED SPACER III	TUNED SPACER III - SBM (483826)	20.00	bbl	9.	5.91	41.71	.0	
	39.63 gal/bbl	FRESH WATER							
	3 gal/Mgal	MUSOL(R) A, BULK (100003696)							
	3 gal/Mgal	SEM-7, 55 GAL DRUM (100001626)							
	3 gal/Mgal	D-AIR 3000L, 5 GAL PAIL (101007444)							
	7.5 lbm/bbl	BARITE, BULK (100003681)							
2	MUD RECOVERY SPACER		65.00	bbl	9.	.0	.0	.0	
	38 lbm/bbl	BARITE, BULK (100003681)							
	31.25 lbm/bbl	HALLIBURTON GEL, 50 LB SK (100064040)							
	0.05 gal/bbl	ANHIB II (100003821)							
3	MUD FLUSH III	MUD FLUSH III - SBM (528788)	10.00	bbl	8.4	.0	.0	.0	
4	LifeCem	LIFECEM (TM) CEMENT (532084)	220.0	sacks	13.5	1.73	7.31		7.31
	7.31 Gal	FRESH WATER							
5	KCl Displacement		115.00	bbl	8.4	.0	.0	5.0	
	7.15 lbm/bbl	POTASSIUM CHLORIDE 7% (100001585)							
	42 gal/bbl	WATER - FRESH - GAL (24047)							
<b>Calculated Values</b>		<b>Pressures</b>			<b>Volumes</b>				
Displacement	115	Shut In: Instant		Lost Returns		Cement Slurry	68	Pad	
Top Of Cement	4000'	5 Min		Cement Returns	0	Actual Displacement	115	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	278
<b>Rates</b>									
Circulating	2	Mixing	2	Displacement	6	Avg. Job	4		
Cement Left In Pipe	Amount	40 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
<b>The Information Stated Herein Is Correct</b>				Customer Representative Signature					

# QUICKSILVER RESOURCES 4.5" PRODUCTION

AUGUST 25 2011 SO# 8411533



Intersection	SDPP	Intersection	SDPP
2 Pressure Test	07:31:08 5061.1	3 Pump 20bbl TSIII	07:36:28 35.20
4 Pump 65bbl Mud Rec	07:40:47 479.2	5 Slow Rate	07:46:18 477.8
6 Pump 10bbl Mud Flush	07:51:44 85.04	7 Pump Cement	07:54:11 122.2
8 Shutdown/build weight	08:10:26 48.42	9 Pump Cement	08:11:59 25.20
10 End Cement	08:22:42 167.7	11 Clean Lines	08:24:12 20.00
12 Drop Top Plug	08:28:13 27.27	13 Pump Displacement	08:28:50 20.00
14 Slow Rate	08:43:55 1437	15 Slow Rate	08:46:38 1449
16 Bump Plug	08:50:58 2192	17 Check Floats	08:53:05 45.02

Customer: QUICKSILVER  
 Well Description: PERILAW PARTNERS LTD. 1-3  
 SVC LDR: MIKE STILL

Job Date: 25-Aug-2011  
 RIG NAME: DHS 6  
 SVC SUP: SEMISI PAUU

Sales Order #: 8411533  
 PUMP TRUCK: 10872113  
 SVC OPR: SEMISI PAUU