

# **OEHL**

POST JOB REPORTS  
CEMENTING/PUMPING

**Well Name : Westwood-1**

**Rig: Hunt #3**

## **SURFACE CASING 7521**

**Prepared for Juris Ozolins**

**3/12/2009**

**Prepared by Anthony Kelly**

# **HALLIBURTON**

*The Future is Working Together.*

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<b>HALLIBURTON</b>		CUSTOMER	SALES ORDER No.	DATE	
		OEHL	0	3 December 2009	
<b>CEMENT/PUMPING JOB SUMMARY</b>					
WELL	LOCATION/FIELD NAME	COUNTRY	HES REP	CUSTOMER REP	WELL TYPE
Westwood-1	Tasmania	Australia	Anthony Kelly	Juris Ozolins	Exploration
JOB TYPE		JOB PURPOSE CODE		BDA	RIG
Cementing Casing		SURFACE CASING 7521		Perth	Hunt #3

### KEY PERFORMANCE INDICATORS

<b>TYPE OF JOB (Cementing or Non-Cementing):</b> <i>Select the job type (Cementing or Non-Cementing)</i> <b>TOTAL OPERATING TIME (hrs)</b> <i>Rig up/ Pumping/ Rig Down</i> <b>HSE INCIDENT, ACCIDENT, INJURY:</b> <i>This should be recordable incidents only</i> <b>WAS THE JOB DELIVERED CORRECTLY AS PERJOB DESIGN:</b> <i>This will be dictated by the customer</i> <b>TOTAL TIME PUMPING (hrs)</b> <i>Total number of hours pumping fluid on this job</i> <b>NON -PRODUCTIVE RIG TIME:</b> <i>As a result of Halliburton cementing PSL</i> <b>NUMBER OF JSA'S PERFORMED:</b>  <b>NUMBER OF UNPLANNED SHUTDOWNS (After starting to pump)</b>  <b>TYPE OF RIG(CLASSIFICATION) JOB WAS PERFORMED ON:</b>	<div>Cementing</div> <div>5.0 hrs</div> <div>NO</div> <div>YES</div> <div>1.0 hrs</div> <div>0.0 hrs</div> <div>1</div> <div>0</div> <div>LAND</div>	<b>WAS THIS A PRIMARY CEMENT JOB (YES / NO)</b> <i>Primary cement job = Casing job, Liner Job, tie back</i> <b>DID WE RUN WIPER PLUGS?</b>  <b>WAS THIS A PLUG OR SQUEEZE JOB?</b>  <b>WAS THIS A PRIMARY OR REMEDIAL JOB?</b> <i>Remedial = Repeated attempts or corrections of initial cement job</i> <b>MIXING DENSITY OF JOB STAYED IN DESIGNED RANGE</b> <i>Density defined as +/- 0.2ppg. Calculation: Total bbls cement mixed at designed density divided by total bbls of cement multiplied by 100</i> <b>WAS AUTOMATED DENSITY CONTROL USED</b>  <b>JOB WAS PUMPED AT DESIGNED PUMP RATE</b> <i>Pump rate ranged defined as +/- bpm. Calculation : total bbls of fluid pumped at the designed rate divided by total bbls of fluid pumped multiplied by 100</i> <b>NUMBER OF REMEDIAL SQUEEZE JOBS REQUIRED - HES</b> <i>Number of remedial squeeze jobs required after primary job performed by HES</i> <b>NUMBER OF REMEDIAL AQUEEZE JOBS REQUIRED - COMPETITION</b> <i>Number of remedial squeeze jobs required after primary job performed by competition</i> <b>NUMBER OF REMEDIAL PLUG JOBS REQUIRED - HES</b> <i>Number of remedial plug jobs required after primary plug pumped by HES</i>	<div>YES</div> <div>Top &amp; Bottom Plugs</div> <div>Neither</div> <div>Primary</div> <div>70%</div> <div>NO</div> <div>70%</div> <div>0</div> <div>0</div> <div>0</div>
<b><u>REASON FOR UNPLANNED SHUTDOWNS (After starting to pump)</u></b> <i>Add details in job logs</i> <b><u>REASON FOR NON-PRODUCTIVE RIG TIME (Cementing PSL responsibility):</u></b> <i>Add details in job logs</i>			

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<b>CUSTOMER SATISFACTION SURVEY</b>					

<b>Sales</b> 0	<b>Line Item:</b> 0	
<b>Customer:</b> OEHL		<b>Job Type (BOM):</b> Cementing
<b>Customer Rep./Phone:</b> Juris Ozolins		<b>API / UWI: (leave blank if unknown)</b> 0
<b>Well Name:</b> Westwood-1		<b>Well Number:</b> 0
<b>Well Type:</b> Exploration	<b>Well Country:</b> Australia	
<b>H2S</b> 0	<b>Well State:</b> 0	<b>Well County:</b> 0

Dear Customer,

We hope that you were satisfied with the service delivery 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.

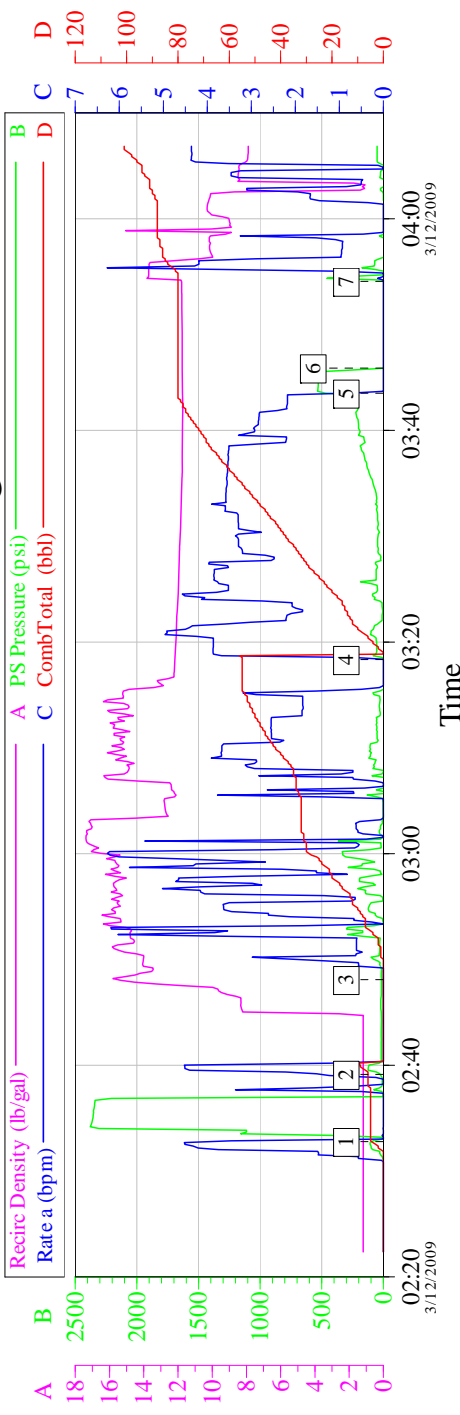
Please take the time to let us know if our performance met with your satisfaction. Please be as critical as possible to ensure we constantly improve our service. Your comments are of great value to us and are intended for the exclusive use of Halliburton.

CATEGORY	CUSTOMER SATISFACTION RATING (Please circle yes or no)
Survey Conducted Date	The date the survey was conducted
Survey Interviewer	The survey interviewer is the person who initiated the survey.
Customer Participation	Did the customer participate in this survey? (Y/N)
Customer Representative	Enter the Customer representative name
HSE	Was our HSE performance satisfactory? Circle Y or N
Equipment	Were you satisfied with our Equipment? Circle Y or N
Personnel	Were you satisfied with our people? Circle Y or N
Customer Comment	
Job DVA	Did we provide job DVA above our normal service today? Circle Y or N
Time	Please enter hours in decimal format to nearest quarter hour.
Other	Enter short text for other efficiencies gained.
Customer Initials	Customer's Initials
Please provide details	

<b>CUSTOMER SIGNATURE</b>
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<b>PERSONELL</b>						
PERSONNEL / EXPOSURE		hrs	PERSONNEL / EXPOSURE		hrs	PERSONNEL / EXPOSURE
#N/A Anthony Kelly		5	00460251 Sean Harrison		5	
<b>EQUIPMENT</b>						
SAP#	PUMPING / MIXING	HOURS	SAP#	BULK SUPPLY / TANKS	HOURS	
#N/A	SKD-4 Cementing Skid - RCM Ile	5	#N/A	1410 Bulk Cement Equipment	5	
SAP#	VEHICLES / TRAILERS	HOURS	SAP#	OTHER EQUIPMENT	HOURS	
			#N/A	Cement Cutting Pod	5	
<b>FLOAT EQUIPMENT AND CASING EQUIPMENT</b>						
SAP#	FLOAT EQUIPMENT	QTY	SAP#	PLUGS	QTY	
#N/A	Non Halliburton Float Shoe	1	#N/A	Non Halliburton 9-5/8" Top Wiper Plug	1	
#N/A	Non Halliburton Float Collar	1	#N/A	Non Halliburton 9-5/8" Bottom Wiper Plug	1	
SAP#	CASING ATTACHMENTS	QTY	SAP#	OTHER	QTY	
#N/A	Non Halliburton Centralizers	4				
<b>WELL PROFILE</b>						
NEW CASING		OPEN HOLE + EXCESS OR CALIPER DATA			PREVIOUS CASINGS	
Non Tapered Casing , , 24m shoe track						
9.625in 36ppf K-55 BTC : 0m to 338m MD, 338m TVD		12.25in, 25 percent excess, 0m to 340m			13.375in, 54.5ppf, 0m to 104m	
<b>CEMENT DESIGN</b>						
Spacer			Single			
DENSITY	8.3ppg	WATER	0.00gal/sk	DENSITY	15.8ppg	WATER
YIELD	0.00cuft/ft	MIX FLUID	0.00gal/sk	YIELD	1.16cuft/ft	MIX FLUID
WATER SOURCE	Freshwater			WATER SOURCE	Freshwater	
CEMENT TYPE	at lb/sk			CEMENT TYPE	ABC Class 'G' at 94lb/sk	
Total Cement Used				Total Cement Used	270sks	
Estimated TOC				Estimated TOC	140m	
Additive	Concentration	Total Used	Additive	Concentration	Total Used	
			NF-6	0.25 gal/10bbl	5gals	
<b>JOB LOGS</b>						
DATE	TIME	VOLUME	PRESSURE (psi)		RATE	JOB DESCRIPTION
DAY-MTH-YR	HRS:MIN	BBLS	HIGH	LOW	BPM	REMARKS/DETAILS
3/12/2009	3:00					RIG UP UNIT TO RIG FLOOR / STANDBY
	5:00					PRE-JOB SAFETY MEETING
	5:15					ATTACH CEMENT HEAD TO TOP OF CASING
	5:35	5			4	PUMP 5 BBLS FRESHWATER AHEAD
	5:37	0	2500			PRESSURE TEST SURFACE LINES TO 2500 PSI
	5:42	5			4	PUMP 5 BBLS FRESHWATER SPACER
	5:45	0				DROP BOTTOM PLUG
	5:45	52			4	MIX AND PUMP SINGLE SLURRY
	6:05	0				DROP TOP PLUG
	6:05	5			3.5	PUMP 5 BBLS FRESHWATER
	6:07	80			3.5	DISPLACE WITH MUD
	6:30		500			BUMP PLUG AT 500 PSI
	6:30		500			HOLD PRESSURE FOR 10 MINS FOR CASING TEST
	6:40					BLEED OFF LINES
	6:40	0.5				CHECK FLOATS - OK
	6:42					WASH UP
	8:00					RIG DOWN / DISCONNECT CEMENT HEAD
END OF JOB LOGS						

# 9-5/8" Surface Casing



- 1 Pump Freshwater Ahead, then Pressure Test Surface Lines
- 2 Pump Freshwater Spacer, then Drop Bottom Plug
- 3 Mix and Pump Single Slurry
- 4 Drop Top Plug, Pump Freshwater, Displace with Mud
- 5 Bump Plug, Hold Pressure for Casing Test
- 6 Bleed Off Lines, Check Floats
- 7 Wash Up Unit