



Occidental Petroleum Corporation

SBJ 13-13HZ

Surface Casing

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SBJ 13-13HZ – Surface Casing

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1. Project Background

On October 10, 2021, Magnum utilized PCMP-Q technology on the surface casing cementing job with a total of 344 bbl mixed and pumped, and maximum combined displacement rate of 6 bbl/min. The total time of operations was 2 hours.



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2. Cement Blend Data

This is the blend data of the Cement ordered for the job.

Blend Description	Cement Properties
Base Cement Blend : MAG S 14.1	
Mix Water (gal/sk)	5.89
Yield (ft ³ /sk)	1.28
Lab Results	
Density (ppg)	14.1
Working Time (hr:min)	2:13
Thickening Time (hr:min)	3:05
Compressive Strength (psi/12h)	698
Compressive Strength (psi/24h)	1070
Mix water Temperature (°F)	65
Slurry Temperature (°F)	65



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3. Pump Schedule

Service Supervisor	W.Silvester
Client	OCCIDENTAL
Well	SBJ 13-12 HZ
Job Type	SURFACE
JOB #	109547



PRESSURE TEST **LOW 500 PSI** **HIGH 2500 PSI**

Job Procedure		Density	Adds	
Sequence	Pump		BPM	
Fill Lines	5 BBLS	8.33 ppg	3	
PRESSURE TEST	2500 BBL			
Fresh water	5 bbls	8.3 ppg	3	
Mag Mark	10 BBL	8.3 ppg	3	
Fresh water	10 bbls	8.3 ppg	3	
Tail	179 BBL	14.1 ppg	6	
Drop Top Plug				
Displacement	140.99		6	
Bump Top Plug				
Shoe Joint Volume	3.30 BBL			

Cement to Surface **9.9 BBLS** **Spacer to Surface = 30 bbls**

Total Water Needed 361.3 bbl
Lift Pressure 1,046.1 psi
Differential Pressure 588.8 psi
Pressure Test 2500 psi


SLURRY MIX WATER
 179.39 110.3533571

Lead	1.64 cuft/sk 8.59 gal/sk
Tail	1.28 cuft/sk 5.89 gal/sk



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4. Job Sequence / Procedure 1 of 2

		US Treatment Report			
Customer: OCCIDENTAL PETROLEUM CORP.		Job #: JOB00109547			
Rep: David Cornett		Rig: Ikon 12		Job Date: Oct 10 @ 00:00	
Supervisor: WILLIAM (WAYNE) SILVESTER		Well: SBJ 13-13HZ		Time Requested: Oct 10 @ 14:30	
Job Type: US Primary Casing-Surface		UWI: SBJ 13-13HZ		Time Arrived: Oct 10 @ 14:00	
		Surface: T4N R68W S13		Time Released: Oct 10 @ 18:00	
0 sk MAG S 14.1 + 1.00% MCA-1 + 0.10% MCDF-P					
		Yield: 1.28 ft ³ /sk = 0bbls		Mix Water: 5.89 gal/sk = 0gal	
BHCT (F)	81	BHST (F)	81	Surface Casing Casing Size (in)	9.625
Surface Casing Grade	L-80	Surface Casing Weight (lb/ft)	40	Funnel Vis (sec/qt)	TBD
Mud Type	WBM	Plug Size (in)	9.625	Plug Type	Top PDC
Surface Casing (in)	9.625	Surface Casing Grade	P-110	Surface Casing Length (ft)	1902.9
Surface Casing WT (lb/ft)	40	TMD (ft)	1842.7		2
Unkown UDF	Surface Casing		6	TVD (ft)	1797
Treatment Info: Sacks Used: 0 Sacks Not Used: 0					
Preflush: 10bbls Fresh Water & 10bbls MAG Mark & 10bbls Fresh Water				Circulation Time: 1	
Displace:				Slurry Temp: 72	Bulk Sample: Yes
				Water Temp: 68	Water Sample: Yes
				Bulk Temp: 66	Slurry Sample: Yes
				Air Temp:	Air Pressure 29.68
Slurry Returns: 10		Plug Bumped: Yes	Pump Out Lines: Yes	Float Held: Yes	
Cement Class:		Type III	Humidity: 24	Precipitation: 0	



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Job Sequence / Procedure 2 of 2

Time	Pressure psi	Annular Pressure psi	Volume Per Stage bbls	Total Stage Volume bbls	Rate bbls/mi n	Treatment Detail
14:00	0.00					Arrive on Location - ARRIVED ON LOCATION SPOKE WITH COMPANY REP GOT PIPE TALLY WATER TEST COMPLETE
15:00	0.00					Safety Meeting - SPOKE ABOUT STOP WORK AUTHORITY,VOL,DEPTH,DISPLACEMENT ,SAFETY MUSTER AREA
16:00	35.00				3	Drop Plug
16:00	630.00					Bump Plug - TO 1230 PSI HELD FOR 3 MINS CHECK FLOAT IT HELD
16:00	500.00			141.00	6	Displace - =141.00 BBLS GOOD RETURNS CEMENT TO SURFACE @ 131 BBLS AWAY
16:00	60.00				6	Pump Slurry - = 786.9 SKS 1.28 FT3/SK 5.89 GPS=179 BBLS WET & DRY SAMPLES TAKEN WEIGHT CHECKED BURST BOTTOM PLUG SLOWED RATE @ 100 BBLS OF SLURRY AWAY GOOD RETURNS
16:00	35.00			25	3	Pump Preflush - = 10 BBLS OF FRESH WATER 10 BBLS OF MAG MARK 10 BBLS OF FRESH WATER
16:00	2,525.00					Start Pressure Test - TO 2525 PSI
16:00	30.00			5	3	Fill Lines - WITH 5 BBLS DROP BOTTOM PLUG
19:00	0.00					Leave Location



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5. Job Graph

