



Occidental Petroleum Corporation

SBJ 13-12HZ

Surface Casing

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SBJ 13-12HZ – Surface Casing

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1. Project Background

On October 09, 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

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

SLURRY MIX WATER

SILO # 8120 179.39 110.3533571



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4. Job Sequence / Procedure 1 of 2

		US Treatment Report			
Customer: OCCIDENTAL PETROLEUM CORP. Rep: David Cornett Supervisor: WILLIAM (WAYNE) SILVESTER Job Type: US Primary Casing-Surface		Rig: Ikon 12 Well: SBJ 13-12-HZ UWI: SBJ 13-12HZ Surface: T4N R68W S13		Job #: JOB00109545 Job Date: Oct 09 @ 00:00 Time Requested: Oct 09 @ 18:00 Time Arrived: Oct 09 @ 14:45 Time Released: Oct 09 @ 14:45	
0 sk MAG S 14.1 + 1.00% MCA-1 + 0.10% MCDF-P					
		Yield: 1.28 ft3/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
Hole Size (in)	13.5	Max Pressure (psi)	2500	Mud Type	WBM
Plug Size (in)	9.625	Plug Type	Rig	Surface Casing (in)	9.625
Surface Casing Grade	P-110		Supplie	Surface Casing WT (lb/ft)	40
TMD (ft)	1880.59	Surface Casing Length (ft)	1880.59	Unkown UDF	Surface Casing
		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: 139.41bbls Fresh Water				Slurry Temp: 72	Bulk Sample: Yes
				Water Temp: 68	Water Sample: Yes
				Bulk Temp: 64	Slurry Sample: Yes
				Air Temp: 64	Air Pressure 29.66
Slurry Returns: 10	Plug Bumped: Yes	Pump Out Lines: Yes	Float Held: Yes		
Cement Class:	Type III	Humidity: 27	Precipitation:		



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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
08:15	35.00			25	3	Pump Preflush - = 10 BBLS OF FRESH WATER 10 BBLS OF MAG MARK 10 BBLS OF FRESH WATER
18:00	0.00					Arrive on Location - ARRIVED ON LOCATION SPOKE WITH COMPANY REP GOT PIPE TALLY WATER TEST COMPLETE
19:30	0.00					Safety Meeting - SPOKE ABOUT STOP WORK AUTHORITY,VOL,DEPTH,DISPLACEMENT ,SAFETY MUSTER AREA
20:00	30.00			5	3	Fill Lines - WITH 5 BBLS DROP BOTTOM PLUG
20:10	2,570.00					Start Pressure Test - TO 2570 PSI
20:20	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
20:50	35.00				3	Drop Plug
20:55	300.00			139.41	6	Displace - =139.41 BBLS GOOD RETURNS CEMENT TO SURFACE @ 129 BBLS AWAY
21:20	630.00					Bump Plug - TO 1230 PSI HELD FOR 3 MINS CHECK FLOAT IT HELD
22:00	0.00					Leave Location



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5. Job Graph

