



Occidental Petroleum Corporation

SBJ 13-7HZ

Surface Casing

Date: October 05, 2021



Author: Yithanlily Silvester

Yithanlily.Silvester@magnumcement.com



SBJ 13-7HZ – Surface Casing

Disclaimer

The information provided in this report is confidential and intended solely for the use of the individual or entity to whom they are addressed. Magnum Cementing Services Technical Team give a based-on facts interpretation. If you are not the named addressee you should not disseminate, distribute, or copy this information. Please notify the sender immediately by e-mail if you have received this report by mistake and delete it from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing, or taking any action in reliance on the contents of this information is strictly prohibited. Any use of this information for the decision-making process is exclusively Customer responsibility.



Table of Contents

Disclaimer.....	2
1. Project Background.....	4
2. Cement Blend Data	5
3. Pump Schedule	6
4. Job Sequence / Procedure 1 of 2	7
Job Sequence / Procedure 2 of 2	8
5. Job Graph.....	9



SBJ 13-7HZ – Surface Casing

1. Project Background

On October 05, 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.



SBJ 13-7HZ – Surface Casing

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



SBJ 13-7HZ – Surface Casing

3. Pump Schedule




OXY - SBJ 13-7HZ - SURFACE

RATE	EVENT	VOLUME (BBLs)	SACKS	WEIGHT	YIELD	GAL/ SK
	START JOB		1200		<u>Max Psi</u>	
	DROP BOTTOM PLUG					
2 BPM	FILL LINES	5.0		8.33 PPG		
	PRESSURE TEST	2500 PSI		8.33 PPG		
5 BPM	FRESH WATER	5.0		8.33 PPG		
5 BPM	DYE WATER	10.0		8.33 PPG		
5 BPM	FRESH WATER	10.0		8.33 PPG		
6 BPM	CMT - MAG S 14.1	179.4	786.9	14.1 PPG	1.28	5.89
	SHUTDOWN	WASH PUMPS AND LINES				
	DROP TOP PLUG					
6 BPM	DISPLACEMENT	139.8				
	LAND PLUG	BUMP PLUG 500 PSI OVER				
		SHOE JOINT LENGTH		BBLs TO SURFACE		H2O REQ
TP	1886'	42'		2.8 BBLs CEMENT		300 BBLs
TD	1897'	<u>USE MUD SCALES ON EVERY TIER.</u>				
Total Displacement						
PRESSURE TO LAND		553 PSI				
Collapse	3090 PSI	Burst	5750 PSI		JOB #	109239



SBJ 13-7HZ – Surface Casing

4. Job Sequence / Procedure 1 of 2

		US Treatment Report			
Customer: OCCIDENTAL PETROLEUM CORP. Rep: David Cornett Supervisor: WESLEY BELL Job Type: US Primary Casing-Surface		Rig: Ikon 12 Well: SBJ 13-7Hz UWI: SBJ 13-7Hz Surface: T4N R68W S13		Job #: JOB00109239 Job Date: Oct 05 @ 00:00 Time Requested: Oct 05 @ 16:30 Time Arrived: Oct 05 @ 16:30 Time Released: Oct 05 @ 20:00	
786.9 sk MAG S 14.1 + 1.00% MCA-1 + 0.10% MCDF-P					
Yield: 1.28 ft3/sk = 179.39bbbls Mix Water: 5.89 gal/sk = 4634.84gal					
BHCT (F)	81	BHST (F)	81	Surface Casing Grade	L-80
Surface Casing Weight (lb/ft)	40	Collapse Csg Pressure (psi)	3090	Float Depth (ft)	1844'
Hole Size (in)	13.5	Max Csg Pressure (psi)	5750	Max Pressure (psi)	1200psi
Mud Density (lb/gal)	8.4	Mud Type	WATE	Plug Size (in)	9 5/8
Plug Type	Rig Supplied		R	TVD (ft)	1897'
Unkown UDF	Surface Casing	TMD (ft)	1897'		
Treatment Info: Sacks Used: 0 Sacks Not Used: 0					
Preflush: 10bbbls Fresh Water & 10bbbls MAG Mark & 10bbbls Fresh Water				Circulation Time: 0.5	
Displace: 139.8bbbls Fresh Water				Slurry Temp: 82	Bulk Sample: Yes
				Water Temp: 65	Water Sample: Yes
				Bulk Temp: 71	Slurry Sample: Yes
				Air Temp: 84	Air Pressure
Slurry Returns: 4 Plug Bumped: Yes				Pump Out Lines: Yes	Float Held: Yes
Cement Class: Type III				Humidity:	Precipitation:



SBJ 13-7HZ – Surface Casing

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
15:10	0.00					Arrive on Location - ARRIVED ON LOCATION. CUSTOMER REQUESTED CREW @ 16:30. RIG IS GETTING READY TO RUN CASING.
16:55	0.00					CASING ON BOTTOM
17:20	0.00					Safety Meeting - PRE JOB SAFETY MEETING WITH ALL PERSONEL
17:30	0.00					Drop Plug - DROP BOTTOM PLUG
17:34	2,520.00		5		2.0	Start Pressure Test - LOAD LINE AND PRESSURE TEST
17:37	110.00		5		5.0	Pump Preflush - FRESH WATER AHEAD
17:38	100.00		10		5.0	Pump Preflush - DYE SPACER
17:40	120.00		10		5.0	Pump Preflush - FRESH WATER
17:44	317.00		179.4		6.0	Pump Slurry - BATCH/ WEIGHT/ PUMP 786.9 SKS / 179.4 BBLs OF MAG S 14.1.
18:20	0.00					Stop Pumping - SHUTDOWN. FINISHED PUMPING CEMENT
18:25	0.00					Drop Plug - DROP TOP PLUG.
18:29	630.00		120		6.0	Displace - FRESH WATER DISPLACEMENT.
18:52	670.00		19.8		2.0	Slow Rate Pumping - SLOW RATE.
19:00	1,125.00			139.8		Bump Plug - BUMP PLUG WITH 500 PSI OVER FINAL CIRCULATING PRESSURE. 4 BBLs OF CEMENT TO SURFACE.
19:03	0.00					Check Floats - FLOATS HELD. 1 BBL BACK
19:10	0.00					Wash Up Truck
19:20	0.00					Rig Out



SBJ 13-7HZ – Surface Casing

5. Job Graph

