



## 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 <sup>3</sup> /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)	48
Slurry Temperature (°F)	61



## BERRY FARMS 8-1HZ – Surface Casing

### 3. Job Sequence

MS Magnum Cementing Services		US Treatment Report				
Customer: OCCIDENTAL PETROLEUM CORP.		Job #: JOB00140655				
Rep: David Cornett		Rig: Ikon 12		Job Date: Nov 14 @ 08:00		
Supervisor: TRAVIS TOLMAN		Well: BERRY FARMS 8-1HZ		Time Requested: Nov 14 @ 22:00		
Job Type: US Primary		UWI: BERRY FARMS 8-1HZ		Time Arrived: Nov 14 @ 16:00		
Casing-Surface		Surface: BERRY FARMS 8-1HZ		Time Released: Nov 14 @ 20:00		
866 sk MAG PR-S 14.1 + 0.50% MCA-1 + 0.50% MCA-2 + 0.20% MCDP-P						
Yield: 1.31 ft <sup>3</sup> /sk = 202.05bbbls Mix Water: 6.06 gal/sk = 5247.96gal						
BHCT (F)	88	BHST (F)	104	Surface Size (in)	9.625	
Surface Grade	J-55	Surface Weight (lb/ft)	36	Collapse Csg Pressure (psi)	1890	
Float Depth (ft)	1817	Funnel Vis (sec/qt)	TBD	Max Csg Pressure (psi)	4096	
Max Pressure (psi)	1300	Mud Density (lb/gal)	TBD	Mud Type	WBM	
Plug Size (in)	9.625	Plug Type		Rig TMD (ft)	1857	
TVD (ft)	1857			Supplie d		
Treatment Info: Sacks Used: 866 Sacks Not Used: 0						
Preflush: 10bbbls MAG Mark & 10bbbls Fresh Water						
Displace: 141.4bbbls Fresh Water						
Circulation Time: 1						
Slurry Temp: 61 Bulk Sample: Yes						
Water Temp: 48 Water Sample: Yes						
Bulk Temp: 68 Slurry Sample: Yes						
Air Temp: 34 Air Pressure: 30.1						
7						
Slurry Returns: 31.4 Plug Bumped: Yes Pump Out Lines: No Float Held: Yes						
Cement Class: Type III Humidity: 36 Precipitation: 0						
Time	Pressure psi	Annular Pressure psi	Volume Per Stage bbbls	Total Stage Volume bbbls	Rate bbbls/mi n	Treatment Detail
16:00	0.00					Arrive on Location - Met with company man to discuss job and safety. On location set at 16:00
18:00	0.00					Safety Meeting - Held meeting with company man, rig hands and crew
18:41	92.00		5		2.5	Fill Lines - Load pump and lines with MAG MARK
18:43	2,300.00					Start Pressure Test - Test pump and lines with fresh water
18:47	104.00		15		2.8	Pump Preflush - Pump 5bbbls of MAG Mark 10bbbls of fresh water
18:52	245.00		202		5	Pump Slurry - Pump 866sks/202bbbls of MAG PR-S 14.1#-1.31Y -6.06gps
19:34	0.00					Stop Pumping
19:39	0.00					Drop Plug - Witnessed by company man
19:44	784.00		120		5	Displace - Pump fresh water, calculated 141.4bbbls

20:10	750.00		21.4		2.5	Decrease Rate
20:17	1,256.00					Bump Plug - Land plug, 141.4bbbls actual displacement got 31.4bbbls of cement to surface
20:23	1,250.00					Check Floats - Float held, got .5bbbl back
20:30	0.00					Wash Up Truck
20:45	0.00					Rig Out
21:30	0.00					Leave Location



## BERRY FARMS 8-1HZ – Surface Casing

### 4. Job Graph

