Post Job Report

Service with Integrity

Customer: Occidental Petroleum Corporation

Job Type: Surface Casing

Job Date: 10/04/2023

Well Name: SWARTZ 4-06HZ

API #: 05-123-51921

Service Station: Cheyenne

Client Representative: Ben Petty

Sales Representative: Steve Moore

Author: Yithanllily Silvester

Report Date: 01/2024

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Table of Contents

1. Well Properties

Well Properties	
Hole Size (in)	13.5
Casing Size (in)	9.625
Grade / Weight (lb/ft)	L80/36
TVD/TMD (ft)	1841/1907
BHCT / BHST (F)	88/103

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)	14.1
Yield (ft^3/sk)	1.31
Lab Results	
Density (ppg)	14.1
Working Time (hr:min)	3:12
Thickening Time (hr:min)	3:50
Compressive Strength (psi/12h)	691
Compressive Strength (psi/24h)	1283

2. Job Sequence / Procedure 1of 2

Treatment Report

Customer:	Occidental Petroleum Corp.			**Job #:**	JOB00167006
Rep:	David Cornett	**Rig:**	IKON 112	**Job Date:**	Oct 04 @ 09:10
Supervisor:	Brandon Gartner	**Well:**	SWARTZ 4-6HZ	**Time Requested:**	
Job Type:	US Primary	**UWI:**	SWARTZ 4-6HZ	**Time Arrived:**	Oct 04 @ 09:10
	Casing-Surface	**Surface:**	NWNE SEC4 T3N R67W	**Time Released:**	Oct 04 @ 14:10

887.5 MAG S 14.1 0.25% MCA-1 + 0.10% MCDF-P
0

Yield: 1.31m3/t = 1162.62m3 Mix Water: 6.06m3/t = 5378.25m3

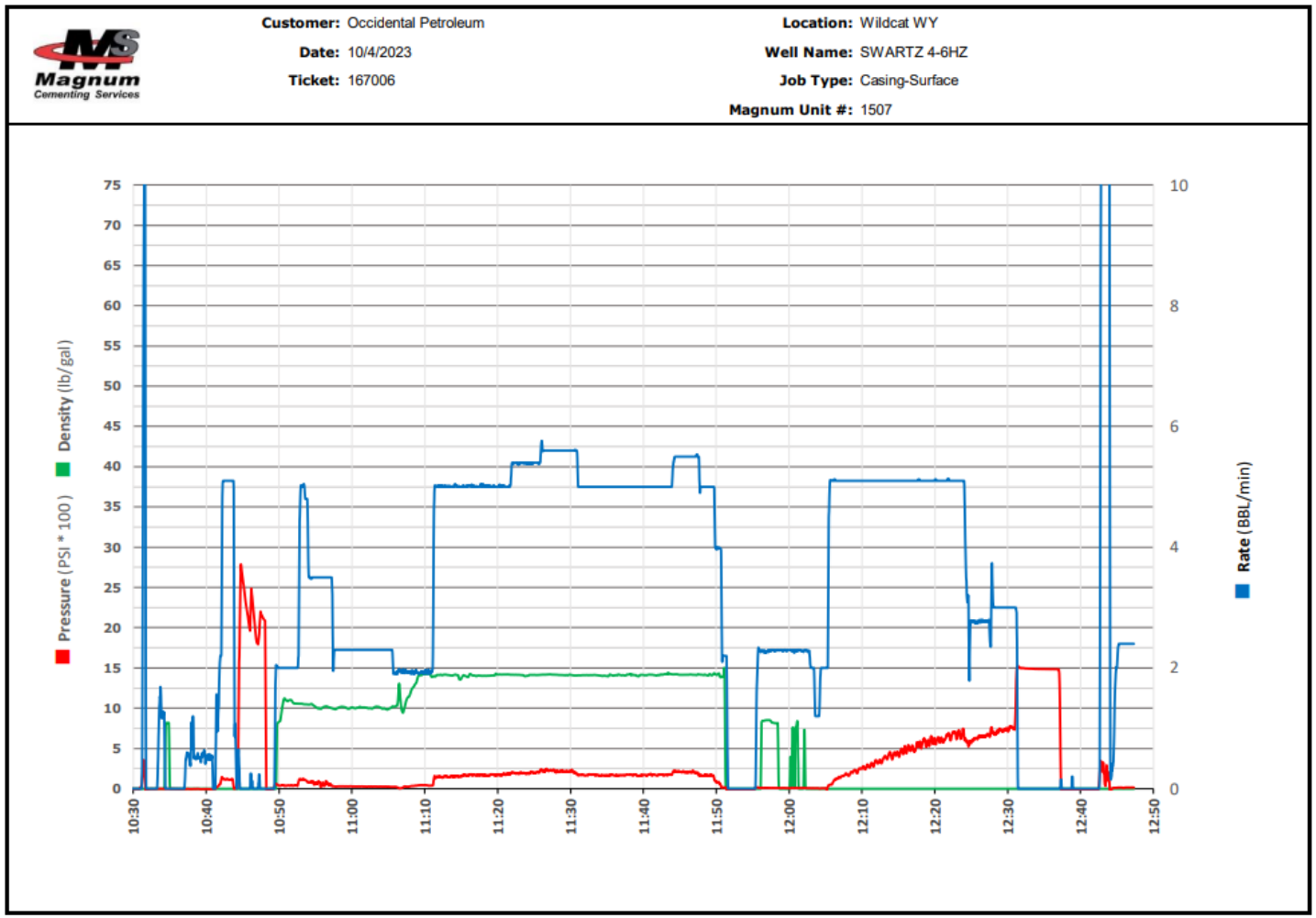
BHCT (`C, 'F)	88	BHST (`C, 'F)	103	Collapse Csg Pressure (MPa, psi)	2020
Float Depth (m, ft)	1855	Funnel Vis (sec/L, sec/qt)	TBD	Max Pressure (MPa, psi)	1700
Mud Type	WBM	Plug Size (mm, in)	9.625	TMD (m, ft)	1907
TVD (m, ft)	1841				

Treatment Info:	Tonnes Used:		Tonnes Not Used:	0.00	
Preflush:	10m3 MAG Mark & 40m3 MAG Sweep			Circulation Time:	1
		Slurry Temp:	84	Bulk Sample:	Yes
Displace:	140.3m3 Fresh Water	Water Temp:	54	Water Sample:	Yes
		Bulk Temp:	67	Slurry Sample:	Yes
Slurry Returns:	36 Plug Bumped:	Yes	Pump Out Lines:	Float Held:	Yes

Job Sequence / Procedure 2 of 2

Time	Pressure MPa	Annular Pressure MPa	Volume Per Stage m3	Total Stage Volume m3	Rate m3/min	Treatment Detail
09:00	0.00	0.00	0	0.00	0	Arrive on Location - Spoke with company representative about: depths, volumes and water requirements. Completed Water test: Temp: 60 f, Hardness:250 , pH:7 , and Chlorides: 100
10:20	0.00	0.00	0	0.00	0	Safety Meeting - Safety Meeting - Held Safety Meeting with all Magnum/ Rig crew. Spoke about Stop work authority, Muster Points, and Communication between Magnum and Rig Crew.
10:25	0.00	0.00	0	0.00	0	Drop Plug - Bottom Plug. Witnessed by Company Representative.
10:41	75.00	0.00	5	0.00	3	Fill Lines - 5 BBls Fresh Water to pressure test.
10:44	2500.00	0.00	0	0.00	0	Start Pressure Test - 2500 PSI. Test: Passed
10:48	101.00	0.00	10	0.00	3	Pump Preflush - MAG Mark 10 BBls
10:54	91.00	0.00	40	0.00	3	Pump Preflush - MAG Sweep 40 BBls
11:00	169.00	0.00	207	0.00	5	Pump Slurry - MAG S 14.1, y=1.31, w=6.06, Sk#: 88 SKS: 871.1 207 BBls
11:55	0.00	0.00	0	0.00	0	Drop Plug - Top Plug. Winessed by Company Representative.
12:00	745.00	0.00	144.3	0.00	5	Displace - Fresh Water 144.3 BBls
12:20	826.00	0.00	120	0.00	3	Slow Rate Pumping - Slowed rate to 3 BBls per minute to bump plug at 120 BBls Away.
12:31	1500.00	0.00	144.3	0.00	3	Bump Plug - 144.3 BBls Away. 36 BBls Cement Returned to surface.
12:32	1500.00	0.00	0	0.00	0	Start Pressure Test - Completed 5 Minute casing integrity test. Test Passed. 1 BBl returned to pump after pressure bled off.
13:00	0.00	0.00	0	0.00	0	Wash Up Truck
14:00	0.00	0.00	0	0.00	0	Leave Location

3. Job Graph


Customer: Occidental Petroleum
Location: Wildcat WY
Date: 10/4/2023
Well Name: SWARTZ 4-6HZ
Ticket: 167006
Job Type: Casing-Surface
Magnum Unit #: 1507
Pressure (PSI * 100)
Density (lb/gal)
Rate (BBL/min)
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
10
8
6
4
2
0
10:30
10:40
10:50
11:00
11:10
11:20
11:30
11:40
11:50
12:00
12:10
12:20
12:30
12:40
12:50

4. Lab Testing Results

SECTION III: REQUIRED TEST							
TEST REQUESTED:	TT	FL	FW	RH	SGSA	UCA	WATER
	√	☐	☐	√	☐	√	☐

SECTION IV: WELL INFORMATION

CEMENT TYPE:	Surface Casing		
TMD (ft):	1849	**BHCT °F:**	88
TVD (ft):	1800	**BHST °F:**	103
MUD Type:	WBM		

SECTION V: BLEND INFORMATION

Blend Name: MAG S 14.1

Additives	(%)	Pre-hydrated additive	Specific Condition
MCA-1	0.25	☐	
MCDF-P	0.10	☐	

Density:	14.1 lbs/gal
Mix water:	6.07 gal/sk
Yield:	1.31 ft³/sk
Lab Cement:	☐
Lab Water:	√
Field Cement:	√
Field Water:	☐

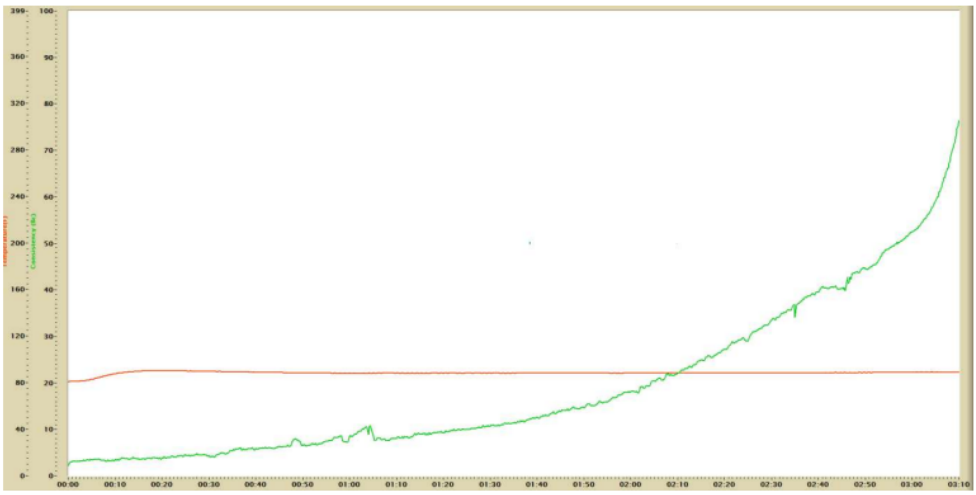
SECTION VI: TEST RESULTS

Load Ticket #	Working Time (40Bc)	Thickening Time (70Bc)
18574 (4-6HZ)	2:34	3:10

Compressive Strength	8hr	12hr	24hr	48hr	Time to 500 psi
(psi)	1147	1518	1870	--	4:18

Rheology	300	200	100	6	3	@10sec	@10min
(D.R.)	62	54	44	26	22.1	23.3	27.3

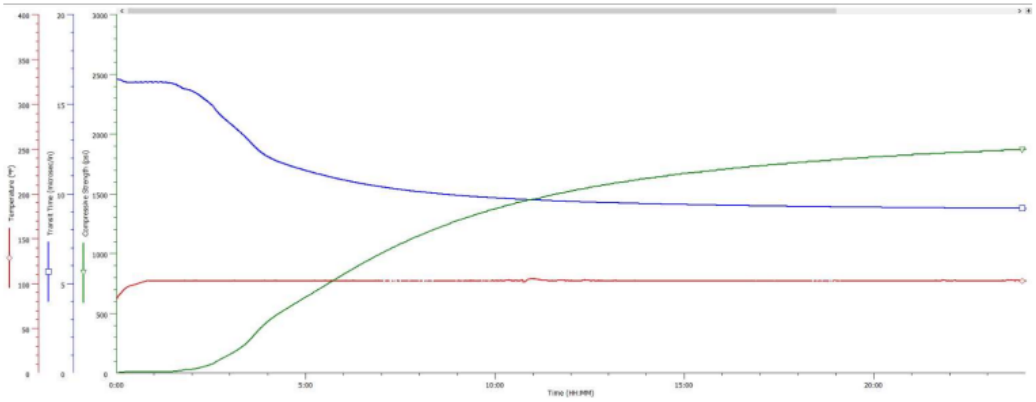
THICKENING TIME TEST RESULTS



TESTED CEMENT INFORMATION

BLEND NAME: MAG S 14.1
BHCT °F: 88
WORKING TIME (40Bc): 2:34
THICKENING TIME (70Bc): 3:10

COMPRESSIVE STRENGTH (UCA) TEST RESULTS



BLEND NAME: MAG S 14.1
BHST °F: 103

STRENGTH @8hr (psi)	STRENGTH @12hr (psi)	STRENGTH @24hr (psi)	STRENGTH @ 48hr (psi)	TIME TO 500 psi (HH:MM)
1147	1518	1870	--	4:18