

# Post Job Report



Service with Integrity

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Customer: Occidental Petroleum Corporation

Job Type: Surface Casing

Job Date: 11/16/2023

Well Name: [Lizzy North 36-9HZ](#)

API #: 05-123-52254

Service Station: Cheyenne

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Client Representative: Ben Petty

Sales Representative: Steve Moore

Author: Yithanlily Silvester

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## Disclaimer

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### 1. Well Properties

Well Properties	
Hole Size (in)	13.5
Casing Size (in)	9.625
Grade / Weight (lb/ft)	L80/36
TVD/TMD (ft)	2084/2177
BHCT / BHST (F)	88/107

### 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)	6.06
Yield (ft <sup>3</sup> /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 1 of 2

US Treatment Report						
<b>Customer:</b> OCCIDENTAL PETROLEUM CORP. <b>Rep:</b> David Cornett <b>Supervisor:</b> JAMES RAGLE <b>Job Type:</b> US Primary Casing-Surface			<b>Job #:</b> JOB00170152 <b>Job Date:</b> 11-16-2023 <b>Time Requested:</b> 2:00PM <b>Time Arrived:</b> 2:00PM <b>Time Released:</b> 5:45PM			
<b>Well:</b> Lizzy North 36-9HZ <b>UWI:</b> Lizzy North 36-9HZ <b>Surface:</b> SENE S36 T1N R68W						
929.7 sk    MAG S 14.1 + 0.25% MCA-1 + 0.10% MCDF-P						
Yield:    1.31 ft <sup>3</sup> /sk = 216.91bbls    Mix Water:    6.06 gal/sk = 5633.98gal						
BHCT (F)	88	BHST (F)	107	Surface Size (in)	9.625	
Surface Grade	L-80	Surface Weight (lb/ft)	36	Float Depth (ft)	2124	
Funnel Vis (sec/qt)	TBD	Max Pressure (psi)	1700	Mud Type	WBM	
Plug Size (in)	9.625	Plug Type	Rig	TMD (ft)	2177	
TVD (ft)	2084		Supplied			
Treatment Info:    Sacks Used: 929.7    Sacks Not Used:    0						
Preflush:    5bbls Fresh Water & 10bbls MAG Mark & 40bbls MAG Sweep						
Circulation Time:    1						
Slurry Temp:    82    Bulk Sample:    Yes						
Water Temp:    70    Water Sample:    Yes						
Bulk Temp:    60    Slurry Sample:    Yes						
Air Temp:    68    Air Pressure    29.5						
Slurry Returns:    40 Plug Bumped:    Yes    Pump Out Lines:    No    Float Held:    Yes						
Cement Class:    Type III    Humidity:    28    Precipitation:    0						
Displace:    165.5bbls Fresh Water						
<b>Further Blend Details:</b>						
Prehydrated:						
Additional Details (General Notes):						
Time	Pressure psi	Annular Pressure psi	Volume Per Stage bbls	Total Stage Volume bbls	Rate bbls/min	Treatment Detail
14:00	0.00					Arrive on Location - GET NUMBERS FROM COMPANY MAN/ TEST WATER TEMP=70/ PH=7/ CHLORIDES=100/ HSRDNESS=250
15:20	0.00					Safety Meeting - GO OVER SAFETY AND JOB WITH ALL PERSONEL ON LOCATION/ LOAD BOTTOM PLUG
15:38	100.00			5	3	Fill Lines - 5 BBLS FRESH WATER TO FILL LINES
15:41	2,500.00					Start Pressure Test - TEST PUMPS AND LINES @2500 PSI
15:44	300.00			10	3	Pump Preflush - 10 BBL MAG MARK
15:47	400.00			40	5	Pump Preflush - MIX AND PUMP 40 BBLS MAG SWEEP @ 10 PPG
15:55	450.00			216.9	5	Pump Slurry - MIX AND PUMP 929.70 SKS MAG S 14.1 PPG = 216.9 BBLS/ YIELD=1.31/ MW=6.06/ #88/ VERIFIED USING SCALES
16:33	0.00					Stop Pumping
16:35	0.00					Drop Plug - DROP TOP PLUG WITNESSED BY COMPANY MAN

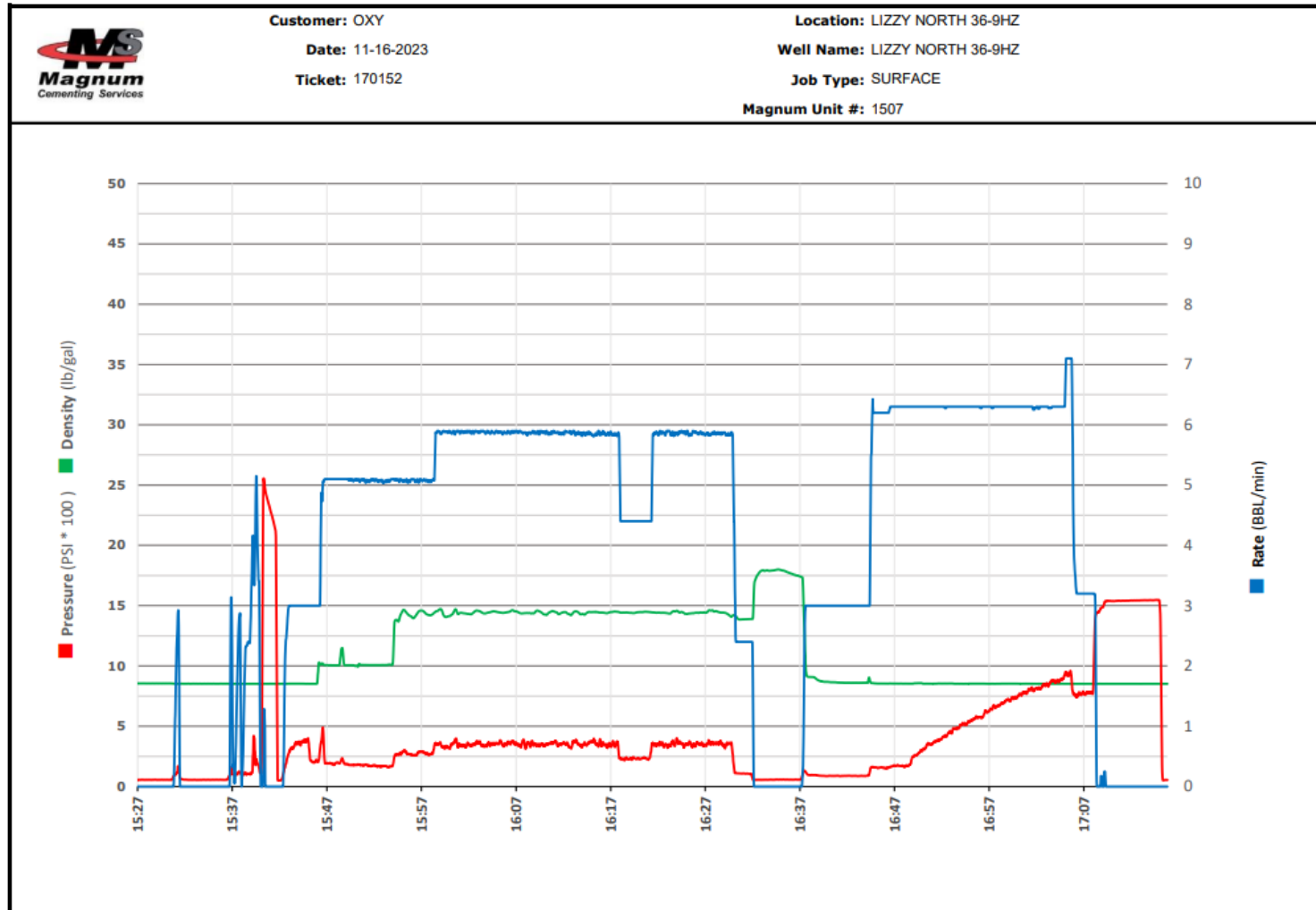


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*Job Sequence / Procedure 2 of 2*

16:39	750.00			145.5	6	Displace - FRESH WATER GOOD RETURNS THROUGH JOB/ 50 AWAY@200/ 100AWAY@500/ 150AWAY @750/ 40 BBLs CEMENT TO SURFACE
17:07	750.00			20	3	Decrease Rate - SLOW RATE LAST 20 BBLs
17:11	1,500.00					Bump Plug - HOLD PSI 5 MINS CASING TEST
17:16	0.00					Check Floats - FLOATS HELD 1 BBL BACK TO TRUCK
17:20	0.00					Wash Up Truck - WASH INTO CELLAR
17:45	0.00					Leave Location

### 3. Job Graph



### 4. Lab Testing Results

Report Name 01-1123-OXY-S-V1.0

SECTION IV: REQUIRED TEST							
TEST REQUESTED:	TT	FL	FW	RH	SGSA	UCA	WATER
	✓	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	✓	<input type="checkbox"/>

SECTION V: WELL INFORMATION			
CEMENT TYPE:	Surface Casing		
TMD (ft):	2106.2	BHCT °F:	88
TVD (ft):	2070	BHST °F:	107
MUD Type:	WBM	SPECIAL CONDITION:	NA

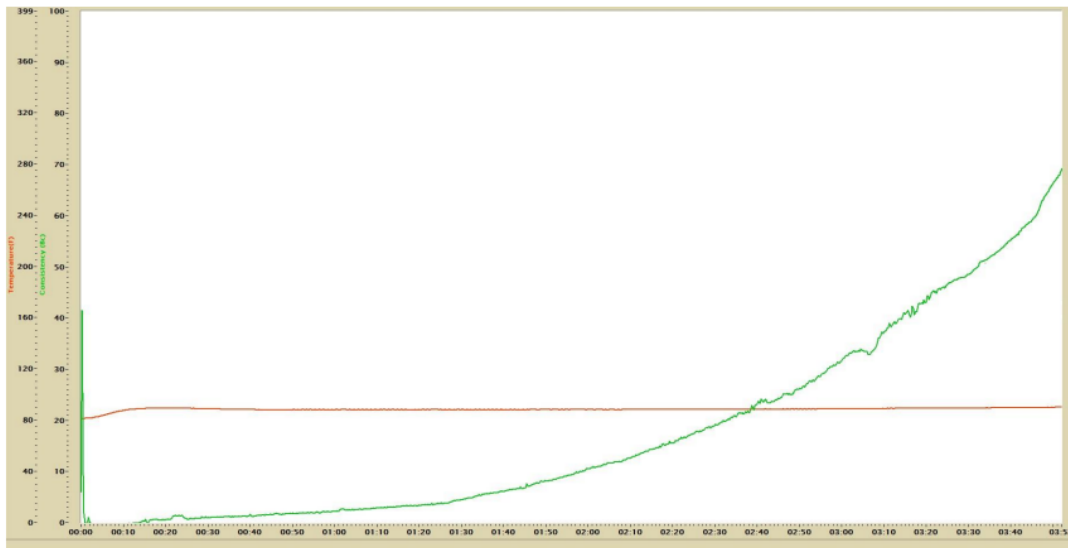
SECTION VI: BLEND INFORMATION					
Blend Name:	MAG S 14.1				
Additives	(%)	Pre-hydrated additive	Specific Condition	Density:	14.1 lbs/gal
MCA-1	0.25	<input type="checkbox"/>		Mix water:	6.07 gal/sk
MCDF-P	0.10	<input type="checkbox"/>		Yield:	1.31 ft <sup>3</sup> /sk
				Lab Cement:	<input type="checkbox"/>
				Lab Water:	✓
				Field Cement:	✓ Load # 19485
				Field Water:	<input type="checkbox"/>

SECTION VII: TEST RESULTS			
Working time (40Bc):	3:14	Thickening time (70Bc):	3:52

Compressive Strength (psi)	8hr	12hr	24hr	48hr	Time to 500 psi
	745	1007	1316	-	5:42

Rheology (rpm)	300	200	100	6	3
	57	50	41	24.4	20

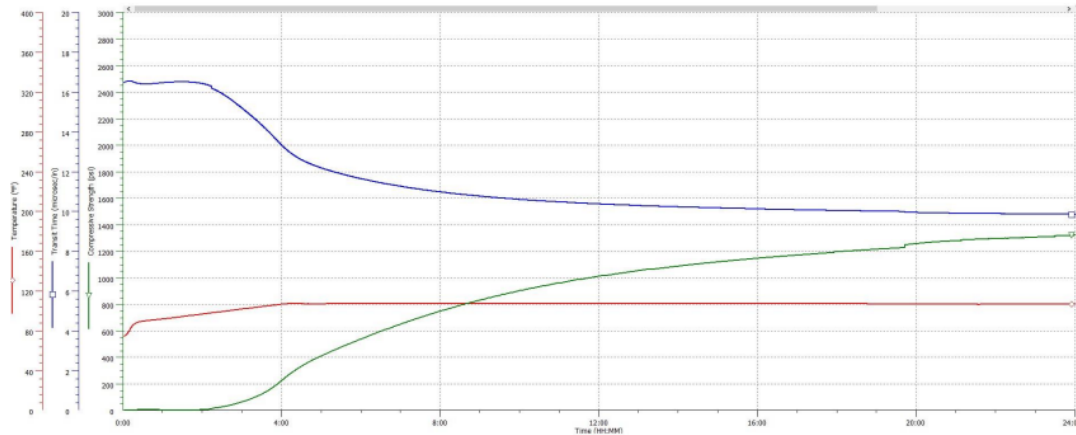
**THICKENING TIME TEST RESULTS**



**TESTED CEMENT INFORMATION**

BLEND NAME: MAG S 14.1  
 BHCT °F: 88  
 WORKING TIME (40Bc): 3:14  
 THICKENING TIME (70Bc): 3:52

**COMPRESSIVE STRENGTH(UCA) TEST RESULTS**



BLEND NAME: MAG S 14.1  
 BHST °F: 107

STRENGTH @8hr (psi)	STRENGTH @12hr (psi)	STRENGTH @24hr (psi)	STRENGTH @ 48hr (psi)	TIME TO 500 psi (HH:MM)
745	1007	1316	-	5:42