



Cementing Service Report

9210090

Client Name Anadarko Petroleum Corporation	Well Name Deepe 4-22	Rig Ensign Drilling Inc. 312	Job Date February 01, 2016	Call Sheet 1064512
Client Representative Mr. Larry Web	Surface Well Location NW NW Sec 22:T2N:R67W	Down Hole Well Location	Job Type Abandonment Plugs	Lead Supervisor Prigmore, Dominic (27161)

Well Profile

Well Type: Oil

Maximum Treating Pressure (psi): ---

Predicted Bottom Hole Static Temperature (°F): --- @ --

Bottom Hole Circulating Temperature (°F): --- @ --

Bottom Hole Logged Temperature (°F): --- @ --

Casing

Size (in)	Weight (lb/ft)	Grade	Collapse Pressure (psi)	Internal Yield Pressure (psi)	Capacity (bbl)	I.D. (in)	O.D. (in)	Depth From (ft)	Depth To (ft)
8.625	24.000	J-55	1,370.0	2,950.0	--	8.097	9.625	--	--
4.500	11.600	J-55	4,960.0	5,350.0	113.93	4.000	5.000	0.0	7,330.0

Tubing

Size (in)	Weight (lb/ft)	Grade	Collapse Pressure (psi)	Capacity (bbl)	I.D. (in)	O.D. (in)	Depth From (ft)	Depth To (ft)
2.375	4.700	J-55	8,100.000	28.340	1.995	2.910	0.000	7,330.000

Products

Plug 1

From Depth (ft): 6890

To Depth (ft): 7330

Plug Type : Abandonment

Acids/Blends/Fluids :

Plug: 25 Sacks of Thermal 35, Density = 15.8 lb/gal, Volume Pumped = 6.7 (bbl)

Water Temperature(°F) = 55 , Bulk Temperature(°F) = 55 , Slurry Temperature(°F) = 55

+ 0.3 % of ASM-3 (Preblend),

+ 0.3 % of CFR-2 (Preblend)

Plug 2

From Depth (ft): 4230

To Depth (ft): 5150

Plug Type : Abandonment

Acids/Blends/Fluids :

Plug: 70 Sacks of 0-1-0 G, Density = 15.8 lb/gal, Volume Pumped = 143 (bbl)

Water Temperature(°F) = 55 , Bulk Temperature(°F) = 55 , Slurry Temperature(°F) = 55

+ 0.5 % of CFR-2 (Preblend),

+ 0.2 % of ASM-3 (Preblend),

+ 0.5 % of LWA (Preblend)

Fluid & Cement Data

Expected Cement Top: Depth (ft): 4230

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Jun 07, 2015 22:11



9210090

Units & Personnel							
Units							
<u>Truck Unit No.</u>	<u>Main Type</u>	<u>Sub Type</u>	<u>Tractor Unit No.</u>	<u>Main Type</u>	<u>Sub Type</u>	<u>Time On Location</u>	<u>Time Off Location</u>
201386	PICKUP	1 Ton				02/01/2016 06:30	02/01/2016 10:00
740018-1	BODY JOB	C & A				02/01/2016 06:30	02/01/2016 10:00
446092	TRAILER	Bulker	746092	TRACTOR	Tandem - Tractor	02/01/2016 06:30	02/01/2016 10:00
Crew and Bonuses							
<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>			
Prigmore, Dominic (27161)	02/01/2016 06:30	02/01/2016 10:00					
Devine, Richard (29733)	02/01/2016 06:30	02/01/2016 10:00					
Peterson, Ryan (28158)	02/01/2016 06:30	02/01/2016 10:00					

Treatment Reports & Remarks								
Treatment Report								
Event #	Event Time	Event Description	Fluid Type	Rate (bbl/min)	Tubular Pressure (psi)	Annular Pressure (psi)	Stage Volume (bbl)	Total Volume (bbl)
1	Feb 01,2016 06:30	Arrive On Location		--	--	--	--	0.00
2	Feb 01,2016 06:38	Crew Briefing (Rig in)		--	--	--	--	0.00
3	Feb 01,2016 07:15	Rig in Complete		--	--	--	--	0.00
4	Feb 01,2016 07:30	Crew Briefing (Pre Job)		--	--	--	--	0.00
5	Feb 01,2016 08:18	Pressure Test Start	Water	--	2,500.0	--	--	0.00
6	Feb 01,2016 08:21	Pressure Test Complete	Water	--	2,500.0	--	--	0.00
	Remarks: Good P.T							
7	Feb 01,2016 08:22	Establish Circulation	Water	1.50	50.0	--	5.00	5.00
	Remarks: Circulation present							
8	Feb 01,2016 08:33	Mix Cement	Thermal 35	2.00	350.0	--	6.90	11.90
	Remarks: T.O.C 6,890'							
9	Feb 01,2016 08:39	Displace Fluid	Water	3.00	600.0	--	22.00	33.90
	Remarks: Displaced to balance.							
10	Feb 01,2016 08:45	Wait On Instructions		--	--	--	--	33.90
	Remarks: Wait for rig to pull tubing to 5,150' for plug #2							
11	Feb 01,2016 09:43	Establish Circulation	Water	2.50	500.0	--	5.00	38.90
	Remarks: Circulation present.							
12	Feb 01,2016 09:45	Mix Cement	0-1-0 G	2.50	450.0	--	14.50	53.40
	Remarks: T.O.C 4,230'							
13	Feb 01,2016 09:57	Displace Fluid	Water	2.00	600.0	--	13.00	66.40
	Remarks: Displaced to balance							
14	Feb 01,2016 10:15	Job Complete		--	--	--	--	66.40
15	Feb 01,2016 10:45	Leave Location		--	--	--	--	66.40
Did Float Hold:		Not Applicable						
Fluid Returns :		Not Expected						
Type :								
Volume (bbl) :								
Temperature (°F) :		--						
FDAS Functioning Correctly : Yes								
Was the Program Followed As Per Design? : Yes								
Material Transfer Sheet Number								
Material Transfer Sheet Number								
64544								



Cementing Service Report

9211028

Client Name Anadarko Petroleum Corporation	Well Name Deepe 4-22	Rig Ensign Drilling Inc. 312	Job Date February 04, 2016	Call Sheet 1064653
Client Representative Mr. Larry Web	Surface Well Location NW NW Sec 22:T2N:R67W	Down Hole Well Location	Job Type Abandonment Plugs	Lead Supervisor Svoboda, Miloslav (28226)

Well Profile

Well Type:	Oil
Maximum Treating Pressure (psi):	---
Predicted Bottom Hole Static Temperature (°F):	--- @ --
Bottom Hole Circulating Temperature (°F):	--- @ --
Bottom Hole Logged Temperature (°F):	--- @ --

Open Hole

Size (in)	Excess (%)	TMD From (ft)	TMD To (ft)	TVD From (ft)	TVD To (ft)
8.000	--	688.000	1,280.000	--	--

Casing

Size	Weight	Grade	Collapse Pressure	Internal Yield Pressure	Capacity	I.D.	O.D.	Depth From	Depth To
(in)	(lb/ft)		(psi)	(psi)	(bbl)	(in)	(in)	(ft)	(ft)
8.625	0.000		--	--	--	--	--	0.0	688.0

Tubing

Size	Weight	Grade	Collapse Pressure	Capacity	I.D.	O.D.	Depth From	Depth To
(in)	(lb/ft)		(psi)	(bbl)	(in)	(in)	(ft)	(ft)
2.375	0.000		--	--	--	--	0.000	1,390.000

Products

Plug 1

From Depth (ft): 516

To Depth (ft): 1390

Plug Type : N/A

Acids/Blends/Fluids :

Plug: 270 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 64 (bbl)

Water Temperature(°F) = 32 , Bulk Temperature(°F) = 10 , Slurry Temperature(°F) = 32

- + 0.5 % of CaCl₂ (Preblend),
- + 0.3 % of CFL-3 (Preblend),
- + 0.3 % of CFR-2 (Preblend),
- + 0.4 % of CDF-4P (Preblend),
- + 0.25 % of Polyflake (Preblend)

Fluid & Cement Data

Expected Cement Top: Depth (ft): 516

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Jun 07, 2015 22:11



Units & Personnel							
Units							
<u>Truck Unit No.</u>	<u>Main Type</u>	<u>Sub Type</u>	<u>Tractor Unit No.</u>	<u>Main Type</u>	<u>Sub Type</u>	<u>Time On Location</u>	<u>Time Off Location</u>
201017	PICKUP	1 Ton				02/04/2016 09:00	02/04/2016 13:00
740018-1	BODY JOB	C & A				02/04/2016 09:00	02/04/2016 13:00
446092	TRAILER	Bulker	746092	TRACTOR	Tandem - Tractor	02/04/2016 09:00	02/04/2016 13:00
200595	PICKUP	1/2 Ton				02/04/2016 09:00	02/04/2016 13:00
Crew and Bonuses							
<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>			
Svoboda, Miloslav (28226)	02/04/2016 06:30	02/04/2016 18:00					
Devine, Richard (29733)	02/04/2016 06:30	02/04/2016 18:00					
Thomson, Darron (30226)	02/04/2016 06:30	02/04/2016 18:00					
Bushnell, Cody (21127)	02/04/2016 06:30	02/04/2016 18:00					
Peterson, Ryan (28158)	02/04/2016 06:30	02/04/2016 18:00					



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Treatment Reports & Remarks									
Treatment Report									
Event #	Event Time	Event Description	Fluid Type	Rate	Tubular Pressure	Annular Pressure	Stage Volume	Total Volume	
				(bbl/min)	(psi)	(psi)	(bbl)	(bbl)	
1	Feb 04,2016 09:00	Arrive On Location		--	--	--	--	0.00	
		Remarks: sing in							
2	Feb 04,2016 09:40	Crew Briefing (Rig in)		--	--	--	--	0.00	
		Remarks: tail gate meeting							
3	Feb 04,2016 10:00	Rig in Complete		--	--	--	--	0.00	
4	Feb 04,2016 10:15	Crew Briefing (Pre Job)		--	--	--	--	0.00	
		Remarks: JSA with OSR, rig crew							
5	Feb 04,2016 11:17	Pressure Test Start	Water	2.00	3,000.0	--	2.00	2.00	
6	Feb 04,2016 11:19	Pressure Test Complete		--	--	--	--	2.00	
		Remarks: pressure held							
7	Feb 04,2016 11:21	Pump Spacer	Water	3.00	300.0	--	5.00	7.00	
		Remarks: fresh							
8	Feb 04,2016 11:25	Pump Preflush	Water	3.00	300.0	--	10.00	17.00	
		Remarks: SAPP							
9	Feb 04,2016 11:30	Pump Spacer	Water	3.00	50.0	--	20.00	37.00	
		Remarks: fresh							
10	Feb 04,2016 11:40	Mix Cement	0:1:0 Type III	3.00	100.0	--	64.00	101.00	
		Remarks: mixed & pumped away							
11	Feb 04,2016 12:00	Displace Fluid	Water	2.00	150.0	--	2.00	103.00	
		Remarks: fresh							
12	Feb 04,2016 12:03	Stop		--	--	--	--	103.00	
		Remarks: open return							
13	Feb 04,2016 12:30	Wash		--	--	--	--	103.00	
		Remarks: wash truck							
14	Feb 04,2016 13:30	Rig Out		--	--	--	--	103.00	
15	Feb 04,2016 13:45	Job Complete		--	--	--	--	103.00	
16	Feb 04,2016 14:00	Pre-Departure Meeting		--	--	--	--	103.00	
		Remarks: AAR							
17	Feb 04,2016 14:30	Leave Location		--	--	--	--	103.00	
Did Float Hold:		Not Applicable							
Fluid Returns :		Not Expected							
Type :									
Volume (bbl) :									
Temperature (°F) :		--							
FDAS Functioning Correctly :		Yes							
Was the Program Followed As Per Design? :		Yes							
Material Transfer Sheet Number									
Material Transfer Sheet Number									
64568									
64572									