



**Pumping
Service Report**

9198866

Client Name Anadarko Petroleum Corporation	Well Name HSR-Tandowsky 8-21	Rig Basic 1549	Job Date October 30, 2014	Call Sheet 1049654
Client Representative Mr. Larry Webb	Surface Well Location SE NE Sec 21:T3N:R66W	Down Hole Well Location	Job Type Abandonment Plugs	

Well Profile

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

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)
4.500	11.600	J-55	4,960.0	5,350.0	108.80	4.000	5.000	0.0	7,000.0

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	4.700	J-55	8,100.000	27.060	1.995	2.910	0.000	7,000.000

Products

Plug 1

From Depth (ft): 6484

To Depth (ft): 7000

Plug Type : Abandonment

Acids/Blends/Fluids :

Tail: 30 Sacks of Thermal 35, Density = 15.8 lb/gal, Volume Pumped = 8 (bbl)

Water Temperature(°F) = 55 , Bulk Temperature(°F) = 65 , Slurry Temperature(°F) = 77

+ 0.5 % of CFR-2 (Preblend),

+ 0.25 % of FMC (Preblend),

+ 0.25 lb/sack of Polyflake (Preblend)

Fluid & Cement Data

Expected Cement Top: --

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Oct 08, 2014 14:34

Attachment & Tools

Down Hole Tools

Tool Type	Depth (ft)	Supplier
Bridge Plug	7,000.000	Third Party



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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>
201114	PICKUP	3/4 Ton				10/30/2014 09:30	10/30/2014 12:05
740004	BODY JOB	C & A				10/30/2014 09:30	10/30/2014 12:05
446047	TRAILER	Bulker	746047	TRACTOR	Tandem - Tractor	10/30/2014 09:30	10/30/2014 12:05

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Contreras, Bennie	10/30/2014 09:30	10/30/2014 12:05		
Barden, Sean	10/30/2014 09:30	10/30/2014 12:05		
Phillips, James	10/30/2014 09:30	10/30/2014 12:05		

Treatment Reports & Remarks



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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	Oct 30, 2014 09:30	Arrive On Location	---	--	--	--	--	0.00
		Remarks: Arrived.						
2	Oct 30, 2014 09:40	Tailgate Meeting	---	--	--	--	--	0.00
		Remarks: Talked about spotting trucks and rigging in.						
3	Oct 30, 2014 09:50	Rig In	---	--	--	--	--	0.00
		Remarks: Rigged in hoses and iron.						
4	Oct 30, 2014 10:00	Safety Meeting	---	--	--	--	--	0.00
		Remarks: Muster, Nearest Med., Amb. and driver, Location safety equipt., Job scope.						
5	Oct 30, 2014 10:30	Sign-off on Safety	---	--	--	--	--	0.00
		Remarks: Sign all JSAs.						
6	Oct 30, 2014 10:49	Pressure Test	Water	--	3,000.0	--	--	0.00
		Remarks: Pressure test 3000 psi.						
7	Oct 30, 2014 10:52	Establish Circulation	Water	2.40	650.0	--	5.00	5.00
		Remarks: Establish circulation						
8	Oct 30, 2014 10:56	Mix Cement	Thermal 35	2.50	500.0	--	8.00	13.00
		Remarks: Mix and pump 30 sacks Thermal 35 @ 15.8 lb/gal..						
9	Oct 30, 2014 11:00	Displace Fluid	Water	2.40	150.0	--	24.00	37.00
		Remarks: Displace 24 BBLs of water.						
10	Oct 30, 2014 11:08	Stop	---	--	0.0	--	--	37.00
		Remarks: Stop Bleed off any pressure and rig off well.						
11	Oct 30, 2014 11:15	STEACS Briefing	---	--	--	--	--	37.00
		Remarks: Review JSA.						
12	Oct 30, 2014 11:25	Wash	Water	2.00	170.0	--	15.00	52.00
		Remarks: Wash mix system and runback on triplex.						
13	Oct 30, 2014 11:45	Rig Out	---	--	--	--	--	52.00
		Remarks: Rig out iron and hoses.						
14	Oct 30, 2014 11:55	Job Complete	---	--	--	--	--	52.00
		Remarks: Job complete.						
15	Oct 30, 2014 11:56	Pre-Departure Meeting	---	--	--	--	--	52.00
		Remarks: Journey management.						
16	Oct 30, 2014 12:05	Leave Location	---	--	--	--	--	52.00
		Remarks: Leave.						

Did Float Hold: Not Applicable

Fluid Returns : No

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

54794



**Pumping
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Client Name Anadarko Petroleum Corporation	Well Name HSR-Tandowsky 8-21	Rig Basic 1549	Job Date October 31, 2014	Call Sheet 1049703
Client Representative Mr. Larry Webb	Surface Well Location SE NE Sec 21:T3N:R66W	Down Hole Well Location	Job Type Abandonment Plugs	

Well Profile

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)
	8.500	--	753.000	1,300.000	--	--

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	47.96	8.097	9.625	0.0	753.0
	4.500	11.600	J-55	4,960.0	5,350.0	90.15	4.000	5.000	1,200.0	7,000.0

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	5.030	1.995	2.910	0.000	1,300.000

Products

Plug 1

From Depth (ft): 0

To Depth (ft): 1300

Plug Type : Abandonment

Acids/Blends/Fluids :

Tail: 250 Sacks of 0:1:0 Type III, Density = 14.8 lb/gal, Volume Pumped = 59.2 (bbl)
Water Temperature(°F) = 55 , Bulk Temperature(°F) = 58 , Slurry Temperature(°F) = 74
+ 0.25 lb/sack of Polyflake (Preblend),
+ 0.5 % of CaCl₂ (Preblend),
+ 0.3 % of CFR-2 (Preblend),
+ 0.3 % of CFL-3 (Preblend),
+ 0.4 % of CDF-4P (Preblend)

Fluid & Cement Data

Expected Cement Top: --

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Oct 08, 2014 14:34



**Pumping
Service Report**

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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>
201114	PICKUP	3/4 Ton				10/31/2014 14:30	10/31/2014 17:30
740004	BODY JOB	C & A				10/31/2014 14:30	10/31/2014 17:30
746047	TRACTOR	Tandem - Tractor				10/31/2014 14:30	10/31/2014 17:30

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Contreras, Bennie	10/31/2014 14:30	10/31/2014 17:30		
Barden, Sean	10/31/2014 14:30	10/31/2014 17:30		
Bailey, Steven	10/31/2014 14:30	10/31/2014 17:30		
Phillips, James	10/31/2014 14:30	10/31/2014 17:30		

Treatment Reports & Remarks



Pumping Service Report

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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	Oct 31, 2014 14:00	Arrive On Location	---	--	--	--	--	0.00
		Remarks: Arrived.						
2	Oct 31, 2014 14:10	Tailgate Meeting	---	--	--	--	--	0.00
		Remarks: Talked about spotting trucks and rigging in.						
3	Oct 31, 2014 14:20	Rig In	---	--	--	--	--	0.00
		Remarks: Rig in hoses and iron.						
4	Oct 31, 2014 14:55	Safety Meeting	---	--	--	--	--	0.00
		Remarks: Muster, Nearest med., Amb. and driver, 911 caller, Location of safety equipt., Job scope.						
5	Oct 31, 2014 15:30	Sign-off on Safety	---	--	--	--	--	0.00
		Remarks: Sign all JSAs.						
6	Oct 31, 2014 15:44	Pressure Test	Water	--	2,500.0	--	--	0.00
		Remarks: Pressure test 2500 psi.						
7	Oct 31, 2014 15:46	Establish Circulation	Water	2.40	250.0	--	12.00	12.00
		Remarks: 12 BBL fresh water.						
8	Oct 31, 2014 15:51	Pump Preflush	Water	2.40	260.0	--	10.00	22.00
		Remarks: 10 BBLs of SAAP						
9	Oct 31, 2014 15:55	Pump Spacer	Water	2.40	240.0	--	20.00	42.00
		Remarks: 20 B BL spacer.						
10	Oct 31, 2014 16:02	Mix Cement	0:1:0 Type III	2.40	350.0	--	59.20	101.20
		Remarks: 59.2 BBLs cement @ 14.8 lb/gal.						
11	Oct 31, 2014 16:28	Displace Fluid	Water	0.80	20.0	--	1.00	102.20
		Remarks: Displace 1 BBL of water.						
12	Oct 31, 2014 16:29	Stop	---	--	20.0	--	--	102.20
		Remarks: Stop and rig off well.						
13	Oct 31, 2014 16:35	Wash	Water	2.00	170.0	--	15.00	117.20
		Remarks: Wash mix system and runback on triplex.						
14	Oct 31, 2014 16:55	STEACS Briefing	---	--	--	--	--	117.20
		Remarks: Revisit JSA.						
15	Oct 31, 2014 17:06	Rig Out	---	--	--	--	--	117.20
		Remarks: Rig down.						
16	Oct 31, 2014 17:17	Job Complete	---	--	--	--	--	117.20
		Remarks: Job complete.						
17	Oct 31, 2014 17:18	Pre-Departure Meeting	---	--	--	--	--	117.20
		Remarks: Journey management.						
18	Oct 31, 2014 17:30	Leave Location	---	--	--	--	--	117.20
		Remarks: Leave.						



**Pumping
Service Report**

9198867

Client Name Anadarko Petroleum Corporation	Well Name HSR-Tandowsky 8-21	Rig Basic 1549	Job Date October 31, 2014	Call Sheet 1049703
Client Representative Mr. Larry Webb	Surface Well Location SE NE Sec 21:T3N:R66W	Down Hole Well Location	Job Type Abandonment Plugs	

Well Profile

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

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)
4.500	11.600	J-55	4,960.0	5,350.0	108.80	4.000	5.000	0.0	7,000.0

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	4.700	J-55	8,100.000	15.890	1.995	2.910	0.000	4,110.000

Products

Plug 1

From Depth (ft): 4110

To Depth (ft): 4540

Plug Type : Abandonment

Acids/Blends/Fluids :

Tail: 200 Sacks of 0-1-0 G, Density = 15.8 lb/gal, Volume Pumped = 41 (bbl)

Water Temperature(°F) = 55 , Bulk Temperature(°F) = 50 , Slurry Temperature(°F) = 74

+ 0.5 % of CFR-2 (Preblend),

+ 0.25 % of FMC (Preblend),

+ 0.5 % of LWA (Preblend),

+ 0.25 lb/sack of Polyflake (Preblend)

Plug 2

From Depth (ft):

To Depth (ft):

Plug Type : N/A

Acids/Blends/Fluids :

Fluid & Cement Data

Expected Cement Top: --

Wellbore Fluid

Fluid Type	Viscosity (cP)	Density (lbs/gal)	Yield Point (psi)	Temperature (°F)	Recorded@
Water	--	--	--	--	Oct 08, 2014 14:34

Attachment & Tools

Down Hole Tools

Tool Type	Depth (ft)	Supplier
Cement Retainer	4,110.000	Third Party



**Pumping
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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>
201114	PICKUP	3/4 Ton				10/31/2014 06:30	10/31/2014 09:45
740004	BODY JOB	C & A				10/31/2014 06:30	10/31/2014 09:45
746506	BODY JOB	Baby Bulker				10/31/2014 06:30	10/31/2014 09:45

Crew and Bonuses

<u>Employee</u>	<u>Start Shift</u>	<u>End Shift</u>	<u>Second Start Shift</u>	<u>Second End Shift</u>
Contreras, Bennie	10/31/2014 06:30	10/31/2014 09:45		
Barden, Sean	10/31/2014 06:30	10/31/2014 09:45		
Phillips, James	10/31/2014 06:30	10/31/2014 09:45		
Bailey, Steven	10/31/2014 06:30	10/31/2014 09:45		

Treatment Reports & Remarks



**Pumping
Service Report**

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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	Oct 31, 2014 06:30	Arrive On Location	---	--	--	--	--	0.00
		Remarks: Arrive.						
2	Oct 31, 2014 06:40	Tailgate Meeting	---	--	--	--	--	0.00
		Remarks: Talked about spotting trucks and rigging in.						
3	Oct 31, 2014 06:50	Rig In	---	--	--	--	--	0.00
		Remarks: Rigged in hoses and iron.						
4	Oct 31, 2014 07:10	Safety Meeting	---	--	--	--	--	0.00
		Remarks: Muster, 911 caller, nearest med., amb. and driver, location safety equipt., job scope.						
5	Oct 31, 2014 07:45	Sign-off on Safety	---	--	--	--	--	0.00
		Remarks: Sign all JSAs.						
6	Oct 31, 2014 08:07	Pressure Test	Water	--	2,500.0	--	--	0.00
		Remarks: Pressure test 2500 psi.						
7	Oct 31, 2014 08:08	Establish Circulation	Water	2.40	1,000.0	--	5.00	5.00
		Remarks: 5 BBLs establish circulation.						
8	Oct 31, 2014 08:10	Pump	Water	2.40	900.0	--	20.00	25.00
		Remarks: 20 BBLs of SMS.						
9	Oct 31, 2014 08:18	Pump Spacer	Water	2.40	800.0	--	5.00	30.00
		Remarks: 5 BBL spacer.						
10	Oct 31, 2014 08:20	Mix Cement	0-1-0 G	2.40	500.0	--	41.00	71.00
		Remarks: Mix and pump 41 BBLs of cement @ 15.8						
11	Oct 31, 2014 08:40	Displace Fluid	Water	2.40	1,000.0	--	16.00	87.00
		Remarks: Displace 16 BBLs of water.						
12	Oct 31, 2014 08:45	Stop	---	--	200.0	--	--	87.00
		Remarks: Stop and Bleed back then rig off well.						
13	Oct 31, 2014 08:50	Wash	Water	2.00	170.0	--	15.00	102.00
		Remarks: Wash mix system and runback on triplex.						
14	Oct 31, 2014 09:10	STEACS Briefing	---	--	--	--	--	102.00
		Remarks: Revisit JSA.						
15	Oct 31, 2014 09:20	Rig Out	---	--	--	--	--	102.00
		Remarks: Hammer swings, 2 man lifting, overhead lifting by rig crew, Proper stowing of iron.						
16	Oct 31, 2014 09:30	Job Complete	---	--	--	--	--	102.00
		Remarks: Job complete.						
17	Oct 31, 2014 09:31	Pre-Departure Meeting	---	--	--	--	--	102.00
		Remarks: Journey management.						
18	Oct 31, 2014 09:45	Leave Location	---	--	--	--	--	102.00
		Remarks: Leave.						