

## RAILROAD COMMISSION OF TEXAS

Oil and Gas Division

Rev. 4/1/83

EAG0897

Type or print only

483-047

API No 42-475-35180

7. RRC District No.

08

8 RRC Gas ID No

N/A

9 Well No

1

10 County of well site

Ward

11 Purpose of filing

Initial Potential ☒Retest ☐Reclass ☐Well record only  
(Explain in remarks)Gas Well Back Pressure Test,  
Completion or Recompletion Report, and Log

1 FIELD NAME (as per RRC Records or Wildcat)

Haley (Lwr. Wolfcamp-Penn Cons.)

2 LEASE NAME

University 19-27

3. OPERATOR'S NAME (exactly as shown on Form P-5, Organization Report)

Anadarko Petroleum Corporation

RRC Operator No

020572

4 ADDRESS

P.O. Box 1330 - Houston, TX 77251

5 Location (Section, Block, and Survey)

Sec. 27, Blk. 19, UL

5b. Distance and direction to nearest town in this county

20.5 miles Southwest from Winkler

6 If operator has changed within last 60 days,  
name former operator12 If workover or reclass, give former field (with reservoir) & Gas ID or  
oil lease no.  
FIELD & RESERVOIRGAS ID or  
OIL LEASE #Oil -- O  
Gas -- GWELL  
#

13 Pipe Line Connection

Anadarko Energy Services

14 Completion or recompletion date

11/2/07

15. Any condensate on hand at time of workover  
or recompletion? ☐ Yes ☐ No

16 Type of Electric or other Log Run

GR

## Section I

## GAS MEASUREMENT DATA

Date of Test 11/7-10/07		Gas measurement Orifice Meter <input type="checkbox"/> <input checked="" type="checkbox"/>		Method (Check One) Flange Taps <input type="checkbox"/> Pipe Taps <input type="checkbox"/>		Positive Choke <input type="checkbox"/>	Orifice Vent Meter <input type="checkbox"/>	Pitot Tube <input type="checkbox"/>	Critical-flow Prover <input type="checkbox"/>	Gas produced during test 17253 MCF	
Run No	Line Size	Orif or Choke Size	24 Hr Coeff. Orif or Choke	Static P <sub>m</sub> or Choke Press	Diff h <sub>w</sub>	Flow Temp °F	Temp Factor F <sub>tf</sub>	Gravity Factor F <sub>g</sub>	Compress Factor F <sub>pv</sub>	Volume MCF/DAY	
1	4.026	1.5		1153.8	136.6	123.2	-	-	-	5751	
2											
3											
4											

## Section II

## FIELD DATA AND PRESSURE CALCULATIONS

Gravity (Dry Gas)		Gravity Liquid Hydrocarbon		Gas-Liquid Hydro Ratio		Gravity of Mixture		Avg Shut-in Temp		Bottom Hole Temp	
0.571		0		0		G <sub>mix</sub> = -		- °F		240° F @ 16283' (Depth)	
D <sub>eff</sub> <sup>8/3</sup> =		$\sqrt{T_f} = \sqrt{\quad} =$		$\sqrt{GL} = \sqrt{\quad} =$							
$C = \frac{1118 \times (D_{eff})^{8/3}}{\sqrt{T}} =$		$\frac{\sqrt{GL}}{C} =$									
Run No	Time of Run Min	Choke Size	Wellhead Press PSIA	Wellhead Flow Temp °F	P <sub>w</sub> <sup>2</sup> (Thousands)	R	R <sup>2</sup> (Thousands)	P <sub>i</sub>	R <sub>w</sub> /P <sub>i</sub>		
Shut-In		SEE REMARKS									
1	4320	11/64	1246	123.2							
2											
3											
4											
Run No	F	K	S = $\frac{1}{z}$	E <sub>ks</sub>	P <sub>f</sub> and P <sub>s</sub>	P <sub>f</sub> <sup>2</sup> and P <sub>s</sub> <sup>2</sup> (Thousands)	P <sub>f</sub> <sup>2</sup> - P <sub>s</sub> <sup>2</sup> (Thousands)	Angle of Slope			
Shut-In											
1								h			
2								n			
3								Absolute Open Flow			
4								MCF/DAY			

WELL TESTER'S CERTIFICATION I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I conducted or supervised this test and that data and facts shown in Sections I and II above are true, correct and complete to the best of my knowledge. Bottomhole temperature and the diameter and length of flow string were furnished by the operator of the well.

TEST BY ANADARKO EMPLOYEE

Signature Well Tester

Name of Company

RRC Representative

OPERATOR'S CERTIFICATION I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that I prepared or supervised and directed this report, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

Signature, Operator's representative

Jill Fowler

Regulatory Analyst

Title

Date

11/31/08

Tel

832.636.1554

A/C Number

SECTION III DATA ON WELL COMPLETION AND LOG (Not Required on Retest)									
17. Type of Completion New Well <input checked="" type="checkbox"/> Deepening <input type="checkbox"/> Plug Back <input type="checkbox"/> Other <input type="checkbox"/>						18. Permit to Drill, Plug Back or Deepen DATE 10/3/06 PERMIT NO. 626545			
19. Notice of Intention to Drill this well was filed in Name of  Anadarko Petroleum Corporation						Rule 37 Exception		CASE NO.	
						Water Injection Permit		PERMIT NO.	
20. Number of producing wells on this lease in this field (reservoir) including this well  1			21. Total number of acres in this lease  641.0			Salt Water Disposal Permit		PERMIT NO.	
22. Date Plug Back, Deepening, WorkOver or Drilling Operations:  6/5/07			Completed  10/6/07		23. Distance to nearest well, Same Lease & Reservoir  n/a		Other PERMIT NO.		
24. Location of well, relative to nearest lease boundaries of lease on which this well is located				1320 Feet From West Line and 1320 Feet from North Line of the University 19-27 Lease					
25. Elevation (DF, RKB, RT, GR, ETC) 2837' GR				26. Was directional survey made other than inclination (Form W--12)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
27. Top of Pay 15012'	28. Total Depth 17848'	29. P B Depth 17770'	30. Surface Casing Determined by Field Rules <input type="checkbox"/> Recommendation of T D W R. Railroad Commission (Special) <input checked="" type="checkbox"/>		Dt. of Letter 9/28/06		Dt. of Letter 12/12/06		
31. Is well multiple completion? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		32. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No FIELD & RESERVOIR				33. Intervals Drilled by Rotary Tools <input checked="" type="checkbox"/> Cable Tools			
34. Name of Drilling Contractor Rowan Drilling Company				35. Is Cementing Affidavit Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
36. CASING RECORD (Report All Strings Set in Well)									
CASING SIZE	WT#/FT	DEPTH SET	MULTISTAGE TOOL DEPTH	TYPE & AMOUNT CEMENT (sacks)	HOLE SIZE	TOP OF CEMENT	SLURRY VOL. cu ft		
13 3/8	68.0	5183'	--	4000 sx "C"	17 1/2	750	7932.5		
10 3/4	65.7	12547'	--	1271 sx "C&H"	12 1/4	2500	3929		
5, 5 1/2	23.2, 26.0	17848'	--	2165 sx "H"	8 3/4	8000	3399.05		

37. LINER RECORD				
Size	TOP	Bottom	Sacks Cement	Screen
---				

38. TUBING RECORD			39. Producing Interval (this completion) Indicate depth of perforation or open hole	
Size	Depth Set	Packer Set	From	To
n/a			From 15426'	To 17140'
			From	To
			From	To
			From	To

40. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
Depth Interval	Amount and Kind of Material Used
17130'-140'	Frac w/ 140,000# 20/40 Sinterball
15426'-428', 15792'-794', 15970'-972', 16059'-061'	Frac w/ 400,160# 20/40 Sinterball

41. FORMATION RECORD (LIST DEPTHS OF PRINCIPAL GEOLOGICAL MARKERS AND FORMATION TOPS)			
Formations	Depth	Formations	Depth
Bone Springs	10277'	Atoka	16851'
Wolfcamp	11576'	Morrow	17278'
Strawn	15012'		

REMARKS: NEW GAS WELL - PRODUCING

BHP = 16058 psi @ 17130'

EXCEPTION TO SIWH PRESSURE PER DKT #08-0249064

\*APC received verbal approval from Joe Guerra and Mark Henkhouse with the Midland RRC on 8/10/07 at 9:30 to sidetrack the University 19-27 #1 well.



GAS WELL  
CLASSIFICATION REPORT

READ INSTRUCTIONS ON BACK

1. OPERATOR NAME (Exactly as shown on Form P-5 Organization Report)  Anadarko Petroleum Corporation		3. RRC DISTRICT NO  08	4. OIL LEASE NO OR GAS WELL ID NO.  N/A																												
2. MAILING ADDRESS  P.O. Box 1330 Houston, TX 77251		5. WELL NO  1	6. API NO  42- 475-35180																												
		7. COUNTY OF WELL SITE  Ward																													
8. FIELD NAME  Haley (Lwr. Wolfcamp-Penn Cons.)	9. LEASE NAME  University 19-27																														
10. LOCATION (Section, Block, and Survey)  Sec. 27, Blk. 19, UL	11. PIPELINE CONNECTION OR USE OF GAS  Anadarko Energy Services																														
I. PRODUCTION TEST AT RATE ELECTED BY OPERATOR (data on 24-hour basis)		II. A.S.T.M. DISTILLATION OF LIQUID SAMPLE. Distillation test is required for gas wells ONLY if the producing gas-liquid hydrocarbon ratio is less than 100,000 CF/barrel																													
A. Date of Test <u>11/7/07-11/10/07</u> B. Gas Volume <u>5751</u> (Mcf) C. Oil or Condensate Volume <u>0</u> (Bbl) D. Water Volume <u>278</u> (Bbl) E. Gas/Liquid Hydrocarbon Ratio <u>0</u> (Cf/Bbl) F. Flowing Tubing Pressure <u>1246</u> (psia) G. Choke Size <u>11/64</u> (in) H. Casing Pressure <u>-</u> (psia) I. Shut-in Wellhead Pressure-Tubing <u>EXC - DKT #08-0249064</u> (psia) J. Separator Operating Pressure <u>-</u> (psia) K. Color of Stock Tank Liquid <u>-</u> L. Gravity of Separator Liquid <u>-</u> °API M. Gravity of Stock Tank Liquid <u>0</u> °API N. Specific Gravity of the Gas (Air = 1) <u>0</u>		Date Liquid Sample Obtained <u>N/A</u> Where Obtained: <input type="checkbox"/> Separator <input type="checkbox"/> Stock Tank <table style="width:100%;"> <thead> <tr> <th>% Over Initial Boiling Temp</th> <th>Temp (deg F)</th> <th>% Over</th> <th>Temp. (deg. F)</th> </tr> </thead> <tbody> <tr><td></td><td></td><td>60</td><td></td></tr> <tr><td>10</td><td></td><td>70</td><td></td></tr> <tr><td>20</td><td></td><td>80</td><td></td></tr> <tr><td>30</td><td></td><td>90</td><td></td></tr> <tr><td>40</td><td></td><td>95</td><td></td></tr> <tr><td>50</td><td></td><td>End Point</td><td></td></tr> </tbody> </table> Total Recovery <u>                    </u> percent Residue <u>                    </u> percent Loss <u>                    </u> percent		% Over Initial Boiling Temp	Temp (deg F)	% Over	Temp. (deg. F)			60		10		70		20		80		30		90		40		95		50		End Point	
% Over Initial Boiling Temp	Temp (deg F)	% Over	Temp. (deg. F)																												
		60																													
10		70																													
20		80																													
30		90																													
40		95																													
50		End Point																													
I declare under penalties prescribed in Sec 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete to the best of my knowledge.  <u>1/31/08</u> DATE		RRC USE ONLY  <u>Jill Fowler</u> NAME (Type or Print) <u>Jill Fowler</u> SIGNATURE <u>Regulatory Analyst</u> TITLE <u>Jill Fowler</u> <u>(832 ) 636.1554</u> CONTACT PERSON PHONE NUMBER																													

APPLICATION FOR ALTERNATE SURFACE CASING PROGRAM  
Statewide Rule 13(b)(2)(g)  
RRC District 8/8A

1/03

Operator's Name and Address:  Anadarko Petroleum Corporation P. O. Box 1330 Houston, Texas 77251-1330	Lease: University 19-27 Field: Haley (Lower Wolfcamp-Penn Cons.) Drilling Permit No.: 626545 County: Ward Location: Sec. 27 Block 19 Sur U.L. Twp. Proposed TD: 19500	Well No.: 1 RRC District: 08
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Distance and Direction from nearest town: 20.5 Miles SW from Winkler

\* Proposed injection or disposal well? ☐ Yes ☒ No NOTE Special conditions may apply. See PROVISIONS below.

Usable-quality water strata (as determined by TCEQ "Waterboard" letter) occur to a depth of 400 ft, and from 750 ft to 1150 ft, and from \_\_\_\_\_ ft to \_\_\_\_\_ ft

Note: Please submit copy of TCEQ "Waterboard" letter with this request. Request cannot be processed without this information.

Distance and direction of nearest water well (within 1/4 mile): N/A

Type of water well (domestic, public, irrigation, stock, etc.): N/A Depth N/A

**Proposed Casing and Cementing Program**

Note: You may attach a wellbore diagram or cementing proposal to this application

This application is for (check applicable boxes): ☐ Short surface casing ☒ excess surface casing ☐ no surface casing

The proposed surface casing depth: 5150 Multi-Stage tool depth (if applicable): \_\_\_\_\_

Intermediate or production casing depth: 12650 Multi-Stage tool depth (if applicable): \_\_\_\_\_

Centralizer number and placement: Every other joint for 20 joints. Every 4<sup>th</sup> joint. To surface (Total: 35 centralizers)

Does the cement across the critical zone have 72-hr compressive strength of at least 1,200 psi? ☒ Yes ☐ No

Does the filler cement have 24-hr compressive strength of at least 250 psi? ☒ Yes ☐ No

Do you plan on circulating cement to the surface on all casing strings protecting usable-quality water? ☒ Yes ☐ No

Reason for this request: Optimize casing design for a deep, high pressure well.

**PROVISIONS APPLICABLE TO RULE 13 EXCEPTIONS:**

1. Caution: If this well is being drilled for injection or disposal purposes, an injection or disposal well permit may be denied unless surface casing is set and cemented through all zones of usable-quality groundwater
2. Centralizers must be used through all usable-quality waters. Refer to Rule 13(b)(2)(F)
3. Notify District Office 8 hours prior to setting casing

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DEC 12 2006  
U&G  
MIDLAND

Signature Carla Ghazizadeh Print Name: Carla Ghazizadeh Date 12/11/06 Phone 832-636-3315

IF CEMENT IS NOT CIRCULATED TO THE GROUND SURFACE AS REQUIRED BY THIS EXCEPTION, YOU MUST IMMEDIATELY CONTACT THE DISTRICT 8/8A OFFICE AT 432-684-5581, AND FOLLOW THE PROCEDURES AS SET OUT IN RULE 13(B)(2)(g)(III) OR AS RECOMMENDED BY THE DISTRICT OFFICE.

RRC Use Only▶

RRC District Office Action:

☒ Approved ☐ Approved as Modified ☐ Denied

By [Signature]

Date 12/12/06

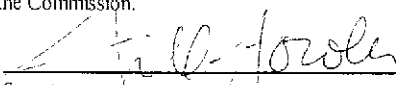
Remarks/Modifications

**CERTIFICATE OF COMPLIANCE  
AND TRANSPORTATION AUTHORITY**

**P-4**

5/02  
EAG0502

READ INSTRUCTIONS ON BACK

1. Field name exactly as shown on proration schedule <b>Haley (Lwr. Wolfcamp-Penn Cons.)</b>		2. Lease name as shown on proration schedule <b>University 19-27</b>					
3. Current operator name exactly as shown on P-5 Organization Report <b>Anadarko Petroleum Corporation</b>		4. Operator P-5 no <b>020572</b>	5. Oil Lse/Gas ID no <b>N/A</b>	6. County <b>Ward</b>	7. RRC district <b>08</b>		
8. Operator address including city, state, and zip code <b>P.O. Box 1330 Houston, TX 77251</b>		9. Well no(s) (see instruction E) <b>1</b>		11. Effective date <b>11/2/07</b>			
12. Purpose of Filing. (Complete section a or b below) (See instructions B and G) a. Change of: <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code <input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____ - OR - b. New RRC Number for: <input type="checkbox"/> oil lease <input checked="" type="checkbox"/> gas well Due to: <input checked="" type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input type="checkbox"/> reclass gas to oil <input type="checkbox"/> other well (specify) _____ <input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)		10. Classification <input type="checkbox"/> Oil <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)					
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s) (See instruction G)							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X		Anadarko Gathering				100.0	
	X	Anadarko Energy Services			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s) (See instruction G)							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)					Percent of Take	RRC USE ONLY Reviewer's initials: _____ Approval date: _____	
Eastex Crude Company					100.0		
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission							
Name of Previous Operator  Name (print)  Title				Signature  <input type="checkbox"/> Authorized Employee of previous operator <input type="checkbox"/> Authorized agent of previous operator (see instruction G)  Date _____ Phone with area code _____			
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
Jill Fowler Name (print) Regulatory Analyst Title jill.fowler@Anadarko.com E-mail Address (optional)				Signature  <input checked="" type="checkbox"/> Authorized Employee of current operator <input type="checkbox"/> Authorized agent of current operator (see instruction G) 1/31/08 Date 832.636.1554 Phone with area code			

RAILROAD COMMISSION OF TEXAS  
OIL AND GAS DIVISION

Form W-12  
(1-1-71)  
FOD1296

<b>INCLINATION REPORT</b> (One Copy Must Be Filed With Each Completion Report)		6 RRC District <u>8</u>
		7 RRC Lease Number (Oil completions only)
1 FIELD NAME (as per RRC Records or Wildcat) <u>Halen (Lws. Wolfcamp-Penn. Cons.)</u>	2 LEASE NAME <u>University 19-27</u>	8 Well Number <u>1</u>
3 OPERATOR <u>Anadarko Petroleum Corporation</u>		9 RRC Identification Number (Gas completions only)
4 ADDRESS <u>P.O. Box 1536</u> <u>Houston, TX, 77251</u>		10 County <u>Ward</u>
5 LOCATION (Section, Block, and Survey) <u>Sec. 27, Blk 19, 1/4</u>		

**RECORD OF INCLINATION**

*11 Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13 Angle of Inclination (Degrees)	14 Displacement per Hundred Feet (Sine of Angle x100)	15 Course Displacement (feet)	16 Accumulative Displacement (feet)
739	7.39	1.57	2.74	20.24	20.24
1230	4.91	0.60	1.05	5.15	25.39
1709	4.79	1.28	2.23	10.68	36.07
2736	10.27	0.84	1.47	15.09	51.16
3209	4.73	1.07	1.87	8.84	60.00
3708	4.99	2.82	4.92	24.55	84.55
3962	2.54	1.48	2.58	6.55	91.10
4213	2.51	1.65	2.88	7.22	98.32
4713	5.00	2.68	4.68	23.40	121.72
5174	4.61	1.01	1.76	8.11	129.83
5659	4.85	0.80	1.40	6.79	136.62
6639	9.80	1.60	2.79	27.34	163.96
7619	9.80	0.28	0.49	4.80	168.76
8102	4.83	0.76	1.33	6.42	175.18
9058	9.56	0.35	0.61	5.83	181.01

If additional space is needed, use the reverse side of this form.

- 17 Is any information shown on the reverse side of this form? ☒ yes ☐ no
18. Accumulative total displacement of well bore at total depth of 12,022 feet = 227.23 feet
- \*19. Inclination measurements were made in - ☐ Tubing ☐ Casing ☐ Open hole ☒ Drill Pipe
- 20 Distance from surface location of well to the nearest lease line 1320 feet
- 21 Minimum distance to lease line as prescribed by field rules 1320 feet
- 22 Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? no

(If the answer to the above question is "yes," attach written explanation of the circumstances.)

<b>INCLINATION DATA CERTIFICATION</b> <p>I declare under penalties prescribed in Sec. 91 143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge. This certification covers all data as indicated by asterisks (*) by the item numbers on this form.</p> <p><u>Delores Pouncey</u> Signature of Authorized Representative</p> <p><u>Delores Pouncey</u> Name of Person and Title (type or print)</p> <p><u>Rowan Companies, Inc.</u> Name of Company</p> <p>Telephone <u>(713) 991-6300</u> Area Code</p>	<b>OPERATOR CERTIFICATION</b> <p>I declare under penalties prescribed in Sec. 91 143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of all information presented in this report, and that all data presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers all data and information presented herein except inclination data as indicated by asterisks (*) by the item numbers on this form.</p> <p><u>Bill Fowler</u> Signature of Authorized Representative</p> <p><u>Bill Fowler Regulatory Analyst</u> Name of Person and Title (type or print)</p> <p><u>Anadarko Petroleum Corporation</u> Operator</p> <p>Telephone <u>832/636-1554</u> Area Code</p>
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Railroad Commission Use Only

Approved By \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

\* Designates items certified by company that conducted the inclination surveys

## RECORD OF INCLINATION (Continued from reverse side)

[illegible]

If additional space is needed, attach separate sheet and check here ☐

REMARKS:

- INSTRUCTIONS -

An inclination survey made by persons or concerns approved by the Commission shall be filed on a form prescribed by the Commission for each well drilled or deepened with rotary tools or when, as a result of any operation, the course of the well is changed. No inclination survey is required on wells that are drilled and completed as dry holes that are plugged and abandoned. (Inclination surveys are required on re-entry of abandoned wells.) Inclination surveys must be made in accordance with the provisions of Statewide Rule 11

This report shall be filed in the District Office of the Commission for the district in which the well is drilled, by attaching one copy to each appropriate completion for the well (except Plugging Report)

The Commission may require the submittal of the original charts, graphs, or discs, resulting from the surveys.



Cementer. Fill in shaded areas.  
Operator. Fill in other items

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev. 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>ANADARKO Petroleum Corp.</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (w/o Wolfcamp - Penn Cons.)</b>		6. API No. <b>4247535180</b>	7. Drilling Permit No. <b>626545</b>
8. Lease Name <b>University 19-27</b>	9. Rule 37 Case No. <b>N/A</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		6-19-07					
13. • Drilled Hole Size		17 1/2"					
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)		13 3/8"					
15. Top of liner (ft.)		-					
16. Setting depth (ft.)		5183'					
17. Number of centralizers used		35					
18. Hrs. Waiting on cement before drill-out		2					
1st Slurry	19. API cement used: No. of sacks ▶	2750					
	Class ▶	C					
	Additives ▶	Remarks #1					
2nd Slurry	No. of sacks ▶	1250					
	Class ▶	C					
	Additives ▶	Remarks #2					
3rd Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶	6270					
	Height (ft.) ▶	9026					
2nd	Volume (cu. ft.) ▶	1662.5					
	Height (ft.) ▶	2393					
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	7932.5					
	Height (ft.) ▶	11419					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing ?		no					
22. Remarks # 1 2 5%SMS +1.5% R-3+ 1/8#/SK CELLOFLAKE Remarks #2 3/10% R-3							

Cementer. Fill in shaded areas  
Operator Fill in other items

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>ANADARKO Petroleum Corporation</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (Lwr. Wolfcamp - Penn Cons.)</b>		6. API No. <b>475-35180</b>	7. Drilling Permit No. <b>620545</b>
8. Lease Name <b>University 19-27</b>	9. Rule 37 Case No. <b>n/a</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date							
13. • Drilled Hole Size							
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)							
15. Top of liner (ft.)							
16. Setting depth (ft.)							
17. Number of centralizers used							
18. Hrs. Waiting on cement before drill-out							
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶						
	Class ▶						
	Additives ▶						
2 <sup>nd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1 <sup>st</sup>	20. Slurry pumped: Volume (cu. ft.) ▶						
	Height (ft.) ▶						
2 <sup>nd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3 <sup>rd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?							

REMARK A 2%CACL2

REMARK B PUMPED CMT DOWN THE DRILL PIPE THEN DISPLACED WITH 28 FW TURNED OVER TO RIG SO THEY COULD TRY TO SQUEEZE CMT, NO CMT TO SURFACE

CEMENTING TO PLUG AND ABANDON	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date	7-13-07							
24. Size of hole or pipe plugged (in.)	13 3/8							
25. Depth to bottom of tubing or drill pipe (ft)	450							
26. Sacks of cement used (each plug)	1000							
27. Slurry volume pumped (cu. ft.)	1350							
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lb/gal)	14.8							
31. Type cement	C							

CEMENTER'S CERTIFICATE: I declare under penalties in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

**MIKE MADRID** Service Supervisor

**BJ Services Company**

*Mike Madrid*  
Signature

Name and title of cementer's representative

Cementing Company

**P.O. Box 4717**

**Odessa,**

**Texas**

**79760**

**(432) 381-2301**

**7-13-07**

Address

City,

State,

Zip Code

Tel: Area Code

Number

Date, mo day yr

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

*Jill Fowler*

*Regulatory Analyst*

*Jill Fowler*  
Signature

Typed or printed name of operator's representative

Title

**P.O. Box 1330**

**Houston, TX 77251**

**832/636-1554**

**1/31/08**

Address

City,

State,

Zip Code

Tel: Area Code

Number

Date, mo day yr

#### Instructions to Form W-15, Cementing Report

**IMPORTANT:** Operators and cementing companies must comply with the requirements of the Commission's Statewide Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c).

- A. What to file. An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. Form W-15 should be filed with the following.
- An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rates;
  - Form W-4, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
  - Form W-3, Plugging Record, unless the W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. Where to file. The appropriate Commission District Office for the county in which the well is located
- C. Surface Casing. An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Committee.
- D. Centralizers. Surface Casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In Non-deviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.
- E. Exceptions and alternative casing programs. The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.
- F. Intermediate and production casing. For specific technical requirements, operators should consult Statewide Rule 13 (3) and (4).
- G. Plugging and abandoning. Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations, Cementing companies, service companies or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

Cementor Fill in shaded areas.  
Operator Fill in other items

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev. 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>Anadarko Petroleum Corporation</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (Lwr. Wolfcamp-Penn. Cons.)</b>	6. API No. <b>42-475-35780</b>	7. Drilling Permit No. <b>626545</b>	
8. Lease Name <b>University 19-27</b>	9. Rule 37 Case No. <b>n/a</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		7/14/07					
13. • Drilled Hole Size		17 1/2"					
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)		13 3/8"					
15. Top of liner (ft.)							
16. Setting depth (ft.)							
17. Number of centralizers used							
18. Hrs. Waiting on cement before drill-out							
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks	100					
	Class	C					
	Additives	5#/Sk LCM-1					
2 <sup>nd</sup> Slurry	No. of sacks						
	Class						
	Additives						
3 <sup>rd</sup> Slurry	No. of sacks						
	Class						
	Additives						
1 <sup>st</sup>	20. Slurry pumped: Volume (cu. ft.)	133					
	Height (ft.)	Remark A					
2 <sup>nd</sup>	Volume (cu. ft.)						
	Height (ft.)						
3 <sup>rd</sup>	Volume (cu. ft.)						
	Height (ft.)						
Total	Volume (cu. ft.)	133					
	Height (ft.)	Remark A					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		No					

Remark A) Set a plug between 4290"- 4475" inside the surface pipe to seal a leak

Cementor. Fill in shaded areas  
Operator. Fill in other items.

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev. 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>ANADARKO Petroleum Corp</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (Lwr. Wolfcamp Penn Cons.)</b>		6. API No. <b>4247535180</b>	7. Drilling Permit No. <b>626545</b>
8. Lease Name <b>UNIVERSITY 19-27</b>	9. Rule 37 Case No. <b>n/a</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		7-15-07					
13. • Drilled Hole Size		17.5					
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)		13.375					
15. Top of liner (ft.)							
16. Setting depth (ft.)							
17. Number of centralizers used							
18. Hrs. Waiting on cement before drill-out							
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶	1000	TOP OUT				
	Class ▶	Prem C					
	Additives ▶	2%CACL <sub>2</sub>					
2 <sup>nd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1 <sup>st</sup>	20. Slurry pumped: Volume (cu. ft.) ▶	1340					
	Height (ft.) ▶	1929					
2 <sup>nd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3 <sup>rd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	1340					
	Height (ft.) ▶	1929					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		NO					
WE TOP OUT TRU DRILL PIPE AND PERFS @ 650' NO CMT RETURNS							

Cement: Fill in shaded areas  
Operator: Fill in other items

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev. 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>ANADARKO Petroleum Corp.</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (Lwr. Wolfcamp - Penn Cons.)</b>		6. API No. <b>4247535180</b>	7. Drilling Permit No. <b>6216545</b>
8. Lease Name <b>UNIVERSITY 19-27</b>	9. Rule 37 Case No. <b>N/A</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		7-18-07					
13. • Drilled Hole Size		17.5					
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)		13.375					
15. Top of liner (ft.)							
16. Setting depth (ft.)							
17. Number of centralizers used							
18. Hrs. Waiting on cement before drill-out							
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶	500					
	Class ▶	Prem C					
	Additives ▶	2%CACL2					
2 <sup>nd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶	670					
	Height (ft.) ▶	965					
2nd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	670					
	Height (ft.) ▶	965					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		NO					
REMARK SQUEEZED HOLES @650' PACKER SET@482'							

Cementor Fill in shaded areas  
Operator Fill in other items

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>Anadarko Petroleum Corporation</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (Loc. Wolfcamp-Penn (cons.))</b>		6. API No. <b>42-475-35180</b>	7. Drilling Permit No. <b>626545</b>
8. Lease Name <b>University 19-27</b>	9. Rule 37 Case No. <b>n/a</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		7/19/07					
13. • Drilled Hole Size		17 1/2"					
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)		13 3/8"					
15. Top of liner (ft.)							
16. Setting depth (ft.)							
17. Number of centralizers used							
18. Hrs. Waiting on cement before drill-out							
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶	300					
	Class ▶	C					
	Additives ▶	Remark A					
2 <sup>nd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶	555					
	Height (ft.) ▶	Remark A					
2nd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶	555					
	Height (ft.) ▶	Remark B					
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		Yes					

Remark A) 10% A-10 + 2% CACL2 + 5#/Sk LCM-1 + 1/8#/Sk Cello Flake  
Remark B) Top Out via the annulus at 210' with 300 Sacks of cement, bring cement to surface

Cementor Fill in shaded areas  
Operator Fill in other items

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>ANADARKO Petroleum</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (Lwr Wolfcamp - Penn Cons.)</b>		6. API No. <b>42-4175-35180</b>	7. Drilling Permit No. <b>626545</b>
8. Lease Name <b>University 19-27</b>	9. Rule 37 Case No. <b>na</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date			07-23-2007				
13. • Drilled Hole Size			12 1/4"				
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)			10 3/4"				
15. Top of liner (ft.)			-				
16. Setting depth (ft.)			12,547'				
17. Number of centralizers used			12				
18. Hrs. Waiting on cement before drill-out			8.5				
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶		603				
	Class ▶		C				
	Additives ▶		REMARKS A				
2 <sup>nd</sup> Slurry	No. of sacks ▶		668				
	Class ▶		H				
	Additives ▶		1 2/10%FL-62 1/10%ASA-301				
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1 <sup>st</sup>	20. Slurry pumped: Volume (cu. ft.) ▶		3135				
	Height (ft.) ▶		16661				
2 <sup>nd</sup>	Volume (cu. ft.) ▶		794				
	Height (ft.) ▶		4219				
3 <sup>rd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶		3929				
	Height (ft.) ▶		20880				
21. Was cement circulated to ground surface (or bottom of cellar) outside casing ?			NO				
Remarks A SX C+20#/SK CSE-2+4 %MPA-1+5/10%FL-52A+1%BA-10+4%SMS+5%A-10+0 15%ASA-301+3.5%R-21+5#/SK LCM-1							



Cementer. Fill in shaded areas.  
Operator. Fill in other items

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev. 4/1/83  
483-045

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5. Field Name (Wildcat or exactly as shown on RRC Records) <i>Haley (Lux, Wolfcamp - Penn Cons.)</i>	6. API No. <i>42-475-35180</i>	7. Drilling Permit No. <i>626545</i>	
8. Lease Name <b>UNIVERSITY</b> <i>19-27</i>	9. Rule 37 Case No. <i>n/a</i>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date							
13. • Drilled Hole Size							
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)							
15. Top of liner (ft.)							
16. Setting depth (ft.)							
17. Number of centralizers used							
18. Hrs. Waiting on cement before drill-out							
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶						
	Class ▶						
	Additives ▶						
2 <sup>nd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1st	20. Slurry pumped: Volume (cu. ft.) ▶						
	Height (ft.) ▶						
2nd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3rd	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?							
<i>Set Bridge Plug at 12,439'</i> <i>Side tracked well</i>							

CEMENTING TO PLUG AND ABANDON	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date	8-12-07							
24. Size of hole or pipe plugged (in )								
25. Depth to bottom of tubing or drill pipe (ft )								
26. Sacks of cement used (each plug)	150							
27. Slurry volume pumped (cu ft.)	144							
28. Calculated top of plug (ft.)	12439							
29. Measured top of plug, if tagged (ft )								
30. Slurry wt. (lb/gal)	17.3							
31. Type cement	H							

CEMENTER'S CERTIFICATE: I declare under penalties in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this Certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my Supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

**RON GUNDY Service Supervisor**

Name and title of cementer's representative

**BJ Services Company**

Cementing Company

Signature

**P.O. Box 4717**

Address

**Odessa,**

City,

**Texas**

State,

**79760**

Zip Code

**(432) 381-2301**

Tel: Area Code

Number

**08-12-07**

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this Certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

*Jill Fowler*

Typed or printed name of operator's representative

*Regulatory Analyst*

Title

*Jill Fowler*

Signature

*P.O. Box 1330*

Address

*Houston, TX 77251*

City,

State,

Zip Code

*832/636-1554*

Tel. Area Code

Number

*1/31/08*

Date: mo. day yr.

#### Instructions to Form W-15, Cementing Report

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A. What to file. An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. Form W-15 should be filed with the following.

- An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rates;
- Form W-4, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
- Form W-3, Plugging Record, unless the W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

B. Where to file. The appropriate Commission District Office for the county in which the well is located.

C. Surface Casing. An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Committee.

D. Centralizers. Surface Casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In Non-deviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.

E. Exceptions and alternative casing programs. The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.

F. Intermediate and production casing. For specific technical requirements, operators should consult Statewide Rule 13 (3) and (4).

G. Plugging and abandoning. Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

Cementor: Fill in shaded areas  
Operator: Fill in other items.

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

Form W-15  
Cementing Report  
Rev 4/1/83  
483-045

1. Operator's Name (As shown on Form P-5, Organization Report) <b>Anadarko Petroleum Corporation</b>	2. RRC Operator No. <b>020572</b>	3. RRC District No. <b>8</b>	4. County of Well Site <b>Ward</b>
5. Field Name (Wildcat or exactly as shown on RRC Records) <b>Haley (Lwr. Wolfcamp - Penn Cons.)</b>	6. API No. <b>42-475-35180</b>	7. Drilling Permit No. <b>626545</b>	
8. Lease Name <b>University 19-27</b>	9. Rule 37 Case No. <b>N/A</b>	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:		SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
				Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date				10-6-07			
13. • Drilled Hole Size				8 3/4"			
• Est. % wash or hole enlargement							
14. Size of casing (in. O.D.)				5' 5 1/2"			
15. Top of liner (ft.)				-			
16. Setting depth (ft.)				17,848'			
17. Number of centralizers used				50			
18. Hrs. Waiting on cement before drill-out				6			
1 <sup>st</sup> Slurry	19. API cement used: No. of sacks ▶			2165			
	Class ▶			H			
	Additives ▶			Remark A			
2 <sup>nd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
3 <sup>rd</sup> Slurry	No. of sacks ▶						
	Class ▶						
	Additives ▶						
1 <sup>st</sup>	20. Slurry pumped: Volume (cu. ft.) ▶			3399.05			
	Height (ft.) ▶			13457			
2 <sup>nd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
3 <sup>rd</sup>	Volume (cu. ft.) ▶						
	Height (ft.) ▶						
Total	Volume (cu. ft.) ▶			3399.05			
	Height (ft.) ▶			13457			
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?				No			
Remark A) 35% S8C + 33#/SK Hematite + 5/10% FL-63 + 5/10% BA-11 + 1 2% CD-32 + 7/10% SMS + 5% ASA-301 + .65% R-21							

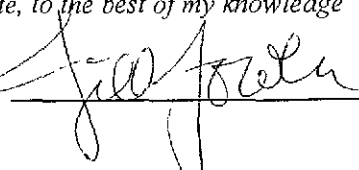
STATEMENT OF PRODUCTIVITY OF ACREAGE  
ASSIGNED TO PRORATION UNITS

Form P-15  
(5-5-71)  
EAG0897

The undersigned states that he is authorized to make this statement, that he has knowledge of the facts concerning the Anadarko Petroleum Corporation,  
OPERATOR  
University 19-27 (ID N/A), No. 1; that such well is  
LEASE WELL  
completed in the Haley (Lwr. Wolfcamp-Penn Cons.) Field, Ward County,  
Texas and that the acreage claimed, and assigned to such well for proration purposes as  
authorized by special rule and as shown on the attached certified plat embraces \_\_\_\_\_  
641.0 acres which can reasonably be considered to be productive of hydrocarbons.

- CERTIFICATE -

*I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge*

Date 1/31/08 Signature   
Telephone 832 636-1554 Title Regulatory Analyst  
AREA CODE

25 26

26 31

28 27

27 42

ANADARKO PETROLEUM CORPORATION

ELEV. 2837'

19-27 #1

1320'

1320'

**BLOCK 19**  
**UNIVERSITY LAND SURVEY**

**BLOCK 20**  
**UNIVERSITY LAND SURVEY**

28 27 A-U26  
641 ACRES

"UNIVERSITY 19-27"

27 42

51 29

29 43

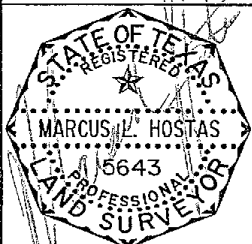
**LEGEND**

- EXIST. PRODUCING WELL
- PROPOSED DRILL WELL
- ⊗ PLUGGED & ABANDONED WELL
- △ EXIST. INJECTION WELL
- ▲ EXIST. INJECTION WELL P&A'd
- ⊙ FND. U. L. MONUMENT

1000' 0 1000'

SCALE : 1" = 1000'

LCA JOB NO: 2006-005-198



THIS WELL LOCATION SHOWN ON THIS PLAT REPRESENTS AN ACTUAL SURVEY MADE BY ME OR UNDER MY SUPERVISION TO THE BEST OF MY KNOWLEDGE AND BELIEF.

**LCA Landgraf, Crutcher and Associates, Inc.**  
TRANSPORTATION ENVIRONMENTAL CIVIL ENGINEERS ODESSA, TEXAS  
Phone: # (432) 332-5058 Fax: # (432) 332-0912

**RAILROAD COMMISSION PERMIT PLAT**  
**ANADARKO PETROLEUM CORPORATION**  
UNIVERSITY 19-27 #1; 1320' F.N.L., 1320' F.W.L.  
SECTION 27, BLOCK 19; UNIVERSITY LAND SURVEY  
WARD COUNTY, TEXAS

GEODETIC POSITION: NAD83  
LATITUDE: N 31°38'45.0" LONGITUDE: W 103°21'48.0"  
STATE PLANE COORDINATES:  
NORTH: 10575180 EAST: 1353814  
GEODETIC POSITION: NAD27  
LATITUDE: N 31°38'45.0" LONGITUDE: W 103°21'46.3"  
STATE PLANE COORDINATES:  
NORTH: 732604 EAST: 1057349

BEARINGS, DISTANCES, ACREAGE AND COORDINATES ARE GRID, RELATIVE TO THE TEXAS COORDINATE SYSTEM, CENTRAL ZONE, 1927 NAD.

DATE: 08-31-2006

SCALE: 1" = 1000'

DRAWN BY: S.O.B.

DISTANCE TO NEAREST TOWN IN Co.: 20.5 MILES SW OF WINKLER, TX

NORTH AMERICAN DATUM OF: NAD83

ZONE: TCZ STATE: TX