



KANSAS CORPORATION COMMISSION 1047199
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009

Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34269
Name: Apache Corporation
Address 1: 2000 POST OAK BLVD, STE 100
Address 2: _____
City: HOUSTON State: TX Zip: 77056 + _____
Contact Person: Amanda Pickney
Phone: (918) 491-4852
CONTRACTOR: License # 34000
Name: Kenai Mid-Continent, Inc.
Wellsite Geologist: Larry Baskin
Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
 Gas D&A ENHR SIGW
 OG GSW Temp. Abd.
 CM (Coal Bed Methane)
 Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____
Well Name: _____
Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to ENHR Conv. to SWD
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth _____
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____

<u>8/28/2010</u>	<u>09/5/2010</u>	<u>10/19/2010</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-119-21264-00-00
Spot Description: _____
_____ NW SW Sec. 18 Twp. 34 S. R. 27 East West
1980 Feet from North / South Line of Section
660 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Meade
Lease Name: HAGER Well #: 1-18
Field Name: Unnamed
Producing Formation: Cherokee
Elevation: Ground: 2295 Kelly Bushing: 2310
Total Depth: 6100 Plug Back Total Depth: 6100
Amount of Surface Pipe Set and Cemented at: 1596 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: 4161 Feet
If Alternate II completion, cement circulated from: _____
feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 10000 ppm Fluid volume: 120 bbls
Dewatering method used: Haul Off Pit
Location of fluid disposal if hauled offsite: _____
Operator Name: General Inc.
Lease Name: NW #2 License #: 23084
Quarter SE Sec. 24 Twp. 26 S. R. 26 East West
County: Harper, OK Permit #: 059-21237

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: 11/22/2010
 Confidential Release Date: 11/21/2012
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: NAOMI JAMES Date: 11/22/2010



1047199

Operator Name: Apache Corporation Lease Name: HAGER Well #: 1-18
 Sec. 18 Twp. 34 S. R. 27 East West County: Meade

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Dual Induction, GR/Neutron Density, Microlog	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Base Heebner</td> <td>4387</td> <td>-2077</td> </tr> <tr> <td>Oswego</td> <td>5142</td> <td>-2832</td> </tr> <tr> <td>Cherokee</td> <td>5615</td> <td>-3305</td> </tr> <tr> <td>13 Finger</td> <td>5718</td> <td>-3408</td> </tr> </table>	Name	Top	Datum	Base Heebner	4387	-2077	Oswego	5142	-2832	Cherokee	5615	-3305	13 Finger	5718	-3408
Name	Top	Datum														
Base Heebner	4387	-2077														
Oswego	5142	-2832														
Cherokee	5615	-3305														
13 Finger	5718	-3408														

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
surface	12.25	8.625	24	1596	POZ Prem	355	
production	7.875	5.50	17	6100	Extendacem, Prem P	350	

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Perforate				
Protect Casing				
Plug Back TD				
Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	5923-5930	9,744 gal HCl; 50Q foamed acid	5923

TUBING RECORD: Size: <u>2.875</u> Set At: <u>5895</u> Packer At:		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>11/8/2010</u>		Producing Method: <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____
Estimated Production Per 24 Hours	Oil Bbls. <u>0</u>	Gas Mcf <u>309</u>
	Water Bbls. <u>0</u>	Gas-Oil Ratio <u>0</u>
		Gravity <u>40</u>

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input checked="" type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>5923-5930</u>
--	--	--



*Mark Parkinson, Governor
Thomas E. Wright, Chairman
Joseph F. Harkins, Commissioner
Ward Loyd, Commissioner*

November 18, 2010

Amanda Pickney
Apache Corporation
2000 POST OAK BLVD, STE 100
HOUSTON, TX 77056

Re: ACO1
API 15-119-21264-00-00
HAGER 1-18
SW/4 Sec.18-34S-27W
Meade County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Amanda Pickney

HALLIBURTON

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 300496	Ship To #: 2804150	Quote #:	Sales Order #: 7610511
Customer: APACHE CORP		Customer Rep: Hudson, Jim	
Well Name: Hager	Well #: 1-18	API/UWI #:	
Field:	City (SAP): MEADE	County/Parish: Meade	State: Kansas
Legal Description: Section 18 Township 34N Range 27W			
Contractor: KENAI		Rig/Platform Name/Num: 55	
Job Purpose: Cement Multiple Stages			
Well Type: Development Well		Job Type: Cement Multiple Stages	
Sales Person: MEREDITH, JERRY		Srvc Supervisor: WILTSHIRE, MERSHEK	MBU ID Emp #: 195811

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
FARNUM, GORDON	12	0	LOPEZ, JUAN R	12	198514	MATA, ADOLFO V	12	419999
WILTSHIRE, MERSHEK Tonje	12	195811						

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours

TOTAL

Total is the sum of each column separately

Job				Job Times			
Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	Date	Time	Time Zone
				On Location	04 - Sep - 2010	07:00	CST
Form Type		BHST	122 degF	Job Started	04 - Sep - 2010	11:00	CST
Job depth MD	6100. ft	Job Depth TVD	6100. ft	Job Started	04 - Sep - 2010	14:56	CST
Water Depth		Wk Ht Above Floor		Job Completed	04 - Sep - 2010	21:35	CST
Perforation Depth (MD)	From	To		Departed Loc	04 - Sep - 2010	23:00	CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
7-7/8" Production Open Hole Lower Section				7.875				3850.	6100.		
7-7/8" Production Open Hole Upper Section				7.875				1600.	3850.		
Multiple Stage Cementer	Unknown								4100.		
5-1/2" 17 ppf Production Casing	New		5.5	4.892	17.	8 RD (LT&C)	J-55		6100.		
8-5/8" Surface Casing	New		8.625	8.097	24.	8 RD (ST&C)	J-55		1596.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

Miscellaneous Materials														
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%	Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty
FLUID DATA														
Stage/Plug # 1														
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk					
1	Water Spacer		20.00	bbl	8.33	.0	.0	.0						
2	Superflush		20.00	bbl	9.3	.0	.0	.0						
		68 lbm/bbl	HALLIBURTON SUPER FLUSH (100003639)											
3	Water Spacer		20.00	bbl	8.33	.0	.0	.0						
4	Primary Cement	POZ PREMIUM 50/50 - SBM (12302)	355.0	sacks	14.2	1.43	5.79		5.79					
		5.792 Gal	FRESH WATER											
		0.6 %	HALAD(R)-322, 50 LB (100003646)											
		3 lbm	KOL-SEAL, BULK (100064233)											
		5 %	CAL-SEAL 60, BULK (100064022)											
		10 %	SALT, 100 LB BAG (100003652)											
5	Mud Displacement		141.00	bbl	9.			.0						
Stage/Plug # 2														
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density uom	Yield uom	Mix Fluid uom	Rate uom	Total Mix Fluid uom					
1	Water Spacer		20.00	bbl	8.33	.0	.0	.0						
2	Super Flush		20.00	bbl	9.3	.0	.0	.0						
		68 lbm/bbl	HALLIBURTON SUPER FLUSH (100003639)											
3	Water Spacer		20.00	bbl	8.33	.0	.0	.0						
4	Lead Cement	EXTENDACEM (TM) SYSTEM (452981)	250.0	sacks	11.2	3.07	18.29		18.29					
		0.125 lbm	POLY-E-FLAKE (101216940)											
		18.294 Gal	FRESH WATER											
5	Tail Cement	CMT - PREMIUM CEMENT (100003687)	100.0	sacks	16.4	1.07	4.43		4.43					
		94 lbm	CMT - PREMIUM - CLASS H REG OR TYPE V, BULK (100003687)											
		0.1 %	HR-800, 50 LB SACK (101619742)											
		0.125 lbm	POLY-E-FLAKE (101216940)											
		4.426 Gal	FRESH WATER											
6	Water Displacement		91.00	bbl	8.33	.0	.0	.0						
Calculated Values			Pressures			Volumes								
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad						
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment						
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job						
Rates														
Circulating		Mixing		Displacement		Avg. Job								
Cement Left In Pipe	Amount	40 ft	Reason	Shoe Joint										
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID							
The Information Stated Herein Is Correct				Customer Representative Signature										

HALLIBURTON

Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 300496	Ship To #: 2804150	Quote #:	Sales Order #: 7610511
Customer: APACHE CORP		Customer Rep: Hudson, Jim	
Well Name: Hager	Well #: 1-18	API/UWI #:	
Field:	City (SAP): MEADE	County/Parish: Meade	State: Kansas
Legal Description: Section 18 Township 34N Range 27W			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: KENAI		Rig/Platform Name/Num: 55	
Job Purpose: Cement Multiple Stages			Ticket Amount:
Well Type: Development Well		Job Type: Cement Multiple Stages	
Sales Person: MEREDITH, JERRY		Srv Supervisor: WILTSHIRE, MERSHEK	MBU ID Emp #: 195811

Activity Description	Date/Time	Cht	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/04/2010 07:00							
Arrive At Loc	09/04/2010 11:00							
Pre-Job Safety Meeting	09/04/2010 11:15							
Start Job	09/04/2010 14:56							
Test Lines	09/04/2010 14:56						5000. 0	
Pump Spacer 1	09/04/2010 14:58		6	20			520.0	WATER
Pump Spacer 2	09/04/2010 15:03		6	20			520.0	SUPERFLUSH
Pump Spacer 1	09/04/2010 15:08		6	20			520.0	WATER
Pump Cement	09/04/2010 15:11		6	96			520.0	355 SKS 50/50 POZ @ 14.2#
Drop Top Plug	09/04/2010 15:28		6		96		130.0	END CEMENT
Clean Lines	09/04/2010 15:29							
Pump Displacement	09/04/2010 15:37		5	141			60.0	50 BBLS WATER /// 91 BBLS MUD
Other	09/04/2010 16:00		2.5	121			750.0	SLOW RATE
Other	09/04/2010 16:04						950.0	PRESSURE BEFORE LANDING PLUG
Bump Plug	09/04/2010 16:04		2.5		141		1800. 0	FLOAT HELD
Drop Opening Device For Multiple Stage Cementer	09/04/2010 16:06							
Open Multiple Stage Cementer	09/04/2010 16:33						850.0	

Sold To #: 300496

Ship To #: 2804150

Quote #:

Sales Order #:

7610511

SUMMIT Version: 7.20.130

Wednesday, September 15, 2010 03:33:00

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cbl #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	tubing	casing	
End Job	09/04/2010 16:44							END FIRST STAGE /// CIRCULATE 4 HOURS
Start Job	09/04/2010 20:32							STAGE 2
Pump Spacer 1	09/04/2010 20:33		6.5	20			200.0	WATER
Pump Spacer 2	09/04/2010 20:37		6.5	20			200.0	SUPERFLUSH
Pump Spacer 1	09/04/2010 20:41		6.5	20			200.0	WATER
Pump Lead Cement	09/04/2010 20:44		6.5	137			230.0	250 SKS EXTENDACEM @ 11.2#
Pump Tail Cement	09/04/2010 21:04		5.5	19			180.0	100 SKS CLASS H @ 16.4#
Drop Top Plug	09/04/2010 21:08		5.5		156		170.0	END CEMENT
Clean Lines	09/04/2010 21:09							
Pump Displacement	09/04/2010 21:13		8	95			120.0	WATER
Other	09/04/2010 21:27		2.5	75			480.0	SLOW RATE
Other	09/04/2010 21:33							PRESSURE BEFORE LANDING PLUG
Bump Plug	09/04/2010 21:33		2.5		95		2650. 0	FLOAT HELD
Close Multiple Stage Cementer	09/04/2010 21:33						2650. 0	
End Job	09/04/2010 21:35							

Sold To #: 300496

Ship To #: 2804150

Quote #:

Sales Order #:

7610511

SUMMIT Version: 7.20.130

Wednesday, September 15, 2010 03:33:00