



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1093193
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1093193

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input 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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Harlow 3119 1-28H
Doc ID	1093193

All Electric Logs Run

Final Boresight Depiction
ML 5in MD
Spectral Gamma Ray
DCP Density
DCP Induction

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Harlow 3119 1-28H
Doc ID	1093193

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	7429-7886	4228 bbls of water, 36 bbls acid, 75M lbs sand, 4264 TLTR	
5	8596-8903	4218 bbls of water, 36 bbls acid, 75M lbs sand, 8648 TLTR	
5	8214-8521	4217 bbls of water, 36 bbls acid, 75M lbs sand, 13005 TLTR	
5	7832-8139	4196 bbls of water, 36 bbls acid, 75M lbs sand, 17329 TLTR	
5	7450-7757	4166 bbls of water, 36 bbls acid, 75M lbs sand, 21609 TLTR	
5	7068-7375	4169 bbls of water, 36 bbls acid, 75M lbs sand, 25884 TLTR	
5	6686-6982	4148 bbls of water, 36 bbls acid, 75M lbs sand, 30125 TLTR	
5	6304-6611	4175 bbls of water, 36 bbls acid, 75M lbs sand, 34373 TLTR	
5	5932-6207	4151 bbls of water, 36 bbls acid, 75M lbs sand, 38589 TLTR	
5	5540-5848	4165 bbls of water, 36 bbls acid, 75M lbs sand, 42804 TLTR	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Harlow 3119 1-28H
Doc ID	1093193

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Conductor	32	20	75	117	Koda Services Grout	0	none
Surface	12.25	9.63	36	1098	O-Tex Lite Premium Plus 65/ Premium Plus (Class C)	750	6% gel, 2% Calcium Chloride, 1/4 pps Cello-Flake, .5% C-41P
Intermediate	8.75	7	26	5713	50/50 Poz Premium/ Premium	220	4% gel, .4% C-12, .1% C-37, .5% C-41P, 2 lb/sk Phenoseal
Liner	6.12	4.5	11.6	9406	50/50 Premium Poz	450	4% gel, .4% C12, .1% C37, .5% C-41P, 2 Lb/sk Phenoseal

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner

Sam Brownback, Governor

September 11, 2012

Tiffany Golay
SandRidge Exploration and Production LLC
123 ROBERT S. KERR AVE
OKLAHOMA CITY, OK 73102-6406

Re: ACO1
API 15-033-21659-01-00
Harlow 3119 1-28H
SW/4 Sec.28-31S-19W
Comanche 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,
Tiffany Golay

Koda Services, Inc.

INVOICE

Conductor and Rat Hole Drilling, Landfill Gas Drilling and Well Construction Nationwide

Date	Invoice #
8/22/2012	10037

Bill To
Sandridge Energy Accounts Payable P O Box 1748 Oklahoma City, OK 73102

Legal Description	Ordered By	Terms	Field Ticket	Lease Name	Drill Rig
	John Fortune	Net 30	7592	Harlow 3119-1-28H	Unit 9

Item	Quantity	Description
Conductor	130	Drilled 130' of 32" hole for conductor
20" Pipe	130	Furnished 130' of 20" conductor pipe
Ream Hole		Ream Hole
72" X 6'	1	Furnished 6' X 6' tinhorn
Dirt Removal		Provided Labor and Equipment for dirt removal and cleanup
Mud/Water		Furnished Mud, Water, & Trucking
Welder		Welder
Grout		Furnished grout
Deliver Grout		Deliver grout to location
Equipment		Furnished Grout Pump & Flush
Mouse	80	Drilled 80' of 26" Mouse hole
16" pipe	80	Furnished 80' of 16" Mouse Hole Pipe
Cover Plate		Cover Plate

AFE Number: DC-11999
 Well Name: Harlow 3119 1-28H
 Code: 850-010
 Amount: 28,041.83
 Co. Man: Dwayne Burt
 Co. Man Sig.: Dwayne Burt
 Notes: _____

Thank you for your business.	Subtotal	\$27,300.00
	Sales Tax (6.3%)	\$741.83
	Total	\$28,041.83

JOB SUMMARY			PROJECT NUMBER SOK1811	TICKET DATE 08/27/12
COUNTY COMANCHE	State KANSAS	COMPANY Bridge Exploration & Produc	CUSTOMER REP DEWAYNE	
LEASE NAME HARLOW 3119	Well No. 1-28H	JOB TYPE Surface	EMPLOYEE NAME LOUIS ARNEY	

EMP NAME				
LOUIS ARNEY				
JASON JONES				
MARCOS QUINTANA				
JAMES KEEN				

Form. Name _____ Type: _____

Packer Type _____ Set At **0**

Bottom Hole Temp. **80** Pressure _____

Retainer Depth _____ Total Depth **1000'**

Date	Called Out	On Location	Job Started	Job Completed
	8/27/2012	8/27/2012	8/27/2012	8/27/2012
Time	3:00	8:00	20:31	21:46

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Val	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data		From	To	Max. Allow
New/Used	Weight	Size	Grade	
Casing	36#	9 5/8"	Surface	1,500
Liner				
Liner				
Tubing		0		
Drill Pipe				
Open Hole		12 1/4"	Surface	1,000'
Perforations				Shots/Ft.
Perforations				
Perforations				

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	8.33	Lb/Gal
Spacer type	resh Water BBL.	10	8.33
Spacer type	BBL.		
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		In
NE Agent	Gal.		In
Fluid Loss	Gal/Lb		In
Gelling Agent	Gal/Lb		In
Fric. Red.	Gal/Lb		In
MISC.	Gal/Lb		In
Perfpac Balls	Qty.		
Other			
Other			
Other			
Other			

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
8/27	14.5	8/27	1.3	Surface
Total	14.5	Total	1.3	

Pressures	
MAX 1,500 PSI	AVG. 200
Average Rates in BPM	
MAX 6 BPM	AVG 5
Cement Left in Pipe	
Feet 47'	Reason SHOE JOINT

Cement Data				W/Rq.	Yield	Lbs/Gal
Stage	Sacks	Cement	Additives			
1	490	FEX Lite Premium Plus 65	(6% Gel) 2% Calcium Chloride - 1/4pps Cello-Flake - .5% C-41P	10.88	1.84	12.70
2	160	Premium Plus (Class C)	1% Calcium Chloride - 1/4pps Cello-Flake	6.32	1.32	14.80
3	100	Premium Plus (Class C)	2% Calcium Chloride on side to use if necessary	6.32	1.32	14.80

Summary							
Preflush	<input type="text"/>	Type:	<input type="text"/>	Preflush:	BBI	<input type="text"/>	Type:
Breakdown		MAXIMUM	1,500 PSI	Load & Bkdn:	Gal - BBI	N/A	Pad:Bbl -Gal
		Lost Returns-N	NO/FULL	Excess /Return	BBI	23	Calc. Disp Bbl
		Actual TOC	SURFACE	Calc. TOC:		SURFACE	Actual Disp.
Average		Bump Plug PSI:	800	Final Circ.	PSI:	300	Disp:Bbl
ISIP	5 Min.	10 Min.		Cement Slurry:	BBI	198.2	
		15 Min.		Total Volume	BBI	288.20	

CUSTOMER REPRESENTATIVE *Dewayne Rust* SIGNATURE

JOB SUMMARY			PROJECT NUMBER SOK 1833	TICKET DATE 09/02/12
COUNTY Comanche	State Kansas	COMPANY Sandridge Exploration & Production	CUSTOMER REP Ron Savage	
LEASE NAME Harlow	Well No. 1119 1-281	JOB TYPE Intermediate	EMPLOYEE NAME Nate Cotta	

EMP NAME					
Nate Cotta	0				
ARTHUR S.					
MIKE CHALFANT					
DANNY T.					

Form. Name _____ Type: _____
Packer Type _____ Set At **4,332**
Bottom Hole Temp. **155** Pressure _____
Retainer Depth _____ Total Depth **5725**

	Called Out	On Location	Job Started	Job Completed
Date	9.2.12	9.3.12	9.3.12	9.3.12
Time	1900	700	1045	1150

Tools and Accessories		
Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Val	0	IR
Centralizers	0	IR
Top Plug	0	IR
HEAD	0	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

Well Data							
	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing		26#	7"		Surface		5,000
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			8 3/4"		Surface	5,725	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
	WBM	Density	Lb/Gal
Mud Type		9	
Disp. Fluid	Fresh Water	Density 8.33	Lb/Gal
Spacer type	resh Water BBL.	20	8.33
Spacer type	Caustic BBL.	10	8.40
Acid Type	Gal.	%	
Acid Type	Gal.	%	
Surfactant	Gal.	In	
NE Agent	Gal.	In	
Fluid Loss	Gal/Lb	In	
Gelling Agent	Gal/Lb	In	
Fric. Red.	Gal/Lb	In	
MISC.	Gal/Lb	In	

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
9.3.12	5.0	9.3.12	1.0	Intermediate
Total	5.0	Total	1.0	

Perfpac Balls _____ Qty. _____
Other _____
Other _____
Other _____
Other _____
Other _____

Pressures			
MAX	3500	AVG	300
Average Rates in BPM			
MAX	8 BPM	AVG	5
Cement Left in Pipe			
Feet	98	Reason	SHOE JOINT

Cement Data				W/Rq.	Yield	Lbs/Gal
Stage	Sacks	Cement	Additives			
1	120	50/50 POZ PREMIUM	4% Gel - 0.4% C-12 - 0.1% C-37 - 0.5% C-41P - 2 lb/sk Phenoseal	6.77	1.44	13.60
2	100	Premium	0.4% C-12 - 0.1% C-37	5.20	1.18	15.60
3	0	0		0.00	0.00	0.00

Summary								
Preflush	10	Type:	Caustic	Preflush:	BBI	20.00	Type:	WEIGHTED SP.
Breakdown		MAXIMUM	3,500	Load & Bkdn:	Gal - BBI	N/A	Pad:Bbl -Gal	N/A
		Lost Returns-N	NO/FULL	Excess /Return	BBI	N/A	Calc. Disp Bbl	215
		Actual TOC	4,332	Calc. TOC:		4,332	Actual Disp.	215.00
Average		Bump Plug PSI:	1,500	Final Circ.	PSI:	1,000	Disp:Bbl	215.00
5 min		10 min	15 min	Cement Slurry:	BBI	52.0		
				Total Volume	BBI	287.00		

CUSTOMER REPRESENTATIVE *Ron Savage* SIGNATURE

JOB SUMMARY			PROJECT NUMBER SOK1856	TICKET DATE 09/08/12
COUNTY COMANCHE	State KANSAS	COMPANY Bridge Exploration & Produc	CUSTOMER REP RON SAVAGE	
LEASE NAME HARLOW 3119	Well No. 1-28H	JOB TYPE Liner	EMPLOYEE NAME Larry Kirchner Jr.	

EMP NAME Larry Kirchner Jr.	0.00				
John Hall					
Robert Stonehocker					
Wallace Berry					

Form. Name _____ Type: _____
 Packer Type _____ Set At **5,713**
 Bottom Hole Temp. **150** Pressure _____
 Retainer Depth _____ Total Depth **9406**

Date	Called Out 9/8/2012	On Location 9/8/2012	Job Started 9/8/2012	Job Completed 9/8/2012
Time	1:30PM	8:00PM	9:12PM	11:00PM

Tools and Accessories		
Type and Size	Qty	Make
Auto Fill Tube	0	Weatherford
Insert Float Val	0	
Centralizers	0	
Top Plug	0	
HEAD	0	
Limit clamp	0	
Weld-A	0	
Texas Pattern Guide Shoe	0	
Cement Basket	0	

Well Data							
	New/Used	Weight	Size	Grade	From	To	Max. Allow
Casing	New	11.6	4 1/2				
Liner Tool							
HWDP							
Drill Pipe			3 1/2"				
Drill Collars							
Open Hole			6 1/8"			9,406	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	9.1 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	resh Water	BBL.	20 8.33
Spacer type	Caustic	BBL.	10 8.40
Acid Type	Gal.		%
Acid Type	Gal.		%
Surfactant	Gal.		In
NE Agent	Gal.		In
Fluid Loss	Gal/Lb		In
Gelling Agent	Gal/Lb		In
Fric. Red.	Gal/Lb		In
MISC.	Gal/Lb		In

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
9/8	3.0	9/8	2.0	Liner
Total	3.0	Total	2.0	

Perfpac Balls _____ Qty. _____
 Other _____
 Other _____
 Other _____
 Other _____

Pressures	
MAX	3500
AVG.	800
Average Rates in BPM	
MAX	8
AVG	4
Cement Left in Pipe	
Feel	88
Reason	Shoe Joint

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	450	50/50 Premium Poz	(4%Gel) - .4% C12 - .1% C37 - 0.5% C-41P - 2 Lb/Sk Phenoseal	6.77	1.44	13.60
2	0	0		0	0.00	0.00
3	0	0		0	0.00	0.00

Summary					
Preflush Breakdown	10-	Type: Caustic	Preflush: 3,500 PSI	BBI: 30.00	Type: 8.59#SPACER
		MAXIMUM	NO/FULL	N/A	N/A
		Lost Returns-N	4,697'	Load & Bkdn: N/A	Pad:Bbl -Gal 111
		Actual TOC		Excess /Return N/A	Calc. Disp Bbl 111.00
Average		Bump Plug PSI:		Calc. TOC: 4,801'	Actual Disp. 111.00
ISIP	5 Min.	10 Min.	15 Min.	Final Circ. 1,050	Disp:Bbl
				Cement Slurry: 115.0	
				Total Volume 256.00	

CUSTOMER REPRESENTATIVE _____ *Ron Savage* SIGNATURE _____



123 Robert S. Kerr Ave.
Oklahoma City, OK 73102

Survey HARLOW 3119 1-28H

Step #1 - Create a Deviation Survey

Step

#2 - Attach the survey "Description" to the Wellbore - Deviation Survey

Wellbores - Step #2

Actual Deviation Survey Survey, Proposed? No	Wellbore Name Original Hole
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Deviation Surveys - Step #1

Description Survey	Date 8/26/2012	VS Dir (°) 0.83	Comment
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Tie-in Data

Azimuth North Type Grid	Convergence (°)	Declination (°)	MD Tie In (ftKB) 0.00	Azimuth Tie In (°) 0.00	Inclination Tie In (°) 0.00	TVD Tie In (ftKB) 0.00	NSTie In (ft) 0.00	EWTie In (ft) 0.00
----------------------------	-----------------	-----------------	--------------------------	----------------------------	--------------------------------	---------------------------	-----------------------	-----------------------

Survey Data

MD (ftKB)	Incl (°)	Azim (°)	Survey Company	Method	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (*/100ft)
250	0.3								
500	0.5								
750	0.6								
1,000	0.6								
1,159	0.4	77.40	DrillRight	MWD	1,159	1	0.88	3.95	0.03
1,622	0.6	79.50	DrillRight	MWD	1,622	2	1.68	7.91	0.04
2,098	1.0	77.70	DrillRight	MWD	2,098	3	3.02	14.42	0.08
2,573	1.1	77.30	DrillRight	MWD	2,573	5	4.90	22.92	0.02
3,047	0.7	89.50	DrillRight	MWD	3,047	6	5.93	30.25	0.09
3,522	0.8	105.70	DrillRight	MWD	3,522	6	5.05	36.34	0.05
4,000	1.4	94.70	DrillRight	MWD	4,000	4	3.67	45.38	0.13
4,286	0.9	86.80	DrillRight	MWD	4,286	4	3.51	51.10	0.18
4,349	1.9	7.90	DrillRight	MWD	4,349	5	4.57	51.74	3.08
4,378	3.8	357.80	DrillRight	MWD	4,378	7	6.01	51.77	6.75
4,412	6.2	355.40	DrillRight	MWD	4,411	10	8.97	51.58	7.08
4,444	8.0	352.90	DrillRight	MWD	4,443	14	12.90	51.16	5.71
4,476	9.5	348.90	DrillRight	MWD	4,475	18	17.70	50.38	5.06
4,507	11.5	349.90	DrillRight	MWD	4,505	24	23.25	49.34	6.48
4,539	14.1	349.90	DrillRight	MWD	4,536	31	30.23	48.10	8.13
4,571	16.8	349.10	DrillRight	MWD	4,567	39	38.61	46.54	8.46
4,602	19.3	347.60	DrillRight	MWD	4,597	49	48.02	44.60	8.20
4,634	22.0	346.50	DrillRight	MWD	4,627	60	59.01	42.06	8.52
4,666	24.5	345.90	DrillRight	MWD	4,656	72	71.28	39.04	7.85
4,698	26.7	345.80	DrillRight	MWD	4,685	85	84.68	35.66	6.88
4,730	28.1	345.40	DrillRight	MWD	4,713	99	98.95	32.00	4.41
4,761	30.0	346.40	DrillRight	MWD	4,740	114	113.55	28.34	6.33
4,793	32.1	347.80	DrillRight	MWD	4,768	130	129.63	24.66	6.94
4,824	33.3	349.10	DrillRight	MWD	4,794	146	146.04	21.31	4.49
4,856	34.3	349.80	DrillRight	MWD	4,821	164	163.54	18.05	3.35
4,888	35.9	349.70	DrillRight	MWD	4,847	182	181.65	14.78	5.00
4,920	38.2	349.80	DrillRight	MWD	4,872	201	200.62	11.35	7.19
4,952	40.6	351.50	DrillRight	MWD	4,897	221	220.66	8.05	8.22
4,983	42.8	353.90	DrillRight	MWD	4,920	241	241.11	5.44	8.77
5,015	44.8	356.70	DrillRight	MWD	4,943	263	263.18	3.64	8.70
5,047	47.0	358.50	DrillRight	MWD	4,966	286	286.14	2.68	7.97
5,078	49.5	358.30	DrillRight	MWD	4,986	309	309.25	2.04	8.08
5,142	53.1	360.00	DrillRight	MWD	5,026	359	359.19	1.32	5.99
5,237	52.7	359.40	DrillRight	MWD	5,083	435	434.95	0.92	0.66
5,268	52.4	359.10	DrillRight	MWD	5,102	460	459.56	0.60	1.24
5,300	52.3	358.80	DrillRight	MWD	5,122	485	484.89	0.13	0.81
5,328	53.8	0.50	DrillRight	MWD	5,139	507	507.27	0.00	7.23
5,363	56.3	2.40	DrillRight	MWD	5,159	536	535.94	0.73	8.41
5,395	59.0	3.20	DrillRight	MWD	5,176	563	562.94	2.06	8.70
5,426	61.7	3.40	DrillRight	MWD	5,191	590	589.83	3.61	8.73
5,457	65.4	3.40	DrillRight	MWD	5,205	618	617.54	5.25	11.94



123 Robert S. Kerr Ave.
Oklahoma City, OK 73102

Survey HARLOW 3119 1-28H

Step #1 - Create a Deviation Survey

Step

#2 - Attach the survey "Description" to the Wellbore - Deviation Survey

Survey Data										
MD (ftKB)	Incl (°)	Azm (°)	Survey Company	Method	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
5,490	68.7	3.00	DrillRight	MWD	5,218	648	647.87	6.95	10.06	
5,522	71.6	2.00	DrillRight	MWD	5,229	678	677.94	8.26	9.53	
5,553	74.2	0.90	DrillRight	MWD	5,238	708	707.56	9.01	9.05	
5,585	77.7	359.60	DrillRight	MWD	5,246	739	738.59	9.14	11.63	
5,617	81.1	359.70	DrillRight	MWD	5,252	770	770.04	8.95	10.63	
5,649	83.7	0.20	DrillRight	MWD	5,256	802	801.76	8.92	8.27	
5,675	86.2	0.90	DrillRight	MWD	5,258	828	827.65	9.17	9.98	
5,779	91.6	2.20	DrillRight	MWD	5,260	932	931.55	11.98	5.34	
5,810	91.7	2.30	DrillRight	MWD	5,259	963	962.52	13.20	0.46	
5,841	90.6	2.00	DrillRight	MWD	5,259	994	993.49	14.36	3.68	
5,873	90.3	1.30	DrillRight	MWD	5,258	1,026	1,025.48	15.28	2.38	
5,904	90.4	1.30	DrillRight	MWD	5,258	1,057	1,056.47	15.99	0.32	
5,936	89.3	1.80	DrillRight	MWD	5,258	1,089	1,088.45	16.85	3.78	
6,000	88.9	1.60	DrillRight	MWD	5,259	1,153	1,152.42	18.75	0.70	
6,094	88.3	1.00	DrillRight	MWD	5,261	1,247	1,246.36	20.88	0.90	
6,190	89.0	0.90	DrillRight	MWD	5,264	1,343	1,342.32	22.47	0.74	
6,286	89.8	1.80	DrillRight	MWD	5,265	1,438	1,438.29	24.73	1.25	
6,381	91.2	1.30	DrillRight	MWD	5,264	1,533	1,533.25	27.30	1.56	
6,477	90.3	1.20	DrillRight	MWD	5,263	1,629	1,629.22	29.40	0.94	
6,572	91.0	1.20	DrillRight	MWD	5,262	1,724	1,724.19	31.39	0.74	
6,666	90.5	1.00	DrillRight	MWD	5,260	1,818	1,818.16	33.19	0.57	
6,761	89.4	0.50	DrillRight	MWD	5,260	1,913	1,913.15	34.44	1.27	
6,857	90.4	1.60	DrillRight	MWD	5,261	2,009	2,009.14	36.19	1.55	
6,952	91.0	1.40	DrillRight	MWD	5,259	2,104	2,104.10	38.68	0.67	
7,046	90.2	1.60	DrillRight	MWD	5,258	2,198	2,198.06	41.14	0.88	
7,141	89.7	1.00	DrillRight	MWD	5,259	2,293	2,293.03	43.30	0.82	
7,237	90.0	1.10	DrillRight	MWD	5,259	2,389	2,389.02	45.06	0.33	
7,332	90.1	1.20	DrillRight	MWD	5,259	2,484	2,484.00	46.96	0.15	
7,427	90.8	1.10	DrillRight	MWD	5,258	2,579	2,578.97	48.87	0.74	
7,522	91.5	1.00	DrillRight	MWD	5,256	2,674	2,673.94	50.61	0.74	
7,617	91.1	0.30	DrillRight	MWD	5,254	2,769	2,768.91	51.69	0.85	
7,712	91.3	359.80	DrillRight	MWD	5,252	2,864	2,863.89	51.77	0.57	
7,807	92.0	359.70	DrillRight	MWD	5,249	2,959	2,958.84	51.36	0.74	
7,901	89.4	358.90	DrillRight	MWD	5,248	3,053	3,052.82	50.21	2.89	
7,996	88.7	358.80	DrillRight	MWD	5,250	3,148	3,147.79	48.30	0.74	
8,091	88.6	358.80	DrillRight	MWD	5,252	3,243	3,242.74	46.31	0.11	
8,186	89.8	359.40	DrillRight	MWD	5,253	3,338	3,337.72	44.82	1.41	
8,281	90.6	359.00	DrillRight	MWD	5,253	3,433	3,432.71	43.49	0.94	
8,376	91.6	359.00	DrillRight	MWD	5,251	3,528	3,527.67	41.84	1.05	
8,471	92.1	358.80	DrillRight	MWD	5,248	3,623	3,622.61	40.01	0.57	
8,567	91.9	358.60	DrillRight	MWD	5,245	3,719	3,718.52	37.84	0.29	
8,661	91.4	359.80	DrillRight	MWD	5,242	3,813	3,812.47	36.52	1.38	
8,756	90.4	1.30	DrillRight	MWD	5,240	3,908	3,907.45	37.44	1.90	
8,852	89.9	2.50	DrillRight	MWD	5,240	4,004	4,003.40	40.62	1.35	
8,947	89.6	2.30	DrillRight	MWD	5,241	4,099	4,098.31	44.60	0.38	
9,042	89.9	2.10	DrillRight	MWD	5,241	4,194	4,193.24	48.24	0.38	
9,138	90.0	1.60	DrillRight	MWD	5,241	4,289	4,289.19	51.34	0.53	
9,233	90.1	2.00	DrillRight	MWD	5,241	4,384	4,384.15	54.33	0.43	
9,329	90.2	2.30	DrillRight	MWD	5,241	4,480	4,480.08	57.93	0.33	
9,358	91.2	3.30	DrillRight	MWD	5,240	4,509	4,509.04	59.35	4.88	
9,406	91.2	3.30	DrillRight	MWD	5,239	4,557	4,556.95	62.11	0.00	

Section 20
31S 19W

Section 21
31S 19W

635' FWL 272' FNL
BHL: 9406'
-99.398342 37.322633

Section 29
31S 19W

Bottom Perf: 7429'
-99.398322 37.3172

Section 28
31S 19W

Top Perf: 5540'
-99.398397 37.31206

Miss Entry: 5206'
-99.398416 37.311311

GREG 3119 1-33H
* * HARLOW 3119 1-28H

Section 32
31S 19W

Section 33
31S 19W



Actual Bottom-Hole Location of Harlow 31191-28H
Comanche County, Kansas
T&R: 31S 19W
Section: 28, 635' FWL & 272' FNL
Long/Lat: -99.398342 37.322633

1 in = 667 ft

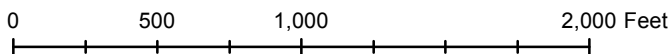


● Actual BH Location

* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Aaron Birk

Draft Date: 11/20/2012

Drawing Name/Number:

Addendum_Harlow_1-28H.mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502

Logo

Back to Well Completion

Harlow 3119 1-28H (1093193)

Actions

View PDF
Delete
Edit
Certify & Submit
Request Confidentiality

Attachments

Two Year Confidentiality OPERATOR	View PDF Delete
Cement Reports OPERATOR	View PDF Delete
Directional Survey OPERATOR	View PDF Delete
As Drilled Plat OPERATOR	View PDF Delete
<input type="button" value="Add Attachment"/>	

Remarks

Remarks to KCC	<input type="button" value="Add Remark"/>
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Remarks

Tiffany Golay 12/07/012 10:57 am	Additional Fluid Mgmt Info: 1120 bbls hauled to West OK Disposal, Smith Estate, Well #1, 21-23N-21W, Woodward, OK; 420 bbls hauled to Gray Mud Disposal, SW/4 15-24N-7W, Garfield, OK; 140 bbls hauled to Guard, Inc. 23-22N-13W, Major, OK
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