



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1160191
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
-----------------------------------	-----------------	---

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: _____



1160191

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No 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: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

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

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> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Murray 3406 2-5H
Doc ID	1160191

All Electric Logs Run

Boresight
Mud Log
Prizm Log
Induction
Nuclear

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Murray 3406 2-5H
Doc ID	1160191

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	8748-8962	1500 gals 15% HCL, 6639 bbls slickwater, TLTR 6432 bbls	
5	8401-8649	1500 gals 15% HCL, 6211 bbls slickwater, TLTR 12535 bbls	
5	8028-8332	1500 gals 15% HCL, 6209 bbls slickwater, TLTR 18495 bbls	
5	7678-7942	1500 gals 15% HCL, 6027 bbls slickwater, TLTR 24438 bbls	
5	7306-7612	1500 gals 15% HCL, 6167 bbls slickwater, TLTR 30673 bbls	
5	6928-7231	1500 gals 15% HCL, 6109 bbls slickwater, TLTR 36789 bbls	
5	6491-6792	1500 gals 15% HCL, 5907 bbls slickwater, TLTR 42719 bbls	
5	6128-6428	1500 gals 15% HCL, 5963 bbls slickwater, TLTR 48710 bbls	
5	5708-6000	1500 gals 15% HCL, 6156 bbls slickwater, TLTR 54864 bbls	
5	5360-5638	1500 gals 15% HCL, 6180 bbls slickwater, TLTR 60944 bbls	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Murray 3406 2-5H
Doc ID	1160191

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	5004-5140	1500 gals 15% HCL, 4047 bbls slickwater, TLTR 65027 bbls	

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
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

September 27, 2013

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

Re: ACO1
API 15-077-21958-01-00
Murray 3406 2-5H
SE/4 Sec.05-34S-06W
Harper 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 #
9/12/2013	10805

<p>Bill To</p> <p>Sandridge Energy Accounts Payable P O Box 1748 Oklahoma City, OK 73102</p>
--

Art. DC 13149
 Well No. MURRAY 3406 2-5H
 Contact 830.210
 Account # 20195
 On Hand MICHAEL KUKATSKY
 Co. M. T. *[Signature]*
 Notes:

Legal Description	Ordered By	Terms	Field Ticket	Lease Name	Drill Rig
Sec.5-34S-6W Ha...	Chuck	Net 30	8151	Murray 3406 2-5	Unit 310

Item	Quantity	Description
Conductor	90	Drilled 90' of 32" hole for conductor
20" Pipe	90	Furnished 90' 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
Safety Ring		Safety Ring

Thank you for your business.	Subtotal	\$19,701.00
	Sales Tax (6.15%)	\$493.57
	Total	\$20,194.57

RECEIVED

SEP 23 2013

HALLIBURTON

Cementing Job Summary

REGULATORY DEPT

The Road to Excellence Starts with Safety

Sold To #: 305021	Ship To #: 3104983	Quote #:	Sales Order #: 900737395
Customer: SANDRIDGE ENERGY INC EBUSINESS		Customer Rep: Webster, John	
Well Name: Murray 3406	Well #: 2-5H	API/UWI #: 15-077-21958	
Field:	City (SAP): ANTHONY	County/Parish: Harper	State: Kansas
Legal Description: Section 5 Township 34S Range 6W			
Contractor: UNIT		Rig/Platform Name/Num: 310	
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: FRENCH, JEREMY		Srcv Supervisor: UNDERWOOD, BILLY MBU ID Emp #: 159068	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
STINNETT, MARK	5	507278	STOOPS, LEVI Keith	5	523378	UNDERWOOD, BILLY	6.5	159068

Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10261039	100 mile	10804555	100 mile	10825967	100 mile	11288856	100 mile
11706678	100 mile						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
9-13-13	2	0	9-14-13	3	1			

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Formation Depth (MD)	Top	Bottom	Date	Time	Time Zone
Formation Name	Formation Depth (MD)	Top	Bottom	Called Out	13 - Sep - 2013	18:00 CST
Form Type	Job depth MD	650. ft	BHST	Job Started	14 - Sep - 2013	01:20 CST
Water Depth	Job Depth TVD	650. ft	Wk Ht Above Floor	Job Completed	14 - Sep - 2013	02:05 CST
Perforation Depth (MD)	From	To		Departed Loc	14 - Sep - 2013	03:00 CST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbf/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
12.25" Open Hole				12.25				80.	650.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	650.		
Preset Conductor	Unknown		20.	19.124	94.			.	80.		

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

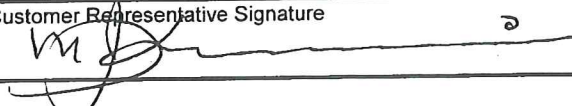
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data

Stage/Plug #: 1											
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbf/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk		

HALLIBURTON

Cementing Job Summary

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	Fresh Water		10.00	bbl	8.33	.0	.0	.0	
2	Lead Cement	EXTENDACEM (TM) SYSTEM (452981)	210.0	sacks	12.4	2.12	11.68		11.68
	3 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	11.681 Gal	FRESH WATER							
3	Tail Cement	SWIFTCEM (TM) SYSTEM (452990)	150.0	sacks	15.6	1.19	5.3		5.3
	1 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)							
	0.125 lbm	POLY-E-FLAKE (101216940)							
	5.302 Gal	FRESH WATER							
4	Displacement		47.00	bbl	8.33	.0	.0	.0	
Calculated Values		Pressures			Volumes				
Displacement	44	Shut In: Instant		Lost Returns		Cement Slurry	78/32	Pad	
Top Of Cement		5 Min		Cement Returns	35	Actual Displacement	44	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	164
Rates									
Circulating	5	Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	42 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 #: 305021	Ship To #: 3104983	Quote #:	Sales Order #: 900737395
Customer: SANDRIDGE ENERGY INC EBUSINESS		Customer Rep: Webster, John	
Well Name: Murray 3406	Well #: 2-5H	API/UWI #: 15-077-21958	
Field:	City (SAP): ANTHONY	County/Parish: Harper	State: Kansas
Legal Description: Section 5 Township 34S Range 6W			
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: UNIT		Rig/Platform Name/Num: 310	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: FRENCH, JEREMY		Srvc Supervisor: UNDERWOOD, BILLY	MBU ID Emp #: 159068

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/13/2013 18:00							
Safety Meeting - Service Center or other Site	09/13/2013 19:00							
Depart from Service Center or Other Site	09/13/2013 19:05							
Arrive at Location from Service Center	09/13/2013 20:30							assess location/test water/get with co rep
Other	09/13/2013 21:00							rigging up casers/run pipe
Arrive at Location from Service Center	09/13/2013 22:00							trucks on location/rig up meeting
Rig-Up Equipment	09/13/2013 22:05							
Rig-Up Completed	09/13/2013 22:30							standby/running casing
Other	09/14/2013 00:00							on bottom/circulate with rig
Safety Meeting - Pre Job	09/14/2013 01:10							job and safety procedures/rig up head
Test Lines	09/14/2013 01:20						1500.0	
Pump Water	09/14/2013 01:22		5	10			100.0	fresh water
Pump Lead Cement	09/14/2013 01:26		6	79			115.0	12.4# Econocem
Pump Tail Cement	09/14/2013 01:39		5	32			145.0	15.6# Swiftcem
Drop Plug	09/14/2013 01:46							
Pump Displacement	09/14/2013 01:48		5	44			180.0	fresh water
Pump Displacement	09/14/2013 01:55		2.8				220.0	slow rate

Sold To #: 305021

Ship To #: 3104983

Quote # :

Sales Order #: 900737395

SUMMIT Version: 7.3.0106

Saturday, September 14, 2013 02:21:00

HALLIBURTON

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Bump Plug	09/14/2013 01:58						700.0	35bbls cmt returns
Check Floats	09/14/2013 01:59							holding/ 1/2 bbl back
End Job	09/14/2013 02:00							
Safety Meeting - Pre Rig-Down	09/14/2013 02:05							
Rig-Down Equipment	09/14/2013 02:10							
Rig-Down Completed	09/14/2013 02:50							
Safety Meeting - Departing Location	09/14/2013 02:55							
Depart Location for Service Center or Other Site	09/14/2013 03:00							

Sold To # : 305021

Ship To # : 3104983

Quote # :

Sales Order # : 900737395

SUMMIT Version: 7.3.0106

Saturday, September 14, 2013 02:21:00

RECEIVED

SEP 30 2013

HALLIBURTON

REGULATORY DEPT
SANDRIDGE ENERGY

Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 305021	Ship To #: 3104983	Quote #:	Sales Order #: 900746300
Customer: SANDRIDGE ENERGY INC EBUSINESS		Customer Rep: Webster, John	
Well Name: Murray 3406	Well #: 2-5H	API/UWI #: 15-077-21958	
Field:	City (SAP): ANTHONY	County/Parish: Harper	State: Kansas
Legal Description: Section 5 Township 34S Range 6W			
Contractor: UNIT		Rig/Platform Name/Num: 310	
Job Purpose: Cement Intermediate Casing			
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: FRENCH, JEREMY		Srvc Supervisor: PENN, BRIAN	MBU ID Emp #: 512150

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
AIRINGTON, JOSEPH Tyler	7	497322	PENN, BRIAN A	7	512150	TOPE, GEOFFREY Daniel	7	489420

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
9/20/13	7	3						

TOTAL Total is the sum of each column separately

Job

Job Times

Formation Name	Top	Bottom	Called Out	Date	Time	Time Zone
Formation Depth (MD)			On Location	19 - Sep - 2013	20:00	CST
Form Type		BHST	Job Started	20 - Sep - 2013	01:00	CST
Job depth MD	5306. m	Job Depth TVD	Job Completed	20 - Sep - 2013	05:30	CST
Water Depth		Wk Ht Above Floor	Departed Loc	20 - Sep - 2013	06:42	CST
Perforation Depth (MD)	From	To		20 - Sep - 2013	08:00	CST

Well Data

Description	New / Used	Max pressure Mpa	Size mm	ID mm	Weight kg/m	Thread	Grade	Top MD m	Bottom MD m	Top TVD m	Bottom TVD m
8.75" Open Hole				8.75				650.	5279.		
7" Intermediate Casing	Unknown		7.	6.276	26.	LTC	P-110	.	5279.		
9.625" Surface Casing	Unknown		9.625	8.921	36.	LTC	J-55	.	650.		

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug	7	1	HES
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container	7	1	HES
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

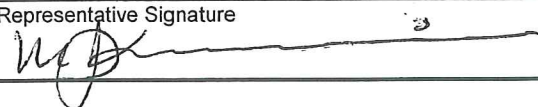
Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density kg/m3	Yield m3/sk	Mix Fluid m3/tonne	Rate m3/min	Total Mix Fluid m3/tonne	

Stage/Plug #: 1

Summit Version: 7.3.0106

Friday, September 20, 2013 07:23:00

Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density kg/m3	Yield m3/sk	Mix Fluid m3/tonne	Rate m3/min	Total Mix Fluid m3/tonne
1	HES Supplied Gel Water		30.00	bbl	8.33	.0	.0	.0	
	1.66 lbm/bbl	CAUSTIC SODA BEADS, 50 LB SK (100003650)							
	10 lbm/bbl	AQUAGEL - 100 LB BAG (101252566)							
2	50/50 POZ STANDARD (w/ 2% extra gel)	ECONOCEM (TM) SYSTEM (452992)	140.0	sacks	13.6	1.53	7.46		7.46
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	2 %	BENTONITE, BULK (100003682)							
	7.459 Gal	FRESH WATER							
3	PREMIUM	HALCEM (TM) SYSTEM (452986)	190.0	sacks	15.6	1.18	5.2		5.2
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	5.197 Gal	FRESH WATER							
4	Displacement		200.00	bbl	8.33	.0	.0	.0	
Calculated Values		Pressures			Volumes				
Displacement	199.4	Shut In: Instant		Lost Returns	0	Cement Slurry	78	Pad	
Top Of Cement	3243	5 Min		Cement Returns	0	Actual Displacement	119	Treatment	
Frac Gradient		15 Min		Spacers	30	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	91 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					
									

The Road to Excellence Starts with Safety

Sold To #: 305021	Ship To #: 3104983	Quote #:	Sales Order #: 900746300
Customer: SANDRIDGE ENERGY INC EBUSINESS		Customer Rep: Webster, John	
Well Name: Murray 3406		Well #: 2-5H	API/UWI #: 15-077-21958
Field:	City (SAP): ANTHONY	County/Parish: Harper	State: Kansas
Legal Description: Section 5 Township 34S Range 6W			
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: UNIT		Rig/Platform Name/Num: 310	
Job Purpose: Cement Intermediate Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Intermediate Casing	
Sales Person: FRENCH, JEREMY		Srvc Supervisor: PENN, BRIAN	MBU ID Emp #: 512150

Activity Description	Date/Time	Cht #	Rate m3/min	Volume m3		Pressure MPa		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/19/2013 19:50							
Depart Yard Safety Meeting	09/19/2013 20:45							
Depart from Service Center or Other Site	09/19/2013 21:00							
Arrive At Loc	09/20/2013 01:00							MEET WITH COMPANY MAN TO GET WORK ORDER SIGNED AND GET NUMBERS
Other	09/20/2013 02:00							WAIT FOR CASING CREW TO RUN CASING AND RIG DOWN
Pre-Rig Up Safety Meeting	09/20/2013 02:30							
Rig-Up Equipment	09/20/2013 02:45							
Pre-Job Safety Meeting	09/20/2013 05:00							MEET WITH COMPANY MAN, RIG CREW, AND HES EMPLOYEES TO GO OVER PUMPING SCHEDULE AND JOB HAZARDS
Start Job	09/20/2013 05:29							
Pressure Test	09/20/2013 05:30							TEST LINES TO 5000
Pump Spacer	09/20/2013 05:35		4	30			145.0	30 BBL GEL SPACER
Pump Lead Cement	09/20/2013 05:48		4	38			200.0	140 SKS LEAD CEMENT @ 13.6 PPG
Pump Tail Cement	09/20/2013 05:55		5	40			222.0	190 SKS TAIL CEMENT @ 15.6 PPG
Drop Plug	09/20/2013 06:04							TOP PLUG

Sold To # : 305021

Ship To # : 3104983

Quote # :

Sales Order # : 900746300

SUMMIT Version: 7.3.0106

Friday, September 20, 2013 07:23:00

Activity Description	Date/Time	Cht #	Rate m3/min	Volume m3		Pressure MPa		Comments
				Stage	Total	Tubing	Casing	
Pump Displacement	09/20/2013 06:05		8	199			540.0	199.4 BBLS FRESH WATER DISPLACEMENT
Slow Rate	09/20/2013 06:34		3.5				600.0	SLOW RATE FOR LAST 20 BBL OF DISPLACEMENT
Bump Plug	09/20/2013 06:39		3.5				640.0	BUMPED PLUG @ AND TOOK 500 OVER
Check Floats	09/20/2013 06:41							CHECKED FLOATS AND GOT 1 BBLS BACK
End Job	09/20/2013 06:42							
Post-Job Safety Meeting (Pre Rig-Down)	09/20/2013 06:50							
Rig-Down Equipment	09/20/2013 06:55							
Other	09/20/2013 07:30							MEET WITH COMPNAY MAN TO GO OVER JOB RESULTS AND GET TICKETS SIGNED
Depart Location Safety Meeting	09/20/2013 07:40							
Depart Location for Service Center or Other Site	09/20/2013 08:00							THANK YOU FOR USING HALLIBURTON! BRIAN AND CREW



Actual Wellpath Report
Sandridge_Svy (10-3-2013).
Page n of nn



REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Murray 3406 2-5H 200 FSL 2150 FEL
Area	Kansas	Well	Subject
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Murray 3406 2-5H 200 FSL 2150 FEL Actual
Facility	Murray 3406 2-5H Sec.5-34S-6W		

REPORT SETUP INFORMATION			
Projection System	NAD27 / Lambert Kansas SP, Southern Zone (1502), US feet		
North Reference	Grid	Software System	WellArchitect™ 3.0.0
Convergence at slot	0.31° East	User	Colejim
Scale	1.00003	Report Generated	10/3/2013 at 10:30:47 AM
Wellbore last revised	09-11-2013	Database/Source file	OKC

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	2148396.00	161675.00	37°06'34.455"N	97°59'28.131"W
Facility Reference Pt			2148396.00	161675.00	37°06'34.455"N	97°59'28.131"W
Field Reference Pt			2132248.82	161602.28	37°06'34.560"N	98°02'47.460"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Unit 310 (RKB) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Slot	Unit 310 (RKB) to Mean Sea Level	1282.00ft
Vertical Reference Pt	Unit 310 (RKB)	Unit 310 (RKB) to Mud Line at Slot (Murray 3406 2-5H 200 FSL 2150 FEL)	18.00ft
MD Reference Pt	Unit 310 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	1.24°



Actual Wellpath Report
 Sandridge_Svy (10-3-2013).
 Page n of nn



REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Murray 3406 2-5H 200 FSL 2150 FEL
Area	Kansas	Well	Subject
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Murray 3406 2-5H 200 FSL 2150 FEL Actual
Facility	Murray 3406 2-5H Sec.5-34S-6W		

WELLPATH DATA (142 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [%/100ft]	Comments
0.00†	0.000	146.370	0.00	0.00	0.00	0.00	2148396.00	161675.00	0.00	
18.00	0.000	146.370	18.00	0.00	0.00	0.00	2148396.00	161675.00	0.00	
250.00	0.250	146.370	250.00	-0.42	-0.42	0.28	2148396.28	161674.58	0.11	
610.00	0.500	146.370	609.99	-2.35	-2.38	1.59	2148397.59	161672.62	0.07	
647.00	0.170	146.370	646.99	-2.53	-2.56	1.71	2148397.71	161672.44	0.89	
709.00	0.250	135.030	708.99	-2.70	-2.74	1.85	2148397.85	161672.26	0.14	
803.00	0.160	192.820	802.99	-2.97	-3.01	1.97	2148397.97	161671.99	0.23	
896.00	0.170	171.420	895.99	-3.23	-3.27	1.96	2148397.96	161671.73	0.07	
927.00	0.470	201.480	926.99	-3.39	-3.44	1.92	2148397.92	161671.56	1.08	
958.00	1.430	188.530	957.98	-3.90	-3.94	1.82	2148397.82	161671.06	3.15	
990.00	2.920	182.510	989.96	-5.11	-5.15	1.72	2148397.72	161669.85	4.70	
1021.00	3.730	178.620	1020.91	-6.90	-6.94	1.71	2148397.71	161668.06	2.71	
1052.00	4.480	180.040	1051.83	-9.12	-9.16	1.73	2148397.73	161665.84	2.44	
1083.00	5.200	178.290	1082.72	-11.74	-11.78	1.77	2148397.77	161663.22	2.37	
1115.00	5.860	181.000	1114.57	-14.82	-14.86	1.79	2148397.79	161660.14	2.22	
1146.00	6.060	180.390	1145.40	-18.04	-18.08	1.75	2148397.75	161656.92	0.68	
1177.00	6.150	180.740	1176.22	-21.33	-21.37	1.72	2148397.72	161653.62	0.31	
1239.00	5.940	177.920	1237.88	-27.86	-27.90	1.79	2148397.79	161647.10	0.59	
1271.00	6.120	178.610	1269.70	-31.21	-31.26	1.89	2148397.89	161643.74	0.61	
1333.00	5.410	175.230	1331.39	-37.42	-37.48	2.22	2148398.22	161637.52	1.27	
1364.00	5.460	175.380	1362.25	-40.34	-40.40	2.46	2148398.46	161634.59	0.17	
1458.00	5.400	181.050	1455.83	-49.21	-49.28	2.74	2148398.74	161625.71	0.57	
1489.00	5.930	185.230	1486.68	-52.27	-52.34	2.56	2148398.56	161622.66	2.17	
1553.00	6.040	186.950	1550.33	-58.92	-58.97	1.85	2148397.85	161616.03	0.33	
1616.00	5.850	185.340	1612.99	-65.42	-65.46	1.15	2148397.15	161609.54	0.40	
1648.00	5.470	185.270	1644.83	-68.57	-68.60	0.86	2148396.86	161606.40	1.19	
1711.00	5.370	181.380	1707.55	-74.51	-74.54	0.52	2148396.52	161600.46	0.60	
1742.00	5.380	181.770	1738.42	-77.41	-77.44	0.44	2148396.44	161597.56	0.12	
1806.00	4.710	182.010	1802.17	-83.04	-83.07	0.25	2148396.25	161591.93	1.05	
1837.00	4.730	177.100	1833.06	-85.59	-85.61	0.27	2148396.27	161589.38	1.30	
1901.00	5.990	181.900	1896.78	-91.56	-91.59	0.29	2148396.29	161583.41	2.09	
1932.00	5.830	179.880	1927.62	-94.75	-94.78	0.24	2148396.24	161580.22	0.85	
1996.00	5.600	180.250	1991.30	-101.12	-101.15	0.24	2148396.24	161573.84	0.36	
2027.00	5.380	180.180	2022.16	-104.09	-104.12	0.23	2148396.23	161570.88	0.71	
2091.00	5.260	177.950	2085.88	-110.02	-110.05	0.32	2148396.32	161564.95	0.37	
2122.00	5.120	179.170	2116.75	-112.82	-112.85	0.39	2148396.39	161562.14	0.58	
2217.00	4.630	177.480	2211.41	-120.88	-120.92	0.62	2148396.62	161554.07	0.54	
2312.00	4.070	173.750	2306.14	-128.05	-128.10	1.16	2148397.16	161546.89	0.66	
2407.00	4.280	170.940	2400.88	-134.88	-134.96	2.08	2148398.08	161540.04	0.31	
2502.00	3.960	173.370	2495.64	-141.62	-141.72	3.02	2148399.02	161533.28	0.38	
2597.00	3.320	172.640	2590.45	-147.59	-147.70	3.75	2148399.75	161527.29	0.68	
2692.00	0.590	195.000	2685.38	-150.78	-150.90	3.98	2148399.98	161524.09	2.93	
2787.00	0.160	316.790	2780.38	-151.16	-151.28	3.76	2148399.76	161523.72	0.72	
2882.00	0.090	61.950	2875.38	-151.03	-151.15	3.73	2148399.73	161523.85	0.21	
2977.00	0.410	150.430	2970.38	-151.29	-151.41	3.97	2148399.97	161523.59	0.44	



Actual Wellpath Report
 Sandridge_Svy (10-3-2013).
 Page n of nn



REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Murray 3406 2-5H 200 FSL 2150 FEL
Area	Kansas	Well	Subject
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Murray 3406 2-5H 200 FSL 2150 FEL Actual
Facility	Murray 3406 2-5H Sec.5-34S-6W		

WELLPATH DATA (142 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
3072.00	0.400	146.200	3065.38	-151.85	-151.98	4.32	2148400.32	161523.02	0.03	
3167.00	0.250	148.210	3160.38	-152.30	-152.43	4.61	2148400.61	161522.56	0.16	
3262.00	0.540	105.940	3255.37	-152.58	-152.73	5.15	2148401.15	161522.27	0.41	
3357.00	0.460	118.350	3350.37	-152.87	-153.03	5.92	2148401.92	161521.96	0.14	
3452.00	0.500	120.220	3445.37	-153.25	-153.42	6.61	2148402.61	161521.57	0.05	
3547.00	0.250	205.410	3540.37	-153.64	-153.82	6.88	2148402.88	161521.18	0.57	
3642.00	0.490	271.300	3635.36	-153.82	-154.00	6.39	2148402.39	161521.00	0.47	
3737.00	0.280	258.160	3730.36	-153.88	-154.04	5.75	2148401.75	161520.96	0.24	
3800.00	1.100	345.220	3793.36	-153.33	-153.48	5.45	2148401.45	161521.51	1.78	
3832.00	3.350	356.450	3825.33	-152.10	-152.25	5.31	2148401.31	161522.74	7.13	
3864.00	5.570	358.920	3857.23	-149.62	-149.77	5.23	2148401.23	161525.23	6.96	
3895.00	6.800	8.990	3888.05	-146.30	-146.45	5.48	2148401.48	161528.55	5.28	
3927.00	8.860	10.920	3919.75	-141.99	-142.16	6.25	2148402.25	161532.84	6.49	
3959.00	11.780	9.460	3951.23	-136.33	-136.51	7.25	2148403.25	161538.48	9.16	
3990.00	14.520	8.740	3981.42	-129.34	-129.55	8.36	2148404.36	161545.44	8.85	
4022.00	17.340	8.650	4012.18	-120.63	-120.87	9.69	2148405.69	161554.13	8.81	
4054.00	20.130	8.890	4042.49	-110.44	-110.71	11.26	2148407.26	161564.28	8.72	
4085.00	22.740	9.390	4071.34	-99.22	-99.53	13.06	2148409.06	161575.47	8.44	
4117.00	25.560	9.810	4100.54	-86.27	-86.62	15.25	2148411.25	161588.37	8.83	
4149.00	28.480	9.120	4129.04	-71.89	-72.28	17.63	2148413.63	161602.71	9.18	
4180.00	30.990	8.910	4155.96	-56.65	-57.10	20.04	2148416.04	161617.90	8.10	
4212.00	33.010	7.360	4183.09	-39.82	-40.31	22.43	2148418.43	161634.68	6.81	
4244.00	35.190	7.340	4209.59	-21.98	-22.52	24.73	2148420.73	161652.48	6.81	
4276.00	37.660	8.380	4235.33	-3.11	-3.70	27.33	2148423.33	161671.30	7.96	
4307.00	40.610	8.980	4259.38	16.29	15.64	30.29	2148426.29	161690.64	9.59	
4339.00	42.970	8.890	4283.24	37.42	36.70	33.60	2148429.60	161711.70	7.38	
4371.00	44.790	8.130	4306.30	59.42	58.64	36.88	2148432.88	161733.64	5.92	
4402.00	46.600	6.950	4327.95	81.47	80.63	39.78	2148435.79	161755.63	6.44	
4434.00	48.120	6.140	4349.63	104.91	104.01	42.47	2148438.47	161779.02	5.10	
4466.00	49.520	6.430	4370.70	128.90	127.95	45.10	2148441.10	161802.96	4.43	
4497.00	51.180	6.860	4390.48	152.66	151.66	47.87	2148443.87	161826.67	5.46	
4529.00	53.830	7.720	4409.95	177.90	176.84	51.09	2148447.09	161851.85	8.55	
4561.00	56.980	8.890	4428.12	204.04	202.90	54.90	2148450.90	161877.91	10.29	
4593.00	59.460	9.190	4444.97	230.99	229.76	59.17	2148455.18	161904.77	7.79	
4624.00	61.540	9.830	4460.24	257.69	256.37	63.63	2148459.64	161931.38	6.95	
4656.00	63.800	9.430	4474.93	285.81	284.40	68.39	2148464.39	161959.41	7.15	
4688.00	66.670	9.520	4488.33	314.56	313.06	73.17	2148469.17	161988.07	8.97	
4719.00	68.600	9.390	4500.13	342.93	341.33	77.88	2148473.88	162016.34	6.24	
4751.00	71.130	8.560	4511.14	372.70	371.01	82.56	2148478.57	162046.02	8.27	
4783.00	73.620	8.520	4520.83	402.95	401.16	87.09	2148483.10	162076.18	7.78	
4814.00	75.870	9.730	4528.99	432.57	430.69	91.84	2148487.84	162105.70	8.18	
4846.00	78.410	9.400	4536.11	463.44	461.45	97.02	2148493.02	162136.47	8.00	
4878.00	79.570	8.410	4542.22	494.57	492.48	101.88	2148497.89	162167.50	4.73	
4907.00	80.570	8.200	4547.22	522.92	520.75	106.01	2148502.01	162195.77	3.52	
4941.00	82.110	9.010	4552.34	556.25	553.98	111.04	2148507.04	162229.00	5.11	



Actual Wellpath Report
 Sandridge_Svy (10-3-2013).
 Page n of nn



REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Murray 3406 2-5H 200 FSL 2150 FEL
Area	Kansas	Well	Subject
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Murray 3406 2-5H 200 FSL 2150 FEL Actual
Facility	Murray 3406 2-5H Sec.5-34S-6W		

WELLPATH DATA (142 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
5005.00	87.410	8.580	4558.18	619.41	616.94	120.78	2148516.78	162291.96	8.31	
5068.00	89.350	8.320	4559.96	681.88	679.23	130.03	2148526.04	162354.25	3.11	
5116.00	89.780	8.400	4560.33	729.51	726.72	137.01	2148533.01	162401.74	0.91	
5163.00	90.860	7.470	4560.06	776.18	773.27	143.50	2148539.50	162448.29	3.03	
5194.00	91.670	7.230	4559.38	807.00	804.00	147.46	2148543.47	162479.03	2.73	
5258.00	93.380	7.400	4556.56	870.58	867.42	155.60	2148551.61	162542.45	2.69	
5286.00	94.110	6.650	4554.73	898.37	895.15	159.02	2148555.03	162570.18	3.73	
5355.00	93.270	5.270	4550.29	966.99	963.63	166.17	2148562.17	162638.66	2.34	
5450.00	89.780	3.280	4547.76	1061.81	1058.32	173.25	2148569.25	162733.35	4.23	
5514.00	89.140	1.430	4548.37	1125.79	1122.26	175.88	2148571.88	162797.29	3.06	
5577.00	89.110	1.130	4549.33	1188.78	1185.23	177.28	2148573.29	162860.27	0.48	
5641.00	89.020	0.570	4550.37	1252.77	1249.22	178.23	2148574.24	162924.26	0.89	
5704.00	88.890	0.010	4551.52	1315.75	1312.20	178.55	2148574.56	162987.25	0.91	
5767.00	88.950	359.720	4552.71	1378.72	1375.19	178.40	2148574.41	163050.24	0.47	
5831.00	88.950	358.750	4553.88	1442.67	1439.18	177.55	2148573.55	163114.22	1.52	
5894.00	88.830	359.110	4555.10	1505.61	1502.15	176.37	2148572.38	163177.20	0.60	
5989.00	88.620	359.180	4557.22	1600.52	1597.12	174.95	2148570.96	163272.17	0.23	
6084.00	89.480	358.440	4558.79	1695.42	1692.08	172.98	2148568.99	163367.14	1.19	
6179.00	90.400	358.040	4558.89	1790.29	1787.04	170.06	2148566.07	163462.10	1.06	
6273.00	90.890	357.060	4557.83	1884.09	1880.94	166.05	2148562.05	163556.01	1.17	
6305.00	91.140	357.130	4557.27	1916.00	1912.90	164.42	2148560.43	163587.96	0.81	
6400.00	91.420	357.510	4555.14	2010.76	2007.77	159.98	2148555.99	163682.84	0.50	
6495.00	90.800	357.160	4553.30	2105.52	2102.65	155.57	2148551.57	163777.72	0.75	
6589.00	91.080	356.480	4551.76	2199.22	2196.49	150.35	2148546.36	163871.56	0.78	
6684.00	91.720	356.980	4549.44	2293.90	2291.31	144.94	2148540.94	163966.38	0.85	
6779.00	91.020	356.070	4547.17	2388.55	2386.10	139.18	2148535.18	164061.18	1.21	
6874.00	89.880	357.580	4546.42	2483.26	2480.95	133.92	2148529.92	164156.03	1.99	
6969.00	89.660	357.230	4546.80	2578.05	2575.85	129.62	2148525.62	164250.94	0.44	
7063.00	89.570	357.400	4547.44	2671.83	2669.75	125.21	2148521.22	164344.83	0.20	
7158.00	89.910	356.060	4547.87	2766.53	2764.59	119.80	2148515.80	164439.68	1.46	
7253.00	89.320	355.990	4548.51	2861.14	2859.36	113.21	2148509.21	164534.45	0.63	
7316.00	90.980	355.670	4548.34	2923.85	2922.19	108.63	2148504.63	164597.28	2.68	
7348.00	91.510	355.710	4547.65	2955.70	2954.09	106.22	2148502.23	164629.19	1.66	
7443.00	91.380	355.800	4545.25	3050.23	3048.80	99.20	2148495.20	164723.90	0.17	
7538.00	91.440	356.160	4542.91	3144.80	3143.54	92.54	2148488.54	164818.64	0.38	
7632.00	91.510	357.190	4540.49	3238.47	3237.35	87.09	2148483.09	164912.45	1.10	
7727.00	91.020	359.210	4538.39	3333.31	3332.27	84.10	2148480.11	165007.38	2.19	
7821.00	90.620	359.530	4537.05	3427.25	3426.26	83.07	2148479.07	165101.37	0.54	
7916.00	91.700	359.960	4535.13	3522.20	3521.23	82.65	2148478.65	165196.35	1.22	
8010.00	92.030	359.420	4532.07	3616.11	3615.18	82.14	2148478.14	165290.30	0.67	
8105.00	89.720	359.680	4530.62	3711.05	3710.16	81.39	2148477.40	165385.28	2.45	
8199.00	89.940	359.980	4530.90	3805.03	3804.16	81.11	2148477.12	165479.28	0.40	
8294.00	89.780	359.670	4531.13	3900.00	3899.16	80.82	2148476.83	165574.29	0.37	
8389.00	89.540	359.620	4531.69	3994.96	3994.16	80.24	2148476.24	165669.29	0.26	
8484.00	89.230	0.250	4532.71	4089.93	4089.15	80.13	2148476.13	165764.28	0.74	



Actual Wellpath Report

Sandridge_Svy (10-3-2013).

Page n of nn



REFERENCE WELLPATH IDENTIFICATION			
Operator	Sandridge Energy	Slot	Murray 3406 2-5H 200 FSL 2150 FEL
Area	Kansas	Well	Subject
Field	Harper County, Kansas (Sandridge Energy) NAD27 / Grid	Wellbore	Murray 3406 2-5H 200 FSL 2150 FEL Actual
Facility	Murray 3406 2-5H Sec.5-34S-6W		

WELLPATH DATA (142 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	DLS [°/100ft]	Comments
8579.00	90.060	0.590	4533.30	4184.91	4184.15	80.82	2148476.83	165859.28	0.94	
8674.00	89.260	1.540	4533.86	4279.91	4279.13	82.59	2148478.59	165954.26	1.31	
8769.00	89.110	0.870	4535.21	4374.90	4374.09	84.59	2148480.59	166049.24	0.72	
8864.00	89.810	0.170	4536.11	4469.89	4469.08	85.45	2148481.45	166144.23	1.04	
8959.00	89.170	0.290	4536.96	4564.87	4564.08	85.83	2148481.83	166239.23	0.69	
9067.00	88.950	0.460	4538.73	4672.84	4672.06	86.54	2148482.54	166347.21	0.26	
9119.00	88.950	0.460	4539.68	4724.83	4724.05	86.96	2148482.96	166399.21	0.00	Actual BHL 9119' MD (4540' TVD) X:2148483 Y:166399 VS:4725' 331' FNL 1995' FEL

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Murray 3406 2-5H PBHL 330 FNL 1980 FEL		4535.37	4737.85	102.00	2148498.00	166413.00	37°07'21.294"N	97°59'26.552"W	point

WELLPATH COMPOSITION - Ref Wellbore: Murray 3406 2-5H 200 FSL 2150 FEL Actual Ref Wellpath: AWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	610.00	EMS (Standard)	Rig Surveys	Murray 3406 2-5H 200 FSL 2150 FEL Actual
610.00	9067.00	NaviTrak (Standard)	INTEQ MWD	Murray 3406 2-5H 200 FSL 2150 FEL Actual
9067.00	9119.00	Blind Drilling (std)	Projection to bit	Murray 3406 2-5H 200 FSL 2150 FEL Actual

Section 32
33S 6W

* VALERIE 1-32

Section 33
33S 6W

384' FNL

BHL: 9119'

-97.991525 37.122446

Bottom Perf: 8748'
-97.991508 37.121494

2119' FEL

Section 5
34S 6W

Harper County

Section 4
34S 6W

Top Perf: 5004'
-97.99111 37.111278

BOLLMAN 3-4

Miss Entry: 4788'
-97.991211 37.11069

MURRAY 3406 2-5H

MURRAY 3406 1-5H

Section 8
34S 6W

Section 9
34S 6W



Actual Bottom-Hole Location of Murray 3406 2-5H

Harper County, Kansas

T&R: 34S 6W

Section: 5, 2119' FEL & 384' FNL

-97.991525 37.122446

1 in = 667 ft

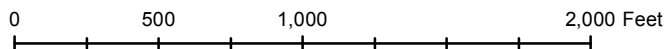


● Actual BH Location

* SandRidge Wells

--- Perf

□ Sections



Draftsman:

Aaron Birk

Draft Date: 12/27/2013

Drawing Name/Number:

Addendum_Murray 3406 2-5H.mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502