Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1220998

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 # 34192
Name: SandRidge Exploration and Production LLC
Address 1: 123 ROBERT S. KERR AVE
Address 2:
City: OKLAHOMA CITY State: OK Zip: 73102 + 6406
Contact Person: Wanda Ledbetter
Phone: (405) 429-5500
CONTRACTOR: License # 34500
Name: Nomac Drilling, LLC
Wellsite Geologist: Trey Boardman
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 #:

5/1/2014	6/16/2014	8/15/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-191-22740-01-00
Spot Description:
SE - SE - SW - NW Sec. 7 Twp. 34 S. R. 4 ☐ East ☑ West
2440 Feet from ☑ North / ☐ South Line of Section
1100 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)*, Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Sumner
Lease Name: Jenny 3404 Well #: 2-18H
Field Name:
Producing Formation: Mississippi
Elevation: Ground: 1249 Kelly Bushing: 1268
Total Vertical Depth: 9352 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 567 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: 4333 ppm Fluid volume: 1460 bbls
Dewatering method used: Evaporated
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: 08/29/2014
☑ **Confidential Release Date:** 08/28/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 09/03/2014

[redacted]

1220998

Operator Name: SandRidge Exploration and Production LLC Lease Name: Jenny 3404 Well #: 2-18H

Sec. 7 Twp. 34 S. R. 4 ☐ East ☑ West County: Sumner

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 ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Array Induction
Porosity

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Base Heebner	3016	-1749
Lansing	3325	-2058
Cottage Grove	3664	-2397
Oswego	4040	-2765
Cherokee	4183	-2891
Miss Unconformity	4484	-3099

CASING RECORD ☑ New ☐ 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
Conductor	30	20	75	110	grout	10	see report
Surface	12.25	9.625	36	567	Class A	320	see report
Intermediate	8.75	7	26	5121	Class A	340	see report

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	-			
	-			

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 *(Amount and Kind of Material Used)*	Depth
	see attachment	Kiel Slickwater Frac - see report	4510-9234

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:
	4.5	9352		☐ 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:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)* _____

PRODUCTION INTERVAL:
4510-9234

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Jenny 3404 2-18H
Doc ID	1220998

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	30	20	75	110	grout	10	see report
Surface	12.25	9.625	36	567	Class A	320	see report
Intermediate	8.75	7	26	5121	Class A	340	see report

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/2/2014
Job End Date:	8/4/2014
State:	Kansas
County:	Sumner
API Number:	15-191-22740-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Jenny 3404 #2-18H
Longitude:	-97.79792300
Latitude:	37.10382800
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	4,450
Total Base Water Volume (gal):	2,934,918
Total Base Non Water Volume:	0

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Well Operator	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	95.36488	None
40/70 Premium Preferred Sand	Cimarron Acid	Proppant, Scouring, Fill					
			Crystalline Silica (quartz)	14808-60-7	100.00000	2.64462	None
15% Unihibited HCl Acid	Cimarron Acid	Etching, Dissolving, Cleaning					
			Water	7732-18-5	85.00000	0.56412	None
			Hydrochloric Acid	7647-01-0	15.00000	0.09955	None
			Water	7732-18-5	24.00000	0.00013	None
			Methanol	67-56-1	9.00000	0.00005	None
			Ethoxylated Nonylphenol	68412-54-4	8.40000	0.00005	None
			Isopropyl Alchohol	67-63-0	8.40000	0.00005	None
			2-Butoxyethanol	111-76-2	8.40000	0.00005	None
			Cinnamaldehyde	104-55-2	8.40000	0.00005	None
			Tar Bases-quinoline derivs-benzyl chloride/quaternized	72480-70-7	8.40000	0.00005	None
			N-Dimethyformamide	68-12-2	8.40000	0.00005	None
			Ethylene Glycol	107-21-1	8.40000	0.00005	None
			Triethyl Phosphate	78-40-0	8.40000	0.00005	None

40/70 Resin Coated Sand	Cimarron Acid	Proppant, Scouring, Fill					
			Crystalline Silica (quartz)	14808-60-7	97.00000	0.64132	None
Coarse Rock salt	Cimarron Acid	Perf and Zone Diverting Agent					
			Sodium Chloride	7647-14-5	100.00000	0.53383	None
Iron Control, Sodium Erythorbate	Cimarron Acid	Iron Control					
			Water	7732-18-5	55.50000	0.02296	None
			Methanol	67-56-1	12.70000	0.00527	None
			Dinanylphenyl Polyoxyethylene	201602-88-2	9.10000	0.00376	None
			Poly(ethlene Oxide)	25322-68-3	9.10000	0.00376	None
			Nonylphenal Polyethylene Glycol Ether	127087-87-0	9.10000	0.00376	None
			Isopropanol	67-63-0	4.60000	0.00188	None
			Sodium Erythorbate	6381-77-7	100.00000	0.00022	None
			Water	7732-18-5	54.50000	0.00017	None
			Polyglycol Ethers	52624-57-4	13.60000	0.00004	None
			Isopropanol	67-63-0	13.60000	0.00004	None
			Glycol Ether EB	111-76-2	9.00000	0.00003	None
			Methanol	67-56-1	9.00000	0.00003	None
FR-986, Cationic Friction Reducer	Cimarron Acid	Friction Reducer					
			Water	7732-18-5	50.00000	0.00415	None
			Petroleum Hydrotreated Light Distillate	64742-47-8	2.50000	0.00180	None
			Hydrochloric Acid	7647-01-0	16.80000	0.00140	None
			Phosphoric Acid	7664-38-2	16.80000	0.00140	None
			Ethylene Glycol	107-21-1	12.70000	0.00106	None
			Methanol	67-56-1	3.60000	0.00030	None
Slurried Gel, 4 PPG Slurry, Guar	Cimarron Acid	Gelling Agent					
			Mineral Oil	8012-95-1	64.00000	0.00570	None
			Guar Gum	9000-30-0	36.00000	0.00321	None
Breaker, Sodium Persulfate	Cimarron Acid	Breaker					
			Sodium Persulfate	7775-27-1	100.00000	0.00014	None

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

* Total Water Volume sources may include fresh water, produced water, and/or recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

Jenny 3404 2-18H Perforations

(5 Shots per foot)

Perforations			
Date	Top (ftKB)	Btm (ftKB)	Zone
7/22/2014	4,510.0	4,512.0	Miss Lime, Original Hole
7/22/2014	4,591.0	4,593.0	Miss Lime, Original Hole
7/22/2014	4,678.0	4,680.0	Miss Lime, Original Hole
8/10/2014	5,156.0	5,158.0	Miss Lime, Original Hole
8/10/2014	5,221.0	5,223.0	Miss Lime, Original Hole
8/10/2014	5,294.0	5,296.0	Miss Lime, Original Hole
8/10/2014	5,354.0	5,356.0	Miss Lime, Original Hole
8/10/2014	5,412.0	5,414.0	Miss Lime, Original Hole
8/10/2014	5,486.0	5,488.0	Miss Lime, Original Hole
8/10/2014	5,579.0	5,581.0	Miss Lime, Original Hole
8/10/2014	5,680.0	5,682.0	Miss Lime, Original Hole
8/10/2014	5,752.0	5,754.0	Miss Lime, Original Hole
8/10/2014	5,829.0	5,831.0	Miss Lime, Original Hole
8/10/2014	5,896.0	5,898.0	Miss Lime, Original Hole
8/10/2014	5,964.0	5,966.0	Miss Lime, Original Hole
8/10/2014	6,038.0	6,040.0	Miss Lime, Original Hole
8/10/2014	6,113.0	6,115.0	Miss Lime, Original Hole
8/10/2014	6,180.0	6,182.0	Miss Lime, Original Hole
8/10/2014	6,250.0	6,252.0	Miss Lime, Original Hole
8/10/2014	6,351.0	6,353.0	Miss Lime, Original Hole
8/10/2014	6,438.0	6,440.0	Miss Lime, Original Hole
8/10/2014	6,526.0	6,528.0	Miss Lime, Original Hole
8/10/2014	6,624.0	6,626.0	Miss Lime, Original Hole
8/10/2014	6,689.0	6,691.0	Miss Lime, Original Hole
8/10/2014	6,762.0	6,764.0	Miss Lime, Original Hole
8/10/2014	6,837.0	6,839.0	Miss Lime, Original Hole
8/10/2014	6,892.0	6,894.0	Miss Lime, Original Hole
8/10/2014	6,940.0	6,942.0	Miss Lime, Original Hole
8/9/2014	7,010.0	7,012.0	Miss Lime, Original Hole
8/9/2014	7,088.0	7,090.0	Miss Lime, Original Hole
8/9/2014	7,162.0	7,164.0	Miss Lime, Original Hole
8/9/2014	7,244.0	7,246.0	Miss Lime, Original Hole
8/9/2014	7,314.0	7,316.0	Miss Lime, Original Hole
8/9/2014	7,386.0	7,388.0	Miss Lime, Original Hole
8/9/2014	7,457.0	7,459.0	Miss Lime, Original Hole
8/9/2014	7,530.0	7,532.0	Miss Lime, Original Hole
8/9/2014	7,605.0	7,609.0	Miss Lime, Original Hole
8/9/2014	7,700.0	7,702.0	Miss Lime, Original Hole
8/9/2014	7,833.0	7,835.0	Miss Lime, Original Hole
8/9/2014	7,915.0	7,917.0	Miss Lime, Original Hole
8/9/2014	7,984.0	7,986.0	Miss Lime, Original Hole
8/9/2014	8,058.0	8,060.0	Miss Lime, Original Hole
8/9/2014	8,140.0	8,142.0	Miss Lime, Original Hole
8/9/2014	8,212.0	8,214.0	Miss Lime, Original Hole
8/9/2014	8,264.0	8,266.0	Miss Lime, Original Hole
8/9/2014	8,320.0	8,322.0	Miss Lime, Original Hole
8/9/2014	8,389.0	8,391.0	Miss Lime, Original Hole
8/9/2014	8,464.0	8,466.0	Miss Lime, Original Hole
8/9/2014	8,538.0	8,540.0	Miss Lime, Original Hole
8/9/2014	8,620.0	8,622.0	Miss Lime, Original Hole
8/9/2014	8,696.0	8,698.0	Miss Lime, Original Hole
8/9/2014	8,798.0	8,800.0	Miss Lime, Original Hole
8/9/2014	8,886.0	8,888.0	Miss Lime, Original Hole
8/8/2014	8,962.0	8,964.0	Miss Lime, Original Hole
8/8/2014	9,048.0	9,050.0	Miss Lime, Original Hole
8/8/2014	9,109.0	9,111.0	Miss Lime, Original Hole
8/8/2014	9,169.0	9,171.0	Miss Lime, Original Hole
8/8/2014	9,232.0	9,234.0	Miss Lime, Original Hole

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 5-28-14 District Medicine Lodge Ticket No. 063002
Company Sandridge Rig Namac 52
Lease Jenny 3404 Well No. 2-18H
County Sumner State KS
Location _____ Field _____

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☒ Intermediate ☐ Production ☐ Liner ☐
Size 9 5/8 Type J55 Weight 36 lb Collar 8rd

Casing Depths: Top 0 Bottom 572

Drill Pipe: Size _____ Weight _____ Collars _____
Open Hole: Size 12 1/4 T.D. 567 ft. P.B. to _____ ft.

CAPACITY FACTORS:

Casing:	Bbls/Lin. ft.	.0773	Lin. ft./Bbl.	12.93
Open Holes:	Bbls/Lin. ft.		Lin. ft./Bbl.	
Drill Pipe:	Bbls/Lin. ft.		Lin. ft./Bbl.	
Annulus:	Bbls/Lin. ft.	.0558	Lin. ft./Bbl.	17.9272
	Bbls/Lin. ft.		Lin. ft./Bbl.	

Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:
Spacer Type: water
Amt. 10 bbls Sks Yield _____ ft³/sk Density 8.33 PPG

LEAD: Pump Time _____ hrs. Type Class A
Excess _____
Amt. 170 Sks Yield 1.87 ft³/sk Density 12.7 PPG
TAIL: Pump Time _____ hrs. Type Class A
Excess _____
Amt. 150 Sks Yield 1.2 ft³/sk Density 15.6 PPG
WATER: Lead 10.05 gals/sk Tail 5.22 gals/sk Total _____ Bbls.

Pump Trucks Used _____
Bulk Equip. _____

Float Equip: Manufacturer Provided by Weather Ford
Shoe: Type Float Shoe Depth _____
Float: Type Float Collar Depth 526
Centralizers: Quantity _____ Plugs Top 1 Btm. —
Stage Collars _____
Special Equip. _____
Disp. Fluid Type water Amt. 41 Bbls. Weight 8.33 PPG
Mud Type water base Weight 9.2 PPG

COMPANY REPRESENTATIVE _____ CEMENTER Dustin Smith

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	ANNULUS	FLUID PUMPED DATA TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	REMARKS
0030						Pretrip & Journey
0050						Left yard conoy
0150						Arrived on location (Rig pulling DP)
0330						~~Rig~~ Casing Crew Rigging Up
0600						Casing Rigging Down
0620						Spot and rig up
0700						Safety meeting
0720			10 bbls			Water spacer
0725	210		56 bbl		5	Pump Cement 170 sks 65/35 Class A 6% gel 2% CC
0745	210		32 bbls		5	Pump Cement Class 2% CC, 1/4 lb Floseal
0800						Drop Plug
0800	290				4.6	Displace
0810	390				3.0	Slowed Rate
0820	410		41		3.0	Bump Plug
0825						Check Floats
0900						Rig Down

FINAL DISP. PRESS: 450 PSI BUMP PLUG TO 1350 PSI BLEEDBACK 1 BBLS. THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 6-5-14 District MEDICINE LODGE Ticket No. 62273
Company SANDRIDGE ENERGY Rig NOMAC 52
Lease JENNY 3404 Well No. 2-18
County SUMNER State KS
Location ANTHONY KS 13 E 33 S Field
B ENTO

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☐ Intermediate ☑ Production ☐ Liner ☐
Size 7" Type Weight 26 # Collar

Casing Depths: Top Bottom 5126.77

Drill Pipe: Size Weight Collars
Open Hole: Size 8 3/4 T.D. 5146 ft. P.B. to ft.

CAPACITY FACTORS:

Casing:	Bbls/Lin. ft. .0383	Lin. ft./Bbl. 26.14	
Open Holes:	Bbls/Lin. ft.	Lin. ft./Bbl.	
Drill Pipe:	Bbls/Lin. ft.	Lin. ft./Bbl.	
Annulus:	Bbls/Lin. ft. .0268	Lin. ft./Bbl. 37.3484	
	Bbls/Lin. ft.	Lin. ft./Bbl.	

Perforations: From ft. to ft. Amt.

CEMENT DATA:
Spacer Type: SUPER FLUSH
Amt. 30 BBLS Sks Yield ft³/sk Density PPG

LEAD: Pump Time hrs. Type 50:50 CLASS A + 2% GEL + .4% FL-160 + .1% C.S.7 Excess
Amt. 240 Sks Yield 1.40 ft³/sk Density 13.6 PPG
TAIL: Pump Time hrs. Type CLASS A + .8% FL160 + .2% CD-31 Excess
Amt. 100 Sks Yield 1.18 ft³/sk Density 15.6 PPG
WATER: Lead gals/sk Tail gals/sk Total Bbls.

Pump Trucks Used 892-555
Bulk Equip. 819-823

Float Equip: Manufacturer
Shoe: Type Depth
Float: Type Depth
Centralizers: Quantity Plugs Top RUBBER Btm.
Stage Collars
Special Equip.
Disp. Fluid Type FRESH H2O Amt. 200 1/2 Bbls. Weight 8.34 PPG
Mud Type Weight PPG

COMPANY REPRESENTATIVE CEMENTER SCOTT PRIDDY

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	ANNULUS	FLUID PUMPED DATA TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	REMARKS
300 AM						ON LOCATION - RUN CASING
800 AM						SAFETY MEETING - RIG UP
830 AM						SAFETY MEETING
845 AM	3000#					PRESSURE TEST
850 AM			30 BBL			PUMP SUPER FLUSH
905 AM	200		59 3/4		5	PUMP LEAD CEMENT
920 AM	200		21 BBL		5	PUMP TAIL CEMENT
925 AM						SHUT DOWN - RELEASE PLUG
925 AM			10		4	START DISPLACEMENT
					5	WASH UP ON TOP OF PLUG
950 AM	600		150 BBL		4	SLOW RATE @ LIFT
	600		184 BBL		3	SLOW RATE
			198 BBL			BUMP PLUG / DID NOT BUMP PLUG
1020 AM	600					SHUT IN WELL
						RELIEVE PRESSURE
						FLOAT DID HOLD
						DID NOT CIRCULATE CEMENT

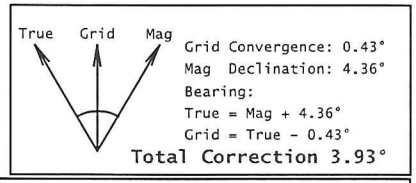
FINAL DISP. PRESS: 400 PSI BUMP PLUG TO — PSI BLEEDBACK — BBLS. THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS

SANDRIDGE
THE POWER OF US™

Weatherford

Jenny 3404 2-18H
Nomac 52
Sumner County, KS
X=2204760.50'
Y=159949.8'
Plan 3 vs Actual



Plan Data for Jenny 3404 2-18H

Plan Point Information:
DogLeg Severity Unit: °/100.00ft Position offsets from Site centre

MD (USft)	Inc (°)	Az (°)	TVD (USft)	+N/-S (USft)	+E/-W (USft)	VSec (USft)	DLS (DLSU)	Toolface (°)
7981.00	93.85	178.69	4455.24	-3783.50	-407.28	3804.06	2.56	182.8
8041.00	91.25	179.90	4452.57	-3843.43	-406.55	3863.74	4.78	155.0
8124.05	88.00	180.59	4453.11	-3926.47	-406.90	3946.53	4.00	168.0
8448.80	88.00	180.59	4464.44	-4251.00	-410.23	4270.27	0.00	0.0
8516.30	90.70	180.59	4465.21	-4318.49	-410.92	4337.59	4.00	0.0
9352.02	90.70	180.59	4455.00	-5154.10	-419.50	5171.14	0.00	0.0

Target Set Information:
Name: Jenny 3404 2-18H T3

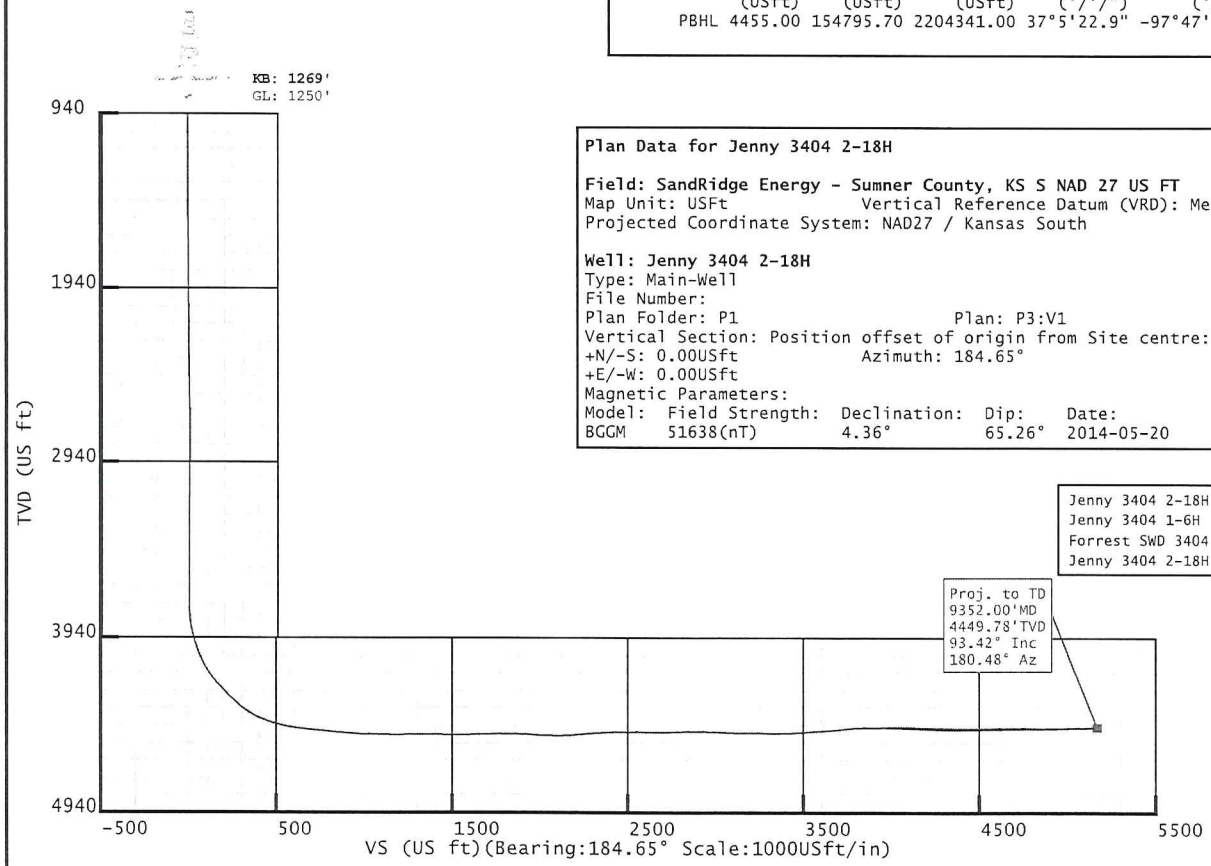
Name	TVD (USft)	Northing (USft)	Easting (USft)	Lat (°/'/")	Long (°/'/")
PBHL	4455.00	154795.70	2204341.00	37°5'22.9"	-97°47'58.2"

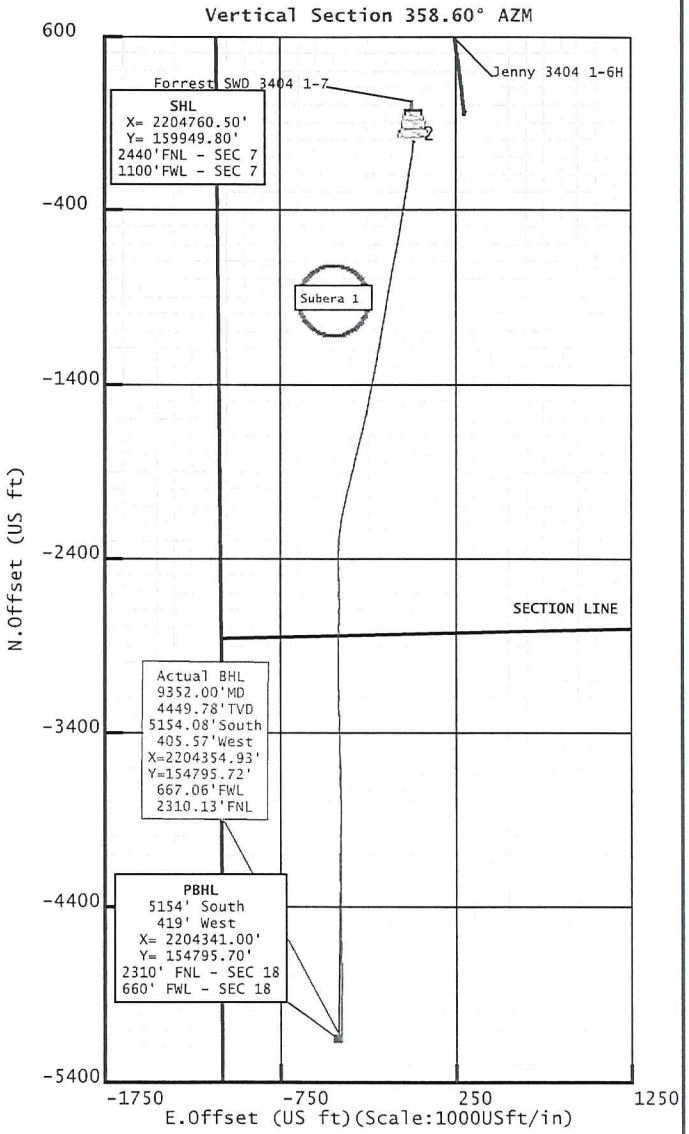
Plan Data for Jenny 3404 2-18H

Field: SandRidge Energy - Sumner County, KS S NAD 27 US FT
Map Unit: USFt Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD27 / Kansas South

Well: Jenny 3404 2-18H
Type: Main-Well
File Number:
Plan Folder: P1 Plan: P3:V1
Vertical Section: Position offset of origin from Site centre:
+N/-S: 0.00USft Azimuth: 184.65°
+E/-W: 0.00USft
Magnetic Parameters:

Model:	Field Strength:	Declination:	Dip:	Date:
BGGM	51638(nT)	4.36°	65.26°	2014-05-20





Planned By: Lando Hiler Date: 06/13/2014

Weatherford Drilling Services
6525 N. Meridian Ste. #201
Oklahoma City, OK 73116
+1.405.773.1100 Main
+1.405.773.1887 Fax

Target Set

Name : Jenny 3404 2-18H T3 **Number of Targets :** 1

Comment :

TargetName:	Position (Relative to Site centre)		
PBHL	**+N / -S :** -5154.10US ft	**Northing :** 154795.70 US ft	**Latitude :** 37°5'22.85"
	+E / -W : -419.50 US ft	**Easting :** 2204341.00US ft	**Longitude :** -97°47'58.18"
Shape:	**TVD (Drill Floor) :** 4455.00 US ft		
Cuboid	**SS :** -3187.00 US ft		
	Orientation	**Azimuth :** 0.00°	**Inclination :** 0.00°
	Dimensions	**Length :** 20.00 US ft	**Breadth :** 20.00 US ft **Height :** 20.00 US ft

Survey Name :Definitive Survey

Date : 20/May/2014 **Survey Tool :** **Comment :** **Company :**

Magnetic Model

Model Name: BGGM **Date:** 20/May/2014 **Field Strength:** 51638.2 nT **Declination:** 4.36° **Dip:** 65.26°

Survey Tool Ranges

Name	Start MD (US ft)	End MD (US ft)	Source Survey
Inc Only 3deg_WFTR	0.00	500.00	Rig Svys
MWD	500.00	9352.00	WFT Svys

Well path created using minimum curvature

Survey Points (Relative to Site centre, TVD relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	2
250.00	0.30	10.28	250.00	0.64	0.12	-0.65	0.12	First Rig Svy
500.00	0.20	10.28	500.00	1.72	0.31	-1.74	0.04	Last Rig Svy
661.00	0.21	10.28	661.00	2.28	0.41	-2.31	0.01	First WFT/MWD Svy
1165.00	0.29	153.40	1164.99	2.05	1.15	-2.14	0.09	
1661.00	0.84	128.38	1660.97	-1.33	4.56	0.95	0.12	
2149.00	0.94	136.35	2148.91	-6.44	10.13	5.60	0.03	
2634.00	0.71	121.92	2633.86	-10.91	15.43	9.63	0.06	
3135.00	0.93	301.07	3134.84	-10.45	14.58	9.24	0.33	
3640.00	0.41	308.12	3639.80	-7.22	9.65	6.42	0.10	
3671.00	0.40	279.20	3670.80	-7.14	9.45	6.35	0.65	
3703.00	0.35	261.04	3702.80	-7.14	9.25	6.36	0.40	

Survey Points (Relative to Site centre, TVD relative to Drill Floor)								
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Comment
3734.00	1.24	200.78	3733.80	-7.46	9.03	6.71	3.58	
3766.00	2.17	200.98	3765.79	-8.35	8.69	7.62	2.91	
3797.00	3.61	198.17	3796.75	-9.83	8.18	9.13	4.67	
3828.00	6.27	193.15	3827.63	-12.41	7.49	11.76	8.69	
3860.00	8.80	186.03	3859.35	-16.54	6.83	15.93	8.41	
3892.00	11.72	183.62	3890.83	-22.22	6.37	21.63	9.22	
3924.00	14.24	183.24	3922.01	-29.40	5.94	28.82	7.88	
3955.00	16.01	183.14	3951.94	-37.47	5.49	36.90	5.71	
3987.00	17.96	184.03	3982.54	-46.80	4.91	46.25	6.15	
4018.00	19.98	183.89	4011.86	-56.85	4.21	56.32	6.52	
4050.00	23.22	183.72	4041.61	-68.60	3.43	68.10	10.13	
4081.00	25.91	185.63	4069.80	-81.45	2.37	80.99	9.05	
4112.00	28.77	187.38	4097.33	-95.59	0.75	95.21	9.58	
4144.00	31.78	189.39	4124.97	-111.54	-1.62	111.31	9.92	
4176.00	34.76	191.16	4151.72	-128.81	-4.76	128.77	9.79	
4207.00	37.53	189.84	4176.75	-146.79	-8.08	146.96	9.28	
4239.00	40.41	187.94	4201.63	-166.67	-11.18	167.03	9.74	
4270.00	41.99	186.96	4224.95	-186.91	-13.83	187.42	5.51	
4301.00	43.49	187.25	4247.72	-207.79	-16.43	208.44	4.88	
4332.00	45.13	188.46	4269.90	-229.24	-19.39	230.06	5.95	
4364.00	46.52	189.56	4292.20	-251.91	-22.99	252.94	4.99	
4395.00	48.96	189.96	4313.05	-274.52	-26.88	275.79	7.93	
4427.00	52.14	189.74	4333.38	-298.86	-31.11	300.40	9.95	
4458.00	55.18	188.93	4351.74	-323.50	-35.15	325.28	10.03	
4489.00	59.17	188.85	4368.55	-349.23	-39.18	351.25	12.87	
4522.00	63.05	189.17	4384.49	-377.76	-43.70	380.06	11.79	
4553.00	66.57	189.32	4397.68	-405.44	-48.21	408.02	11.36	
4585.00	69.19	188.91	4409.73	-434.71	-52.90	437.57	8.27	
4617.00	71.85	188.62	4420.40	-464.52	-57.50	467.66	8.36	
4648.00	73.90	188.78	4429.52	-493.81	-61.98	497.21	6.63	
4680.00	75.46	189.51	4437.98	-524.28	-66.89	527.97	5.35	
4712.00	77.60	190.23	4445.43	-554.93	-72.22	558.96	7.04	
4743.00	80.18	190.68	4451.41	-584.84	-77.74	589.22	8.44	
4775.00	82.57	190.93	4456.20	-615.92	-83.67	620.67	7.51	
4806.00	83.42	190.85	4459.98	-646.13	-89.49	651.26	2.75	
4837.00	83.55	190.90	4463.50	-676.38	-95.30	681.88	0.45	
4869.00	84.26	190.61	4466.90	-707.64	-101.23	713.52	2.39	
4900.00	84.26	190.31	4470.00	-737.97	-106.83	744.20	0.96	
4932.00	84.19	190.06	4473.22	-769.31	-112.46	775.89	0.81	
4964.00	83.92	189.74	4476.53	-800.66	-117.94	807.59	1.30	
4995.00	84.68	189.86	4479.61	-831.06	-123.19	838.31	2.48	

Survey Points (Relative to Site centre, TVD relative to Drill Floor)								
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Comment
5027.00	84.96	189.78	4482.50	-862.46	-128.62	870.05	0.91	
5059.00	84.75	189.45	4485.37	-893.88	-133.95	901.80	1.22	
5086.00	85.94	189.70	4487.56	-920.42	-138.42	928.61	4.50	
5184.00	89.37	190.32	4491.57	-1016.83	-155.44	1026.09	3.56	
5246.00	89.51	189.79	4492.18	-1077.88	-166.26	1087.81	0.88	
5306.00	87.48	189.66	4493.75	-1136.99	-176.40	1147.55	3.39	
5369.00	91.33	189.73	4494.41	-1199.07	-187.00	1210.29	6.11	
5432.00	91.82	190.77	4492.68	-1261.05	-198.21	1272.96	1.82	
5495.00	89.23	191.19	4492.10	-1322.88	-210.21	1335.57	4.16	
5558.00	88.81	191.06	4493.18	-1384.69	-222.36	1398.16	0.70	
5622.00	89.23	191.05	4494.27	-1447.49	-234.63	1461.75	0.66	
5685.00	89.65	191.31	4494.89	-1509.30	-246.84	1524.34	0.78	
5748.00	91.68	192.27	4494.16	-1570.96	-259.72	1586.84	3.56	
5811.00	92.03	192.56	4492.12	-1632.45	-273.25	1649.23	0.72	
5874.00	91.05	194.67	4490.42	-1693.66	-288.08	1711.43	3.69	
5937.00	90.63	194.23	4489.50	-1754.66	-303.80	1773.51	0.97	
6026.00	89.09	192.26	4489.72	-1841.28	-324.19	1861.50	2.81	
6089.00	86.43	194.27	4492.18	-1902.54	-338.63	1923.73	5.29	
6152.00	86.15	194.84	4496.26	-1963.39	-354.43	1985.67	1.01	
6215.00	88.46	193.05	4499.22	-2024.46	-369.59	2047.76	4.64	
6278.00	90.49	192.14	4499.80	-2085.94	-383.33	2110.15	3.53	
6341.00	93.64	190.23	4497.53	-2147.69	-395.54	2172.69	5.85	
6404.00	94.90	188.62	4492.84	-2209.67	-405.82	2235.29	3.24	
6467.00	95.32	186.78	4487.22	-2271.85	-414.23	2297.95	2.98	
6530.00	93.92	182.95	4482.15	-2334.40	-419.55	2360.73	6.45	
6593.00	91.89	179.83	4478.95	-2397.29	-421.08	2423.54	5.90	
6656.00	89.93	178.28	4477.95	-2460.27	-420.04	2486.23	3.97	
6719.00	89.02	178.58	4478.53	-2523.25	-418.31	2548.85	1.52	
6782.00	88.95	179.03	4479.65	-2586.22	-417.00	2611.51	0.72	
6846.00	90.00	179.80	4480.23	-2650.21	-416.35	2675.24	2.03	
6909.00	91.19	181.09	4479.58	-2713.21	-416.84	2738.07	2.79	
6972.00	92.37	181.87	4477.62	-2776.15	-418.46	2800.94	2.24	
7035.00	90.91	181.29	4475.82	-2839.10	-420.20	2863.82	2.49	
7097.00	88.46	180.59	4476.16	-2901.09	-421.22	2925.69	4.11	
7161.00	86.92	179.68	4478.74	-2965.03	-421.37	2989.43	2.79	
7224.00	88.67	179.80	4481.16	-3027.98	-421.08	3052.15	2.78	
7287.00	87.83	179.87	4483.09	-3090.95	-420.90	3114.90	1.34	
7351.00	90.84	179.14	4483.83	-3154.94	-420.35	3178.63	4.84	
7413.00	88.11	178.05	4484.40	-3216.91	-418.83	3240.28	4.74	
7476.00	88.11	178.42	4486.48	-3279.85	-416.89	3302.85	0.59	
7539.00	90.91	179.13	4487.01	-3342.82	-415.54	3365.51	4.59	

Survey Points (Relative to Site centre, TVD relative to Drill Floor)								
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Comment
7601.00	93.22	179.30	4484.78	-3404.77	-414.69	3427.18	3.74	
7664.00	93.36	178.89	4481.16	-3467.66	-413.70	3489.78	0.69	
7728.00	93.71	178.99	4477.22	-3531.53	-412.52	3553.35	0.57	
7792.00	94.83	178.71	4472.45	-3595.34	-411.24	3616.84	1.80	
7855.00	95.88	178.92	4466.57	-3658.05	-409.94	3679.24	1.70	
7918.00	95.46	178.77	4460.35	-3720.73	-408.68	3741.61	0.71	
7981.00	93.85	178.69	4455.24	-3783.50	-407.28	3804.06	2.56	
8044.00	90.84	179.91	4452.66	-3846.43	-406.52	3866.73	5.15	
8106.00	90.77	180.34	4451.79	-3908.43	-406.65	3928.53	0.70	
8169.00	91.47	180.72	4450.56	-3971.41	-407.23	3991.35	1.26	
8232.00	90.49	180.57	4449.48	-4034.40	-407.94	4054.19	1.57	
8295.00	88.46	180.33	4450.06	-4097.39	-408.44	4117.02	3.24	
8358.00	88.39	180.07	4451.79	-4160.37	-408.66	4179.80	0.43	
8422.00	88.81	179.70	4453.35	-4224.35	-408.53	4243.56	0.87	
8485.00	88.67	179.50	4454.74	-4287.33	-408.09	4306.30	0.39	
8548.00	89.86	179.70	4455.55	-4350.32	-407.65	4369.05	1.92	
8611.00	89.79	179.68	4455.74	-4413.32	-407.31	4431.81	0.12	
8674.00	90.14	179.53	4455.78	-4476.32	-406.87	4494.57	0.60	
8737.00	90.28	179.15	4455.55	-4539.31	-406.15	4557.30	0.64	
8801.00	90.77	178.88	4454.96	-4603.30	-405.05	4620.99	0.87	
8864.00	89.93	179.47	4454.57	-4666.29	-404.14	4683.70	1.63	
8927.00	88.88	179.53	4455.23	-4729.29	-403.59	4746.44	1.67	
8990.00	88.74	180.31	4456.54	-4792.27	-403.50	4809.21	1.26	
9053.00	89.23	180.06	4457.65	-4855.26	-403.71	4872.01	0.87	
9117.00	90.42	180.57	4457.85	-4919.26	-404.06	4935.82	2.02	
9179.00	91.54	180.10	4456.79	-4981.25	-404.42	4997.64	1.96	
9243.00	91.12	180.39	4455.30	-5045.23	-404.69	5061.43	0.80	
9292.00	93.42	180.48	4453.36	-5094.19	-405.07	5110.26	4.70	Last WFT/MWD Svy
9352.00	93.42	180.48	4449.78	-5154.08	-405.57	5169.99	0.00	Proj. to TD