



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1192794
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: _____

1192794

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

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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Cather 3507 3-4H
Doc ID	1192794

All Electric Logs Run

Prizm
Boresight
Porosity
Mud
Resistivity

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Cather 3507 3-4H
Doc ID	1192794

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	9250-9561	1500 gals 15% HCl, 6931 bbls sw, TLTR 7235 bbls	
5	8904-9160	1500 gals 15% HCl, 7255 bbls sw, TLTR 14664 bbls	
5	8532-8812	1500 gals 15% HCl, 7025 bbls sw, TLTR 22165 bbls	
5	8106-8442	1500 gals 15% HCl, 6942 bbls sw, TLTR 29309 bbls	
5	7716-8030	1500 gals 15% HCl, 6955 bbls sw, TLTR 36420 bbls	
5	7334-7654	1500 gals 15% HCl, 7064 bbls sw, TLTR 43553 bbls	
5	6941-7272	1500 gals 15% HCl, 7024 bbls sw, TLTR 50685 bbls	
5	6554-6862	1500 gals 15% HCl, 6834 bbls sw, TLTR 57596 bbls	
5	6122-6472	1500 gals 15% HCl, 7233 bbls sw, TLTR 64911 bbls	
5	5740-6032	1500 gals 15% HCl, 6648 bbls sw, TLTR 71603 bbls	

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Cather 3507 3-4H
Doc ID	1192794

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	5542-5670	1500 gals 15% HCl, 5233 bbls sw, TLTR 76869 bbls	
5	5170-5414	1500 gals 15% HCl, 4758 bbls sw, TLTR 81627 bbls	



Standard Wellpath Report
Sandridge
Sec 4 - 35S - 7W, Kansas
Harper County
Wellbore: Cather 3507 3-4H (Actual - Whipstock)

Wellbore

Name	Created	Last Revised
Cather 3507 3-4H (Actual - Whipstock)	27-Dec-2013	8-Jan-2014

Well

Name	Government ID	Last Revised
Cather 3507 3-4H		22-Nov-2013

Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Cather 3507 3-4H	129895.0000	2122393.0000	N37 1 21.5269	W98 4 50.8828	223.99N	2132.88W

Installation

Name	Easting	Northing	Coord System Name	North Alignment
Harper County	2124526.0000	129671.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Field

Name	Easting	Northing	Coord System Name	North Alignment
Sec 4 - 35S - 7W	2124526.0000	129671.0001	KS-S on NORTH AMERICAN DATUM 1927 datum	Grid

Created By

Comments
FINAL SURVEYS: MD 9641 is a projection to bit @ TD



Standard Wellpath Report
Sandridge
Sec 4 - 35S - 7W, Kansas
Harper County
Wellbore: Cather 3507 3-4H (Actual - Whipstock)

Wellpath (Grid) Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	2122393.00	129895.00
868.00	2.10	286.100	867.81	4.41N	15.28W	0.24	-0.18	2122377.72	129899.41
961.00	1.50	284.300	960.76	5.18N	18.10W	0.65	-0.25	2122374.90	129900.18
1054.00	0.50	340.300	1053.75	5.87N	19.41W	1.39	0.03	2122373.58	129900.87
1146.00	0.50	42.700	1145.74	6.54N	19.28W	0.56	0.71	2122373.72	129901.54
1238.00	0.60	45.700	1237.74	7.17N	18.66W	0.11	1.49	2122374.34	129902.17
1329.00	0.70	65.900	1328.73	7.73N	17.81W	0.27	2.27	2122375.19	129902.73
1421.00	0.80	71.600	1420.72	8.16N	16.69W	0.14	3.01	2122376.31	129903.16
1604.00	0.80	48.500	1603.71	9.41N	14.52W	0.18	4.83	2122378.48	129904.41
1879.00	1.00	47.800	1878.67	12.30N	11.30W	0.07	8.52	2122381.69	129907.30
2164.00	0.50	33.900	2163.65	15.00N	8.77W	0.19	11.84	2122384.23	129910.00
2259.00	1.20	81.200	2258.64	15.50N	7.55W	0.99	12.66	2122385.44	129910.50
2354.00	1.00	88.600	2353.62	15.67N	5.74W	0.26	13.35	2122387.26	129910.67
2544.00	1.00	102.000	2543.59	15.36N	2.46W	0.12	14.00	2122390.54	129910.36
2829.00	0.70	115.800	2828.56	14.09N	1.54E	0.13	13.93	2122394.54	129909.09
3019.00	0.70	120.300	3018.55	13.00N	3.58E	0.03	13.48	2122396.58	129908.00
3208.00	0.80	134.600	3207.53	11.49N	5.52E	0.11	12.59	2122398.52	129906.49
3398.00	0.40	122.000	3397.52	10.21N	7.03E	0.22	11.80	2122400.03	129905.21
3588.00	0.20	48.400	3587.52	10.08N	7.84E	0.21	11.91	2122400.84	129905.08
3795.00	0.20	285.100	3794.52	10.41N	7.76E	0.17	12.20	2122400.76	129905.41
3825.00	0.20	282.100	3824.52	10.43N	7.66E	0.03	12.20	2122400.66	129905.43
3855.00	1.00	80.300	3854.52	10.49N	7.86E	3.96	12.31	2122400.86	129905.49
3886.00	3.60	82.900	3885.49	10.66N	9.10E	8.39	12.82	2122402.10	129905.66
3916.00	5.60	85.300	3915.39	10.89N	11.49E	6.70	13.74	2122404.49	129905.89
3947.00	7.40	84.200	3946.19	11.22N	14.98E	5.82	15.06	2122407.98	129906.22
3977.00	9.30	78.200	3975.87	11.91N	19.28E	6.96	16.95	2122412.28	129906.91
4008.00	11.20	74.000	4006.37	13.25N	24.63E	6.58	19.78	2122417.63	129908.25
4038.00	13.70	78.600	4035.67	14.76N	30.91E	8.96	23.03	2122423.91	129909.76
4069.00	15.90	79.800	4065.64	16.23N	38.69E	7.16	26.69	2122431.69	129911.23
4100.00	18.40	79.200	4095.26	17.90N	47.68E	8.08	30.87	2122440.68	129912.90
4130.00	20.50	78.100	4123.54	19.87N	57.47E	7.11	35.58	2122450.47	129914.87
4161.00	23.00	76.900	4152.33	22.37N	68.68E	8.19	41.19	2122461.68	129917.37
4191.00	26.20	76.900	4179.61	25.20N	80.84E	10.67	47.41	2122473.85	129920.20
4222.00	29.30	78.700	4207.04	28.23N	94.95E	10.36	54.38	2122487.95	129923.24
4252.00	31.60	80.500	4232.90	30.97N	109.90E	8.25	61.30	2122502.91	129925.97
4283.00	34.90	80.300	4258.82	33.81N	126.66E	10.65	68.84	2122519.66	129928.81
4315.00	37.20	81.500	4284.69	36.78N	145.25E	7.52	77.04	2122538.26	129931.78
4346.00	40.40	81.400	4308.85	39.67N	164.46E	10.32	85.34	2122557.47	129934.67
4378.00	43.80	81.800	4332.59	42.80N	185.68E	10.66	94.45	2122578.69	129937.80
4410.00	47.70	81.500	4354.91	46.13N	208.35E	12.21	104.16	2122601.35	129941.13
4441.00	50.80	80.300	4375.15	49.85N	231.54E	10.42	114.40	2122624.55	129944.85
4473.00	53.30	79.800	4394.82	54.21N	256.39E	7.91	125.73	2122649.40	129949.21
4504.00	54.90	80.000	4413.00	58.61N	281.11E	5.19	137.07	2122674.12	129953.61
4536.00	57.20	79.300	4430.87	63.38N	307.22E	7.41	149.15	2122700.24	129958.39
4568.00	58.70	79.500	4447.85	68.37N	333.88E	4.72	161.61	2122726.90	129963.37
4583.00	59.20	79.300	4455.59	70.74N	346.51E	3.52	167.51	2122739.53	129965.74
4608.00	59.30	79.100	4468.37	74.76N	367.62E	0.80	177.44	2122760.64	129969.77
4638.00	59.10	78.800	4483.73	79.70N	392.91E	1.09	189.45	2122785.93	129974.70
4669.00	57.80	76.700	4499.95	85.30N	418.72E	7.13	202.25	2122811.74	129980.31
4699.00	57.50	72.200	4516.01	92.09N	443.13E	12.71	215.78	2122836.15	129987.10
4730.00	56.90	67.600	4532.81	101.04N	467.59E	12.62	231.39	2122860.61	129996.04
4761.00	57.40	63.300	4549.63	111.86N	491.27E	11.76	248.57	2122884.29	130006.86
4792.00	58.60	59.400	4566.06	124.46N	514.33E	11.35	267.28	2122907.36	130019.47
4824.00	58.90	55.500	4582.67	139.18N	537.38E	10.46	288.01	2122930.41	130034.19
4855.00	59.40	52.100	4598.57	154.90N	558.85E	9.55	309.24	2122951.88	130049.90
4887.00	59.60	49.300	4614.81	172.36N	580.18E	7.56	332.11	2122973.21	130067.37
4919.00	59.60	47.000	4631.01	190.77N	600.74E	6.20	355.66	2122993.77	130085.78
4950.00	59.30	44.500	4646.77	209.40N	619.86E	7.01	379.00	2123012.90	130104.41
4982.00	59.70	42.300	4663.01	229.43N	638.80E	6.05	403.64	2123031.84	130124.44
5013.00	59.00	40.200	4678.81	249.48N	656.39E	6.25	427.90	2123049.42	130144.49
5045.00	58.70	37.500	4695.37	270.80N	673.56E	7.28	453.27	2123066.60	130165.82
5076.00	59.40	35.000	4711.31	292.24N	689.28E	7.28	478.32	2123082.32	130187.26
5108.00	60.90	33.400	4727.24	315.19N	704.88E	6.39	504.80	2123097.92	130210.21
5139.00	61.20	31.000	4742.25	338.15N	719.33E	6.84	530.94	2123112.37	130233.16
5171.00	62.10	29.200	4757.45	362.51N	733.45E	5.69	558.34	2123126.49	130257.53
5202.00	62.60	27.100	4771.83	386.72N	746.40E	6.21	585.25	2123139.45	130281.74
5234.00	62.90	25.900	4786.49	412.18N	759.10E	3.46	613.29	2123152.14	130307.20
5266.00	62.90	25.000	4801.06	437.90N	771.34E	2.50	641.44	2123164.38	130332.93
5297.00	63.20	24.300	4815.11	463.02N	782.86E	2.23	668.81	2123175.91	130358.04
5329.00	64.00	24.500	4829.34	489.12N	794.70E	2.56	697.22	2123187.75	130384.15

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Cather 3507 3-4H 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 16.730 degrees
Bottom hole distance is 4896.24 Feet on azimuth 16.73 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 8-Jan-2014



Standard Wellpath Report
Sandridge
Sec 4 - 35S - 7W, Kansas
Harper County
Wellbore: Cather 3507 3-4H (Actual - Whipstock)

Wellpath (Grid) Report

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Easting	Northing
5361.00	64.10	24.600	4843.34	515.29N	806.66E	0.42	725.73	2123199.70	130410.32
5392.00	63.60	24.200	4857.01	540.63N	818.16E	1.99	753.31	2123211.20	130435.66
5424.00	63.30	24.000	4871.31	566.76N	829.84E	1.09	781.69	2123222.89	130461.79
5456.00	62.90	23.900	4885.79	592.84N	841.43E	1.28	810.01	2123234.47	130487.88
5487.00	63.50	24.100	4899.76	618.12N	852.68E	2.02	837.45	2123245.73	130513.16
5519.00	63.00	23.500	4914.17	644.27N	864.21E	2.29	865.81	2123257.26	130539.30
5583.00	70.40	21.500	4939.47	698.54N	886.67E	11.91	924.25	2123279.71	130593.58
5614.00	71.80	19.300	4949.51	726.03N	896.89E	8.09	953.52	2123289.93	130621.07
5645.00	72.30	19.800	4959.06	753.82N	906.75E	2.23	982.97	2123299.80	130648.86
5678.00	72.20	19.900	4969.12	783.38N	917.43E	0.42	1014.36	2123310.48	130678.42
5709.00	73.10	19.700	4978.37	811.22N	927.45E	2.97	1043.90	2123320.50	130706.27
5739.00	74.80	19.200	4986.66	838.41N	937.05E	5.89	1072.70	2123330.10	130733.45
5770.00	75.10	19.700	4994.71	866.63N	947.02E	1.83	1102.60	2123340.07	130761.68
5801.00	74.90	19.800	5002.74	894.82N	957.13E	0.72	1132.51	2123350.19	130789.87
5832.00	75.20	19.700	5010.73	923.00N	967.26E	1.02	1162.41	2123360.31	130818.06
5863.00	77.30	20.300	5018.10	951.30N	977.55E	7.03	1192.48	2123370.61	130846.35
5894.00	77.90	20.400	5024.76	979.69N	988.08E	1.96	1222.69	2123381.14	130874.74
5924.00	77.50	20.200	5031.15	1007.18N	998.25E	1.48	1251.95	2123391.31	130902.23
5955.00	78.00	20.600	5037.73	1035.57N	1008.81E	2.05	1282.18	2123401.87	130930.63
5986.00	79.30	20.500	5043.83	1064.03N	1019.48E	4.21	1312.50	2123412.54	130959.09
6016.00	80.80	20.200	5049.01	1091.73N	1029.76E	5.10	1341.99	2123422.81	130986.79
6047.00	82.30	19.300	5053.57	1120.59N	1040.12E	5.63	1372.61	2123433.17	131015.65
6077.00	83.30	18.600	5057.33	1148.74N	1049.78E	4.06	1402.35	2123442.84	131043.80
6108.00	84.20	16.400	5060.70	1178.13N	1059.05E	7.63	1433.16	2123452.11	131073.19
6138.00	86.20	15.900	5063.21	1206.84N	1067.36E	6.87	1463.06	2123460.42	131101.91
6169.00	87.90	14.900	5064.81	1236.69N	1075.58E	6.36	1494.01	2123468.64	131131.76
6199.00	89.20	13.300	5065.57	1265.77N	1082.89E	6.87	1523.96	2123475.95	131160.84
6230.00	90.70	11.500	5065.59	1296.05N	1089.54E	7.56	1554.87	2123482.60	131191.12
6260.00	92.20	10.900	5064.83	1325.47N	1095.37E	5.38	1584.72	2123488.43	131220.54
6291.00	93.00	8.600	5063.43	1355.99N	1100.61E	7.85	1615.46	2123493.67	131251.06
6321.00	93.30	6.300	5061.78	1385.69N	1104.50E	7.72	1645.02	2123497.56	131280.76
6352.00	93.60	6.100	5059.91	1416.45N	1107.84E	1.16	1675.44	2123500.90	131311.53
6383.00	94.30	5.800	5057.78	1447.21N	1111.05E	2.46	1705.82	2123504.11	131342.29
6413.00	93.60	5.700	5055.71	1476.99N	1114.04E	2.36	1735.20	2123507.11	131372.07
6444.00	91.80	5.500	5054.25	1507.80N	1117.07E	5.84	1765.58	2123510.13	131402.88
6535.00	90.90	5.700	5052.11	1598.34N	1125.94E	1.01	1854.84	2123519.00	131493.43
6654.00	91.90	5.600	5049.20	1716.73N	1137.66E	0.84	1971.59	2123530.72	131611.82
6747.00	91.90	5.400	5046.12	1809.25N	1146.56E	0.21	2062.75	2123539.63	131704.35
6839.00	92.00	5.600	5042.98	1900.77N	1155.38E	0.24	2152.94	2123548.44	131795.88
6931.00	91.80	5.900	5039.93	1992.26N	1164.59E	0.39	2243.20	2123557.65	131887.37
7023.00	92.20	6.300	5036.72	2083.68N	1174.36E	0.61	2333.57	2123567.42	131978.79
7114.00	92.80	5.800	5032.75	2174.09N	1183.94E	0.86	2422.91	2123577.01	132069.21
7206.00	93.00	5.400	5028.10	2265.53N	1192.91E	0.49	2513.06	2123585.97	132160.65
7297.00	92.70	5.800	5023.58	2355.98N	1201.78E	0.55	2602.24	2123594.84	132251.11
7389.00	92.50	4.600	5019.40	2447.51N	1210.11E	1.32	2692.28	2123603.17	132342.64
7481.00	92.30	5.400	5015.55	2539.08N	1218.12E	0.90	2782.28	2123611.18	132434.22
7573.00	92.90	5.200	5011.38	2630.59N	1226.61E	0.69	2872.36	2123619.67	132525.73
7668.00	92.00	4.900	5007.31	2725.13N	1234.96E	1.00	2965.31	2123628.03	132620.28
7762.00	91.30	5.400	5004.61	2818.71N	1243.40E	0.92	3057.35	2123636.46	132713.87
7857.00	92.30	5.100	5001.62	2913.27N	1252.08E	1.10	3150.40	2123645.15	132808.43
7952.00	92.80	5.700	4997.40	3007.75N	1261.01E	0.82	3243.46	2123654.08	132902.92
8047.00	91.90	5.100	4993.50	3102.25N	1269.95E	1.14	3336.53	2123663.02	132997.42
8142.00	92.90	4.900	4989.52	3196.80N	1278.22E	1.07	3429.46	2123671.29	133091.98
8237.00	91.60	5.500	4985.79	3291.34N	1286.82E	1.51	3522.47	2123679.89	133186.52
8332.00	92.30	5.700	4982.56	3385.83N	1296.09E	0.77	3615.62	2123689.16	133281.01
8427.00	92.00	5.500	4979.00	3480.31N	1305.35E	0.38	3708.77	2123698.42	133375.50
8522.00	92.60	5.200	4975.19	3574.82N	1314.20E	0.71	3801.83	2123707.27	133470.01
8617.00	92.80	5.800	4970.71	3669.27N	1323.30E	0.67	3894.90	2123716.37	133564.48
8712.00	91.80	5.500	4966.90	3763.74N	1332.64E	1.10	3988.05	2123725.72	133658.94
8807.00	92.10	4.600	4963.66	3858.31N	1341.00E	1.00	4081.03	2123734.07	133753.52
8902.00	92.00	5.500	4960.27	3952.88N	1349.36E	0.95	4174.00	2123742.43	133848.10
8997.00	92.40	4.800	4956.62	4047.43N	1357.88E	0.85	4267.00	2123750.95	133942.65
9092.00	92.90	5.100	4952.23	4141.97N	1366.07E	0.61	4359.90	2123759.14	134037.20
9186.00	92.50	4.500	4947.80	4235.54N	1373.92E	0.77	4451.76	2123767.00	134130.77
9281.00	91.70	5.000	4944.32	4330.15N	1381.79E	0.99	4544.63	2123774.86	134225.38
9376.00	90.90	4.400	4942.16	4424.80N	1389.57E	1.05	4637.51	2123782.64	134320.04
9471.00	91.60	4.000	4940.09	4519.52N	1396.52E	0.85	4730.23	2123789.60	134414.77
9566.00	92.20	4.700	4936.28	4634.13N	1405.24E	0.80	4824.49	2123798.32	134529.38
9641.00	92.20	4.700	4934.17	4688.90N	1409.74E	==>	4896.24	2123802.82	134584.16

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Cather 3507 3-4H 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 16.730 degrees
Bottom hole distance is 4896.24 Feet on azimuth 16.73 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 8-Jan-2014



Standard Wellpath Report
Sandridge
Sec 4 - 35S - 7W, Kansas
Harper County
Wellbore: Cather 3507 3-4H (Actual - Whipstock)

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Slot and TVD's are from Slot (Cather 3507 3-4H 0.00ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 16.730 degrees
Bottom hole distance is 4896.24 Feet on azimuth 16.73 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 8-Jan-2014

Section 33
34S 7W

Section 34
34S 7W

306' FNL
783' FEL

BHL: 9641'
-98.076618 37.035506

Bottom Perf: 9250'
-98.081153 37.03163

Section 4
35S 7W

Harper County

Section 3
35S 7W

Top Perf: 5170'
-98.07863 37.023699

Miss Entry: 5158'
-98.07863 37.023699

CATHER 3507 2-4H

CATHER 3507 3-4H

CATHER 3507 4-4H

SHELBY 2-3 SWD

SHELBY 1-3 SWD

Section 9
35S 7W

RED FERN 3507 2-16H

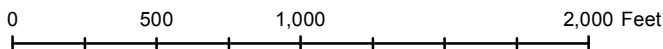
RED FERN 3507 3-16H

Section 10
35S 7W



Actual Bottom-Hole Location of Cather 3507 3-4H
Harper County, Kansas
T&R: 35S 7W
Section: 4, 783 FEL & 306' FNL
-98.076618 37.035506

1 in = 667 ft



● Actual BH Location

* SandRidge Wells

--- Perf

□ Sections

Draftsman:

Aaron Birk

Draft Date: 3/5/2014

Drawing Name/Number:

Addendum_Cather 3507 3-4H.mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502



BASIN SERVICES, LLC
 P O BOX 4268
 ABILENE, TX 79608-4268
 Phone # (325)690-0053
 Fax # (325)698-0055

TICKET

TICKET NUMBER: WY-155-1
 TICKET DATE: 11/08/2013

ELECTRONIC

SANDRIDGE ENERGY
 ***** BILL IN ADP!! *****
 123 ROBERT S KERR AVE
 OKLAHOMA CITY, OK 73102-6406

YARD: WY WAYNOKA OK
 LEASE: Cather 3507
 WELL#: 3-4H
 RIG #: Lariat 45
 Co/St: HARPER, KS

DESCRIPTION	QUANTITY	RATE	AMOUNT
11/8/2013 DRILLED 30" CONDUCTOR HOLE			
11/8/2013 20" CONDUCTOR PIPE (.250 WALL)			
11/8/2013 6' X 6' CELLAR TINHORN WITH PROTECTIVE RING			
11/8/2013 DRILL & INSTALL 6' X 6' CELLAR TINHORN			
11/8/2013 DRILLED 20" MOUSE HOLE (PER FOOT)			
11/8/2013 16" CONDUCTOR PIPE (.250 WALL)			
11/8/2013 MOBILIZATION OF EQUIPMENT & ROAD PERMITTING FEE			
11/8/2013 WELDING SERVICES FOR PIPE & LIDS			
11/8/2013 PROVIDED EQUIPMENT & LABOR TO ASSIST IN PUMPING CONCRETE			
11/8/2013 PROVIDED METAL LIDS (1 FOR CONDUCTOR & 2 FOR MOUSEHOLE PIPE)			
11/8/2013 10 YDS OF 10 SACK GROUT			6,650.00
11/8/2013 TAXABLE ITEMS			11,850.00
11/8/2013 BID - TAXABLE ITEMS			
11/8/2013 HOLE COVER			
		Sub Total:	18,500.00
		Tax HARPER COUNTY (6.15 %):	408.98
		TICKET TOTAL:	<u>\$ 18,908.98</u>

I, the undersigned, acknowledge the acceptance of the above listed goods and/or services.

Approved Signature _____

JOB SUMMARY

COUNTY		State	COMPANY	PROJECT NUMBER	TICKET DATE
Harper		Kansas	Bridge Exploration & Produc	SOK 3225	11/28/13
LEASE NAME		Well No.	JOB TYPE	CUSTOMER REP	
Cather 3507		3-4H	Surface	Claude Hallmark	
EMP NAME			EMPLOYEE NAME		
NATHAN COTTA			NATHAN COTTA		

NATHAN COTTA	0				
VONTREY W					
WALLACE B					
FLO H					

Form. Name _____ Type: _____

Packer Type _____ Set At 0
 Bottom Hole Temp. 80 Pressure _____
 Retainer Depth _____ Total Depth 800'

Date	Called Out	On Location	Job Started	Job Completed
	11.28.13	11.28.13	11.28.13	11.28.13
Time	1400	1730	2218	2350

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	0	IR
Centralizers	0	IR
Top Plug	1	IR
HEAD	1	IR
Limit clamp	0	IR
Weld-A	0	IR
Texas Pattern Guide Shoe	0	IR
Cement Basket	0	IR

New/Used		Weight	Size	Grade	From	To	Max. Allow
Casing		36#	9 1/2"		Surface	800'	1,500
Liner							
Liner							
Tubing			0				
Drill Pipe							
Open Hole			12 1/4"		Surface	800'	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	9 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	Fresh 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

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
11.28.13	6.0	11.28.13	2.0	Surface
Total	6.0	Total	2.0	

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

Pressures	
MAX 1,500 PSI	AVG. 150
Average Rates in BPM	
MAX 6 BPM	AVG 5
Cement Left in Pipe	
Feet 46	Reason SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	225	TEX Lite Premium Plus 65	(6% Gel) 2% Calcium Chloride - 1/4pps Cello-Flake - .5% C-41P	11.11	2.01	12.40
2	140	Premium Plus (Class C)	2% Calcium Chloride - 1/4pps Cello-Flake	6.32	1.32	14.80
3	0	0		0	0.00	0.00

Summary					
Preflush Breakdown	Type: _____	MAXIMUM _____	1,500 PSI	Preflush: BBI _____	10.00
	Lost Returns-N _____	NO/FULL _____		Load & Bkdn: Gal - BBI _____	N/A
	Actual TOC _____	SURFACE _____		Excess /Return BBI _____	33
Average isip _____ 5 Min.	Bump Plug PSI: _____	720		Calc. TOC: _____	SURFACE
	10 Min _____	15 Min _____		Final Circ. PSI: _____	160
				Cement Slurry BBI _____	114.0
				Total Volume BBI _____	179.50

CUSTOMER REPRESENTATIVE Claude Hallmark SIGNATURE

JOB SUMMARY

COUNTY		State	COMPANY		PROJECT NUMBER	TICKET DATE
Harper		Kansas	Sandridge Exploration & Production		SOK 3281	12/22/13
LEASE NAME		Well No.	JOB TYPE		CUSTOMER REP	
Cather 3507		3-4H	Intermediate		Bill Torbett	
EMP NAME				EMPLOYEE NAME		
L. ARNEY				LOUIS ARNEY		

L. ARNEY	W. BERRY		
M. QUINTANA	J. HALL		
D. TEWELL			
D. SETTLEMIER			

Form. Name _____ Type: _____

Packer Type _____ Set At 3,855'

Bottom Hole Temp. 135 Pressure _____

Retainer Depth _____ Total Depth 5,596'

	Called Out	On Location	Job Started	Job Completed
Date	12/21/2013	12/21/2013	12/22/2013	12/22/2013
Time	1300	2100	1638	1800

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
Casing		26#	7"		Surface	5,000
Liner						
Liner						
Tubing			0			
Drill Pipe						
Open Hole			8 1/2"		Surface	5,596'
Perforations						
Perforations						
Perforations						

Materials			
Mud Type	WBM	Density	Lb/Gal
Disp. Fluid	Fresh Water	8.33	Lb/Gal
Spacer type	Fresh 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	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
12/21	3.0	12/22	1.2	Intermediate
12/22	18.0			
Total		Total		
21.0		1.2		

Pressures	
MAX	5,000 PSI
AVG.	500
Average Rates in BPM	
MAX	8 BPM
AVG	5
Cement Left in Pipe	
Feet	46
Reason	SHOE JOINT

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	250	50/50 POZ PREMIUM	4% Gel - 0.2% FL-17 - 0.1% C-51 - 0.1% C-37 - 0.2% C-20 - 0.4% C-41P	6.93	1.43	13.60
2	100	Premium	0.2% FL-17 - 0.1% C-51 - 0.1% C-20 - 0.4% C-41P	5.19	1.19	15.60
3	0	0		0	0.00	0.00

Summary					
Preflush Breakdown	10	Type: Caustic	Preflush: BBI	30.00	Type: Gel Spacer
		MAXIMUM	Load & Bkdn: Gal - BBI	N/A	Pad: Bbl - Gal
		Lost Returns-N	Excess /Return BBI	N/A	Calc. Disp Bbl
		Actual TOC	Calc. TOC:	3,450	Actual Disp.
Average		Bump Plug PSI: 1,400	Final Circ. PSI:	900	Disp: Bbl
5 Min.		10 Min	Cement Slurry: BBI	85.0	
		15 Min	Total Volume BBI	324.00	

CUSTOMER REPRESENTATIVE Bill Torbett SIGNATURE

JOB SUMMARY			PROJECT NUMBER SOK 3245	TICKET DATE 12/06/13
COUNTY Harper	State Kansas	COMPANY Dridge Exploration & Produc	CUSTOMER REP Claude Hallmark	
LEASE NAME Cather 3507	Well No. 3-4H	JOB TYPE Squeeze Job	EMPLOYEE NAME Arthur Setzer	

EMP NAME	Arthur Setzar	0				
	Jared Green					
	Bryan Douglas					
	Flo Helkena					

Form. Name _____ Type: _____
Packer Type _____ Set At _____ 0
Bottom Hole Temp. _____ 90 Pressure _____
Retainer Depth _____ Total Depth _____ 0

Date	Called Out 12/6/2013	On Location 12/6/2013	Job Started 12/7/2013	Job Completed 12/7/2013
Time	1200	2000	1500	1600

Type and Size	Qty	Make
Auto Fill Tube	0	IR
Insert Float Va	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

New/Used		Weight	Size	Grade	From	To	Max. Allow
Casing		0.0	0		Surface		1,500
Liner							
Liner							
Tubing			4"				
Drill Pipe							
Open Hole			8 3/4"		Surface	~5,300'	Shots/Ft.
Perforations							
Perforations							
Perforations							

Materials			
Mud Type	WBM	Density	9 Lb/Gal
Disp. Fluid	Fresh Water	Density	8.33 Lb/Gal
Spacer type	Fresh 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	

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
12/6	4.0	12/7	1.0	Squeeze Job
12/7	16.0			incomplete job
Total	20.0	Total	1.0	

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

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

Cement Data						
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal
1	100	Premium H (Thixotropic)	4% Gel - 10% Gypsum - 2pps Pheno Seal	7.65	1.60	14.40
2	0	0		0	0.00	0.00
3	0	0		0	0.00	0.00

Summary					
Preflush Breakdown	Type: _____	MAXIMUM _____	1,500 PSI	Preflush: BBI _____	10.00
	Lost Returns-1	NO/FULL _____		Load & Bkdn: Gal - BBI _____	N/A
	Actual TOC	SURFACE _____		Excess /Return BBI _____	
Average	Bump Plug PSI: _____			Calc. TOC: _____	SURFACE
ISIP _____	5 Min. _____	10 Min. _____	15 Min. _____	Final Circ. PSI: _____	
				Cement Slurry BBI _____	
				Total Volume BBI _____	10.00

CUSTOMER REPRESENTATIVE _____ SIGNATURE _____

JOB SUMMARY			PROJECT NUMBER SOK 3260	TICKET DATE 03/14/13
COUNTY Harper	State Kansas	COMPANY Bridge Exploration & Produc	CUSTOMER REP Bill Torbett	
LEASE NAME Cather 3507	Well No. 3-4H	JOB TYPE Plug Job	EMPLOYEE NAME LOUIS ARNEY	

EMP NAME					
L. ARNEY					
J. KLEMM					
W. BERRY					
J. HALL					

Form. Name _____ Type: _____

Packer Type _____ Set At **0**

Bottom Hole Temp. **130°** Pressure _____

Retainer Depth _____ Total Depth **5000**

	Called Out	On Location	Job Started	Job Completed
Date	12/14/2013	12/14/2013	12/14/2013	12/15/2013
Time	1500	1700	1900	0100

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
Casing		0.0	0		Surface	
Liner						
Liner						
Tubing			4"			
Drill Pipe						
Open Hole			8 3/4"		Surface	5,000
Perforations						Shots/Ft.
Perforations						
Perforations						

Materials			
Mud Type	WBM	Density	9 Lb/Gal
Disp. Fluid	Fresh Water	Density	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

Hours On Location		Operating Hours		Description of Job
Date	Hours	Date	Hours	
12/14	5.0	12/14	0.7	Plug Job
12/15	1.0			
Total		6.0	0.7	

Perfpac Balls _____ Qty. _____

Other _____

Other _____

Other _____

Other _____

Pressures	
MAX	1,500 PSI
AVG.	300
Average Rates in BPM	
MAX	6 BPM
AVG	4
Cement Left in Pipe	
Feet	0
Reason	SHOE JOINT

Cement Data							
Stage	Sacks	Cement	Additives	W/Rq.	Yield	Lbs/Gal	
1	205	Premium H	0.5% C-37		3.77	0.99	17.00
2	0	0		0	0.00	0.00	0.00
3	0	0		0	0.00	0.00	0.00

Summary							
Preflush Breakdown	Type: _____	MAXIMUM	1,500 PSI	Preflush: BBI	10.00	Type: Fresh Water	
	Lost Returns-N	NO/FULL		Load & Bkdn: Gal - BBI	N/A	Pad:Bbl -Gal	N/A
	Actual TOC	SURFACE		Excess /Return BBI	0	Calc. Disp Bbl	43
Average	Bump Plug PSI:	0		Calc. TOC:	4,500	Actual Disp.	42.00
ISIP	5 Min.	10 Min	15 Min	Final Circ. PSI:	0	Disp:Bbl	
				Cement Slurry: BBI	37.0		
				Total Volume	89.00		

CUSTOMER REPRESENTATIVE Bill Torbett SIGNATURE