



KANSAS CORPORATION COMMISSION 1103032
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009

CONFIDENTIAL

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

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

OPERATOR: License # 33168
Name: Woolsey Operating Company, LLC
Address 1: 125 N MARKET STE 1000
Address 2:
City: WICHITA State: KS Zip: 67202 + 1729
Contact Person: DEAN PATTISSON
Phone: (316) 267-4379
CONTRACTOR: License # 33132
Name: Dan D Drilling
Wellsite Geologist: BILLY KLAVER
Purchaser: PLAINS MARKETING / ATLAS PIPELINE

API No. 15 - 15-007-23928-01-00
Spot Description:
SW SE SE SW Sec. 14 Twp 34 S. R. 11 East West
13 Feet from North / South Line of Section
2115 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW

County: Barber
Lease Name: MILLER-DIEL Well #: 1 H
Field Name: MAYBERRY NORTH

Producing Formation: MISSISSIPPIAN
Elevation: Ground: 1379 Kelly Bushing: 1396

Total Depth: 9118 Plug Back Total Depth: 9050
Amount of Surface Pipe Set and Cemented at: 326 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.

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

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

Well Name: _____

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

08/03/2012 08/30/2012 11/02/2012
Spud Date or Date Reached TD Completion Date or Recompletion Date

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 4900 ppm Fluid volume: 2500 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite: _____

Operator Name: WOOLSEY OPERATING COMPANY LLC

Lease Name: WECKWORTH 6 SWD License #: 33168

Quarter SW Sec. 9 Twp 35 S. R. 12 East West

County: BARBER Permit #: D-31,019

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: 11/30/2012
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: NAOMI JAMES Date: 12/07/2012

Woolsey Operating Company, LLC

N-10 EXPL
F-1
MED. RIVER RANCH

14

WOC
1
LINCOLN TRUST
2008 MS

KCC Post Drill Exhibit

Miller - Diel #1-H

Sect. 23-34s-11w

Barber County, Kansas

POSTED WELL DATA

Operator
Well Number
Well Name
Year Drilled ● ProdFM

By: DLP

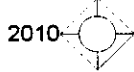
WOC
2-H
MILLER GU D

WOC MILLER - DIEI #1-H

SHL: Lat; 37.0792688
Lon; -98.4867935

BHL: Lat; 37.0684127
Lon; -98.4867725

N-10 EXP
SWD E OWWO
MED RIVER RANCH



T34S - R11W

TRI-EX
1
MILLER
2002 MS

Productive Lateral Interval

WOC
1-H
MILLER-DIEL

PICKRELL
1-B
LINCOLN TRUST
1999 MS

23

VAL
1-23
HICKOCK
2011 MS

WOC
2-F
DIEL
2012 MS

BHL

MACK
1
HKLAR

WOC MILLER-DIEL 1-H HORIZONTAL DRILLING UNIT

VAL
2-26
BROWN ROLF
2010 MS

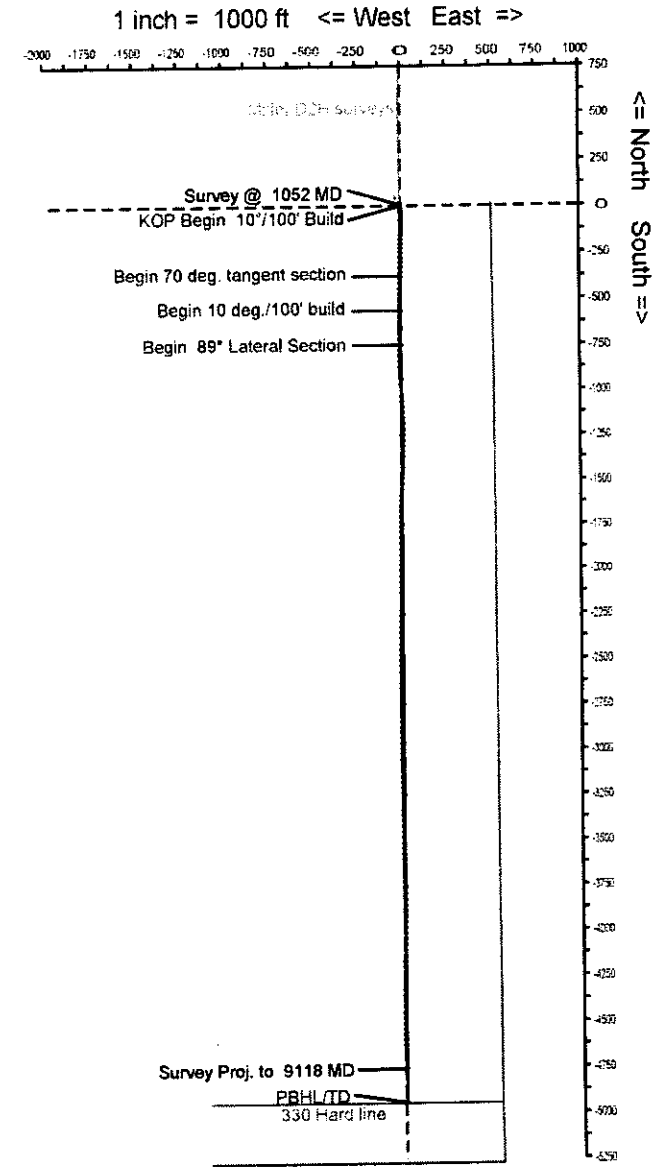
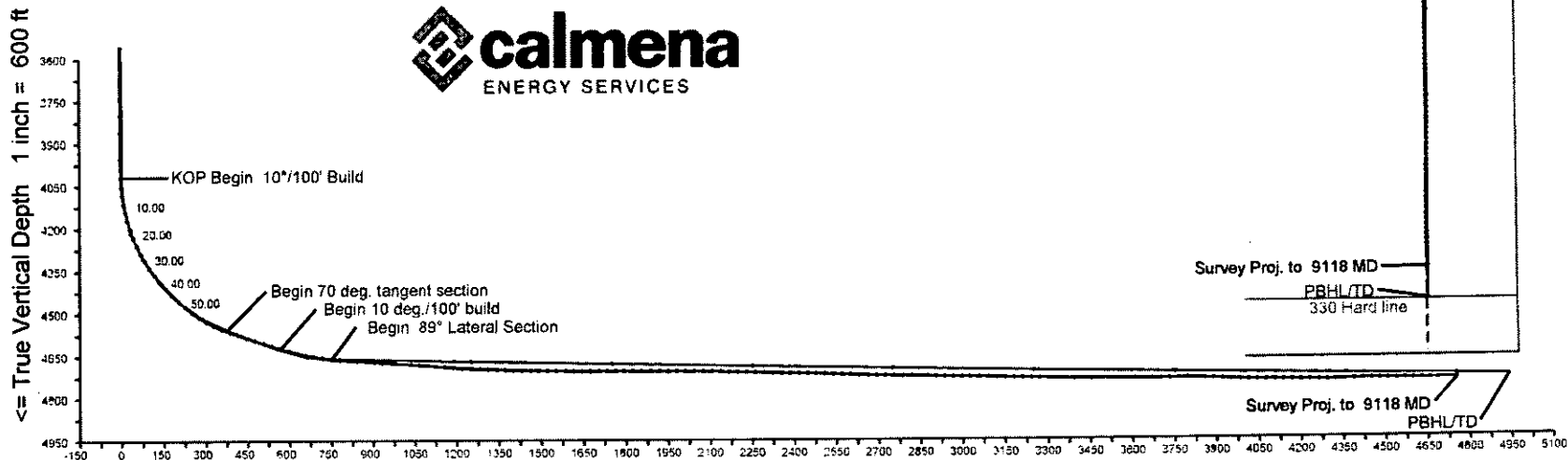
Woolsey Operating Company, LLC

Miller-Diel #1H

Barber County, Kansas

WELL PROFILE DATA							rev2
MD Inc.	Azi.	TVD	N/S	E/W	DLS	Comment	08-09-2012
4019	0.00	179.94	4019	0	0	0.00	KOP Begin 10°/100' Build
4719	70.00	179.94	4557	-377	0	10.00	Begin 70 deg. tangent section
4919	70.00	179.94	4625	-565	1	0.00	Begin 10 deg./100' build
5108	89.00	179.94	4660	-751	1	10.00	Begin 89° Lateral Section
9302	89.00	179.94	4733	-4943	5	0.00	PBHL/TD

WELL PROFILE DATA							svys
MD Inc.	Azi.	TVD	N/S	E/W	DLS	Comment	09-05-2012
9118	90.20	179.50	4742	-4759	2	0.00	Survey Proj. to 9118 MD



Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
 Location: Barber County, Kansas

Date: 5-Sep-2012
 Surveys
 Page 1

Job#: 6708
 NAD27 Ks South gr elev=1379

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
Surface Location								150237.00	2003853.00	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	150237.00	2003853.00	
686.00	1.00	4.30	685.97	5.97	0.45	0.15	-5.98	150242.97	2003853.45	
717.00	1.10	357.40	716.96	6.54	0.46	0.52	-6.55	150243.54	2003853.46	
747.00	0.70	356.10	746.96	7.01	0.43	1.33	-7.02	150244.01	2003853.43	
779.00	0.70	356.10	778.95	7.40	0.40	0.00	-7.41	150244.40	2003853.40	
809.00	0.60	325.70	808.95	7.71	0.30	1.18	-7.72	150244.71	2003853.30	
840.00	0.80	258.30	839.95	7.80	0.00	2.56	-7.80	150244.80	2003853.00	
870.00	1.00	248.90	869.95	7.66	-0.45	0.83	-7.65	150244.66	2003852.55	
902.00	1.30	237.50	901.94	7.37	-1.02	1.17	-7.34	150244.37	2003851.98	
931.00	1.20	235.40	930.93	7.02	-1.54	0.38	-6.97	150244.02	2003851.46	
963.00	1.00	227.90	962.93	6.64	-2.03	0.77	-6.58	150243.64	2003850.97	
992.00	1.10	222.60	991.92	6.27	-2.40	0.48	-6.19	150243.27	2003850.60	
1022.00	1.10	214.40	1021.92	5.82	-2.76	0.52	-5.73	150242.82	2003850.24	
1052.00	0.90	223.10	1051.91	5.41	-3.08	0.84	-5.32	150242.41	2003849.92	
1081.00	1.00	227.90	1080.91	5.07	-3.43	0.44	-4.97	150242.07	2003849.57	
1110.00	1.00	229.50	1109.90	4.74	-3.81	0.10	-4.63	150241.74	2003849.19	
1172.00	1.10	225.70	1171.89	3.97	-4.65	0.20	-3.83	150240.97	2003848.35	
1232.00	1.10	231.90	1231.88	3.21	-5.51	0.20	-3.05	150240.21	2003847.49	
1291.00	0.90	237.00	1290.87	2.61	-6.35	0.37	-2.43	150239.61	2003846.65	
1352.00	0.90	222.00	1351.87	1.99	-7.07	0.39	-1.79	150238.99	2003845.93	
1411.00	1.10	223.70	1410.86	1.24	-7.77	0.34	-1.02	150238.24	2003845.23	
1472.00	1.20	221.70	1471.85	0.34	-8.60	0.18	-0.09	150237.34	2003844.40	
1533.00	1.00	229.60	1532.83	-0.48	-9.43	0.41	0.75	150236.52	2003843.57	
1595.00	0.40	194.70	1594.83	-1.04	-9.90	1.14	1.33	150235.96	2003843.10	
1656.00	0.10	61.20	1655.83	-1.22	-9.90	0.78	1.51	150235.78	2003843.10	
1717.00	0.30	38.00	1716.83	-1.07	-9.76	0.35	1.35	150235.93	2003843.24	
1775.00	0.30	63.40	1774.83	-0.88	-9.53	0.23	1.16	150236.12	2003843.47	
1837.00	0.30	45.40	1836.83	-0.70	-9.27	0.15	0.96	150236.30	2003843.73	
1898.00	0.20	82.40	1897.83	-0.57	-9.05	0.30	0.83	150236.43	2003843.95	
1961.00	0.40	49.00	1960.83	-0.41	-8.77	0.41	0.66	150236.59	2003844.23	

Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
 Location: Barber County, Kansas

Date: 5-Sep-2012
 Surveys
 Page 2

Job#: 6708
 NAD27 Ks South gr elev=1379
 Comments

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
2024.00	0.40	23.70	2023.82	-0.07	-8.52	0.28	0.31	150236.93	2003844.48	
2084.00	0.30	83.10	2083.82	0.14	-8.28	0.60	0.09	150237.14	2003844.72	
2146.00	0.30	63.00	2145.82	0.24	-7.97	0.17	-0.01	150237.24	2003845.03	
2208.00	0.30	40.80	2207.82	0.43	-7.72	0.19	-0.21	150237.43	2003845.28	
2269.00	0.30	39.20	2268.82	0.68	-7.52	0.01	-0.46	150237.68	2003845.48	
2331.00	0.30	56.50	2330.82	0.89	-7.28	0.15	-0.68	150237.89	2003845.72	
2394.00	0.30	50.50	2393.82	1.09	-7.01	0.05	-0.89	150238.09	2003845.99	
2455.00	0.40	36.90	2454.82	1.36	-6.76	0.21	-1.17	150238.36	2003846.24	
2516.00	0.30	40.20	2515.82	1.65	-6.53	0.17	-1.47	150238.65	2003846.47	
2578.00	0.30	38.80	2577.82	1.90	-6.33	0.01	-1.72	150238.90	2003846.67	
2639.00	0.30	56.10	2638.81	2.12	-6.09	0.15	-1.94	150239.12	2003846.91	
2700.00	0.40	58.10	2699.81	2.32	-5.78	0.17	-2.15	150239.32	2003847.22	
2762.00	0.30	60.00	2761.81	2.52	-5.46	0.16	-2.36	150239.52	2003847.54	
2823.00	0.30	55.20	2822.81	2.69	-5.19	0.04	-2.54	150239.69	2003847.81	
2886.00	0.30	45.10	2885.81	2.90	-4.93	0.08	-2.75	150239.90	2003848.07	
2946.00	0.20	129.80	2945.81	2.94	-4.74	0.57	-2.80	150239.94	2003848.26	
3008.00	0.30	122.00	3007.81	2.79	-4.52	0.17	-2.65	150239.79	2003848.48	
3071.00	0.20	148.00	3070.81	2.61	-4.32	0.24	-2.48	150239.61	2003848.68	
3131.00	0.10	146.50	3130.81	2.47	-4.24	0.17	-2.35	150239.47	2003848.76	
3193.00	0.10	166.20	3192.81	2.37	-4.20	0.06	-2.25	150239.37	2003848.80	
3254.00	0.10	255.10	3253.81	2.31	-4.24	0.23	-2.19	150239.31	2003848.76	
3316.00	0.10	4.10	3315.81	2.35	-4.28	0.26	-2.23	150239.35	2003848.72	
3377.00	0.20	29.60	3376.81	2.50	-4.23	0.19	-2.37	150239.50	2003848.77	
3438.00	0.20	22.30	3437.81	2.69	-4.13	0.04	-2.57	150239.69	2003848.87	
3498.00	0.20	37.80	3497.81	2.87	-4.03	0.09	-2.75	150239.87	2003848.97	
3559.00	0.20	91.70	3558.81	2.95	-3.86	0.30	-2.83	150239.95	2003849.14	
3618.00	0.20	93.20	3617.81	2.94	-3.65	0.01	-2.83	150239.94	2003849.35	
3680.00	0.30	98.60	3679.81	2.91	-3.38	0.17	-2.81	150239.91	2003849.62	
3742.00	0.20	119.50	3741.81	2.83	-3.13	0.22	-2.74	150239.83	2003849.87	
3801.00	0.20	121.70	3800.81	2.73	-2.95	0.01	-2.64	150239.73	2003850.05	

Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
 Location: Barber County, Kansas

Date:5-Sep-2012
 Surveys
 Page 3
 Job# : 6708
 NAD27 Ks South gr elev=1379

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
3860.00	0.20	114.20	3859.81	2.63	-2.77	0.04	-2.55	150239.63	2003850.23	
3953.00	0.20	99.00	3952.80	2.54	-2.46	0.06	-2.47	150239.54	2003850.54	
3989.00	0.50	155.40	3988.80	2.38	-2.34	1.18	-2.32	150239.38	2003850.66	
4021.00	2.40	163.10	4020.79	1.62	-2.08	5.96	-1.56	150238.62	2003850.92	
4052.00	4.70	166.10	4051.73	-0.24	-1.59	7.44	0.28	150236.76	2003851.41	
4082.00	7.50	170.80	4081.56	-3.36	-0.98	9.47	3.39	150233.64	2003852.02	
4113.00	10.50	173.90	4112.17	-8.17	-0.36	9.80	8.18	150228.83	2003852.64	
4142.00	13.20	175.60	4140.55	-14.10	0.18	9.39	14.09	150222.90	2003853.18	
4174.00	16.30	176.50	4171.49	-22.23	0.73	9.71	22.20	150214.77	2003853.73	
4205.00	19.10	177.20	4201.02	-31.64	1.25	9.06	31.59	150205.36	2003854.25	
4236.00	21.80	177.70	4230.07	-42.46	1.73	8.73	42.39	150194.54	2003854.73	
4268.00	24.90	177.40	4259.44	-55.13	2.27	9.69	55.04	150181.87	2003855.27	
4300.00	28.30	178.10	4288.05	-69.44	2.83	10.67	69.33	150167.56	2003855.83	
4329.00	31.50	179.50	4313.19	-83.89	3.12	11.29	83.77	150153.11	2003856.12	
4360.00	34.90	180.80	4339.13	-100.86	3.07	11.20	100.73	150136.14	2003856.07	
4390.00	37.50	181.40	4363.33	-118.58	2.72	8.75	118.45	150118.42	2003855.72	
4421.00	40.00	181.90	4387.51	-137.97	2.16	8.13	137.85	150099.03	2003855.16	
4452.00	42.90	182.20	4410.74	-158.48	1.43	9.38	158.37	150078.52	2003854.43	
4483.00	45.90	182.00	4432.89	-180.15	0.63	9.69	180.06	150056.85	2003853.63	
4515.00	48.60	181.10	4454.61	-203.64	0.00	8.69	203.55	150033.36	2003853.00	
4546.00	50.90	180.60	4474.63	-227.29	-0.35	7.52	227.21	150009.71	2003852.65	
4577.00	53.40	180.40	4493.65	-251.77	-0.56	8.08	251.68	149985.23	2003852.44	
4609.00	56.80	180.00	4511.96	-278.01	-0.65	10.67	277.91	149958.99	2003852.35	
4640.00	61.10	180.10	4527.95	-304.56	-0.67	13.87	304.45	149932.44	2003852.33	
4669.00	64.90	180.20	4541.11	-330.39	-0.74	13.11	330.28	149906.61	2003852.26	
4700.00	68.40	181.30	4553.39	-358.85	-1.12	11.75	358.73	149878.15	2003851.88	
4731.00	71.30	181.70	4564.07	-387.94	-1.88	9.43	387.83	149849.06	2003851.12	
4762.00	72.00	181.70	4573.83	-417.35	-2.75	2.26	417.25	149819.65	2003850.25	
4794.00	72.30	181.70	4583.64	-447.79	-3.66	0.94	447.71	149789.21	2003849.34	
4825.00	72.20	181.30	4593.09	-477.31	-4.43	1.27	477.24	149759.69	2003848.57	

Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
 Location: Barber County, Kansas

Date: 5-Sep-2012
 Surveys
 Page 4

Job# : 6708
 NAD27 Ks South gr elev=1379

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
4857.00	72.00	181.00	4602.93	-507.75	-5.04	1.09	507.69	149729.25	2003847.96	
4888.00	71.80	180.50	4612.56	-537.22	-5.43	1.66	537.15	149699.78	2003847.57	
4919.00	72.20	180.60	4622.14	-566.70	-5.71	1.33	566.63	149670.30	2003847.29	
4951.00	74.20	181.10	4631.39	-597.33	-6.16	6.43	597.26	149639.67	2003846.84	
4983.00	76.50	181.20	4639.48	-628.28	-6.79	7.19	628.21	149608.72	2003846.21	
5014.00	78.80	180.80	4646.11	-658.55	-7.31	7.53	658.49	149578.45	2003845.69	
5044.00	80.90	180.10	4651.40	-688.08	-7.54	7.37	688.01	149548.92	2003845.46	
5074.00	82.70	180.20	4655.67	-717.77	-7.62	6.01	717.70	149519.23	2003845.38	
5105.00	84.90	180.40	4659.02	-748.59	-7.78	7.13	748.50	149488.41	2003845.22	
5136.00	86.40	180.40	4661.37	-779.50	-8.00	4.84	779.41	149457.50	2003845.00	
5167.00	87.10	180.00	4663.13	-810.45	-8.11	2.60	810.35	149426.55	2003844.89	
5199.00	86.10	178.70	4665.03	-842.39	-7.75	5.12	842.26	149394.61	2003845.25	
5230.00	85.50	177.90	4667.30	-873.29	-6.83	3.22	873.13	149363.71	2003846.17	
5261.00	86.00	177.10	4669.60	-904.18	-5.48	3.04	903.96	149332.82	2003847.52	
5290.00	86.90	177.50	4671.39	-933.09	-4.12	3.40	932.82	149303.91	2003848.88	
5322.00	87.30	177.10	4673.01	-965.01	-2.61	1.77	964.69	149271.99	2003850.39	
5393.00	85.90	177.10	4677.22	-1035.80	0.97	1.97	1035.34	149201.21	2003853.97	
5422.00	85.60	177.30	4679.37	-1064.68	2.39	1.24	1064.17	149172.32	2003855.39	
5454.00	85.60	176.90	4681.83	-1096.55	4.00	1.25	1095.98	149140.46	2003857.00	
5484.00	85.10	176.60	4684.26	-1126.40	5.70	1.94	1125.77	149110.60	2003858.70	
5516.00	84.50	177.50	4687.16	-1158.22	7.34	3.37	1157.53	149078.78	2003860.34	
5547.00	85.40	178.70	4689.89	-1189.09	8.36	4.83	1188.35	149047.91	2003861.36	
5578.00	86.30	179.70	4692.13	-1220.00	8.79	4.33	1219.24	149017.00	2003861.79	
5610.00	87.00	180.10	4694.00	-1251.95	8.85	2.52	1251.17	148985.05	2003861.85	
5641.00	87.80	180.60	4695.41	-1282.91	8.66	3.04	1282.13	148954.09	2003861.66	
5670.00	88.30	180.80	4696.39	-1311.89	8.30	1.86	1311.11	148925.11	2003861.30	
5702.00	87.80	181.30	4697.48	-1343.87	7.72	2.21	1343.09	148893.13	2003860.72	
5731.00	87.40	180.90	4698.70	-1372.84	7.16	1.95	1372.06	148864.16	2003860.16	
5760.00	88.20	181.60	4699.81	-1401.81	6.53	3.66	1401.04	148835.19	2003859.53	
5790.00	89.20	182.50	4700.49	-1431.78	5.46	4.48	1431.03	148805.22	2003858.46	

Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
 Location: Barber County, Kansas

Date: 5-Sep-2012
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 NAD27 Ks South gr elev=1379

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/S (feet)	E/W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
5821.00	89.60	182.60	4700.81	-1462.75	4.08	1.33	1462.03	148774.25	2003857.08	
5850.00	89.70	182.60	4700.99	-1491.72	2.76	0.34	1491.02	148745.28	2003855.76	
5882.00	89.60	182.30	4701.19	-1523.69	1.39	0.99	1523.02	148713.31	2003854.39	
5913.00	88.80	182.40	4701.62	-1554.66	0.12	2.60	1554.01	148682.34	2003853.12	
5945.00	88.50	182.20	4702.37	-1586.63	-1.16	1.13	1586.00	148650.37	2003851.84	
5974.00	88.80	182.00	4703.06	-1615.60	-2.22	1.24	1614.99	148621.40	2003850.78	
6003.00	89.30	181.40	4703.54	-1644.58	-3.08	2.69	1643.99	148592.42	2003849.92	
6033.00	90.30	181.20	4703.64	-1674.57	-3.76	3.40	1673.99	148562.43	2003849.24	
6062.00	90.50	180.80	4703.44	-1703.57	-4.27	1.54	1702.98	148533.43	2003848.73	
6092.00	90.50	181.00	4703.18	-1733.56	-4.74	0.67	1732.98	148503.44	2003848.26	
6122.00	90.20	180.30	4703.00	-1763.56	-5.08	2.54	1762.98	148473.44	2003847.92	
6152.00	89.80	180.00	4703.00	-1793.56	-5.16	1.67	1792.97	148443.44	2003847.84	
6183.00	89.20	179.70	4703.27	-1824.56	-5.08	2.16	1823.95	148412.44	2003847.92	
6214.00	90.60	179.60	4703.32	-1855.56	-4.89	4.53	1854.93	148381.44	2003848.11	
6246.00	89.80	179.80	4703.21	-1887.56	-4.72	2.58	1886.91	148349.44	2003848.28	
6277.00	89.20	179.80	4703.48	-1918.56	-4.61	1.94	1917.89	148318.45	2003848.39	
6309.00	88.90	180.00	4704.01	-1950.55	-4.56	1.13	1949.87	148286.45	2003848.44	
6340.00	90.60	180.50	4704.14	-1981.55	-4.69	5.72	1980.86	148255.45	2003848.31	
6369.00	90.50	180.60	4703.87	-2010.55	-4.97	0.49	2009.86	148226.45	2003848.03	
6402.00	89.50	180.60	4703.87	-2043.54	-5.32	3.03	2042.85	148193.46	2003847.68	
6433.00	88.90	180.10	4704.30	-2074.54	-5.51	2.52	2073.84	148162.46	2003847.49	
6464.00	89.00	179.80	4704.87	-2105.53	-5.48	1.02	2104.82	148131.47	2003847.52	
6495.00	89.10	180.00	4705.38	-2136.53	-5.42	0.72	2135.80	148100.47	2003847.58	
6526.00	89.20	180.20	4705.84	-2167.53	-5.48	0.72	2166.79	148069.47	2003847.52	
6557.00	88.40	180.10	4706.49	-2198.52	-5.56	2.60	2197.77	148038.48	2003847.44	
6588.00	88.20	180.50	4707.41	-2229.51	-5.72	1.44	2228.75	148007.50	2003847.28	
6619.00	88.00	180.60	4708.44	-2260.49	-6.02	0.72	2259.72	147976.51	2003846.98	
6650.00	88.50	180.90	4709.38	-2291.47	-6.43	1.88	2290.70	147945.53	2003846.57	
6682.00	88.90	181.30	4710.11	-2323.46	-7.04	1.77	2322.70	147913.55	2003845.96	
6713.00	89.00	180.90	4710.68	-2354.44	-7.63	1.33	2353.69	147882.56	2003845.37	

Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
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MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
6744.00	89.40	180.90	4711.11	-2385.44	-8.12	1.29	2384.68	147851.56	2003844.88	
6775.00	89.40	181.00	4711.44	-2416.43	-8.64	0.32	2415.68	147820.57	2003844.36	
6806.00	88.90	180.30	4711.90	-2447.43	-8.99	2.77	2446.67	147789.57	2003844.01	
6836.00	88.00	179.80	4712.71	-2477.41	-9.01	3.43	2476.65	147759.59	2003843.99	
6867.00	87.80	179.80	4713.84	-2508.39	-8.90	0.65	2507.61	147728.61	2003844.10	
6898.00	87.90	179.30	4715.01	-2539.37	-8.66	1.64	2538.57	147697.63	2003844.34	
6929.00	88.20	179.40	4716.06	-2570.35	-8.31	1.02	2569.52	147666.65	2003844.69	
6959.00	88.20	179.60	4717.00	-2600.33	-8.05	0.67	2599.49	147636.67	2003844.95	
6990.00	88.10	179.70	4718.00	-2631.32	-7.86	0.46	2630.45	147605.68	2003845.14	
7021.00	87.80	179.80	4719.11	-2662.30	-7.72	1.02	2661.42	147574.70	2003845.28	
7053.00	88.20	179.60	4720.23	-2694.28	-7.56	1.40	2693.38	147542.72	2003845.44	
7083.00	89.20	179.40	4720.91	-2724.27	-7.29	3.40	2723.35	147512.73	2003845.71	
7113.00	89.10	179.30	4721.36	-2754.26	-6.95	0.47	2753.32	147482.74	2003846.05	
7145.00	89.80	179.00	4721.66	-2786.26	-6.48	2.38	2785.29	147450.74	2003846.52	
7177.00	89.50	179.40	4721.86	-2818.25	-6.03	1.56	2817.26	147418.75	2003846.97	
7206.00	88.40	179.10	4722.39	-2847.25	-5.65	3.93	2846.23	147389.75	2003847.35	
7235.00	87.70	179.60	4723.38	-2876.23	-5.32	2.97	2875.19	147360.77	2003847.68	
7264.00	88.20	179.40	4724.41	-2905.21	-5.07	1.86	2904.15	147331.79	2003847.93	
7295.00	89.10	180.00	4725.14	-2936.20	-4.91	3.49	2935.12	147300.80	2003848.09	
7326.00	89.00	180.40	4725.66	-2967.19	-5.02	1.33	2966.11	147269.81	2003847.98	
7356.00	89.30	180.20	4726.10	-2997.19	-5.17	1.20	2996.10	147239.81	2003847.83	
7385.00	89.70	179.90	4726.36	-3026.19	-5.20	1.72	3025.08	147210.81	2003847.80	
7417.00	89.40	179.50	4726.61	-3058.19	-5.03	1.56	3057.06	147178.81	2003847.97	
7449.00	88.40	178.90	4727.22	-3090.18	-4.59	3.64	3089.03	147146.82	2003848.41	
7478.00	88.00	179.10	4728.13	-3119.16	-4.08	1.54	3117.98	147117.84	2003848.92	
7509.00	88.60	179.50	4729.05	-3150.14	-3.70	2.33	3148.94	147086.86	2003849.30	
7540.00	88.70	179.60	4729.78	-3181.13	-3.46	0.46	3179.91	147055.87	2003849.54	
7570.00	89.00	179.50	4730.38	-3211.13	-3.22	1.05	3209.89	147025.87	2003849.78	
7602.00	89.10	179.80	4730.92	-3243.12	-3.03	0.99	3241.86	146993.88	2003849.97	
7631.00	88.70	179.70	4731.47	-3272.12	-2.90	1.42	3270.84	146964.89	2003850.10	

Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
 Location: Barber County, Kansas

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MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
7662.00	88.20	179.40	4732.31	-3303.10	-2.66	1.88	3301.81	146933.90	2003850.34	
7693.00	88.50	179.50	4733.20	-3334.09	-2.36	1.02	3332.77	146902.91	2003850.64	
7724.00	89.30	179.20	4733.80	-3365.08	-2.01	2.76	3363.74	146871.92	2003850.99	
7753.00	89.90	179.50	4734.00	-3394.08	-1.68	2.31	3392.72	146842.92	2003851.32	
7783.00	89.10	179.40	4734.26	-3424.08	-1.39	2.69	3422.70	146812.93	2003851.61	
7814.00	89.50	179.80	4734.64	-3455.07	-1.17	1.82	3453.67	146781.93	2003851.83	
7844.00	89.80	180.10	4734.82	-3485.07	-1.15	1.41	3483.66	146751.93	2003851.85	
7874.00	90.30	179.90	4734.80	-3515.07	-1.15	1.80	3513.65	146721.93	2003851.85	
7906.00	89.10	179.80	4734.97	-3547.07	-1.06	3.76	3545.63	146689.93	2003851.94	
7938.00	88.80	179.30	4735.55	-3579.06	-0.81	1.82	3577.60	146657.94	2003852.19	
7969.00	89.00	179.30	4736.15	-3610.06	-0.43	0.65	3608.57	146626.95	2003852.57	
8000.00	89.40	178.90	4736.58	-3641.05	0.05	1.82	3639.54	146595.95	2003853.05	
8030.00	89.90	179.40	4736.76	-3671.04	0.50	2.36	3669.51	146565.96	2003853.50	
8061.00	91.80	178.80	4736.30	-3702.04	0.98	6.43	3700.47	146534.97	2003853.98	
8093.00	91.80	178.80	4735.30	-3734.01	1.65	0.00	3732.42	146502.99	2003854.65	
8124.00	91.20	178.10	4734.49	-3764.99	2.49	2.97	3763.36	146472.01	2003855.49	
8155.00	90.60	178.60	4734.00	-3795.97	3.38	2.52	3794.30	146441.03	2003856.38	
8187.00	86.20	178.80	4734.89	-3827.95	4.11	13.76	3826.24	146409.06	2003857.11	
8219.00	88.40	179.60	4736.40	-3859.90	4.56	7.31	3858.17	146377.10	2003857.56	
8250.00	89.10	180.40	4737.08	-3890.90	4.56	3.43	3889.15	146346.10	2003857.56	
8281.00	86.80	180.60	4738.19	-3921.87	4.29	7.45	3920.12	146315.13	2003857.29	
8312.00	86.80	180.50	4739.92	-3952.82	3.99	0.32	3951.07	146284.18	2003856.99	
8342.00	87.60	180.30	4741.38	-3982.79	3.78	2.75	3981.03	146254.21	2003856.78	
8374.00	88.40	180.70	4742.50	-4014.77	3.50	2.79	4013.00	146222.24	2003856.50	
8404.00	89.50	180.70	4743.05	-4044.76	3.13	3.67	4042.99	146192.24	2003856.13	
8436.00	89.60	180.90	4743.30	-4076.75	2.69	0.70	4074.99	146160.25	2003855.69	
8467.00	89.40	181.50	4743.57	-4107.75	2.04	2.04	4105.98	146129.25	2003855.04	
8497.00	89.40	180.90	4743.88	-4137.74	1.41	2.00	4135.98	146099.26	2003854.41	
8528.00	89.90	180.90	4744.07	-4168.73	0.92	1.61	4166.98	146068.27	2003853.92	
8560.00	88.50	180.50	4744.52	-4200.73	0.53	4.55	4198.97	146036.27	2003853.53	

Calmena Energy Services

Company: Woolsey Operating Company
 Well: Miller Diel #1H
 Location: Barber County, Kansas

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 NAD27 Ks South gr elev=1379

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 181.65° Az (feet)	Grid Y	Grid X	Comments
8591.00	88.50	180.20	4745.33	-4231.72	0.34	0.97	4229.95	146005.29	2003853.34	
8623.00	88.60	180.10	4746.14	-4263.71	0.26	0.44	4261.93	145973.30	2003853.26	
8653.00	90.00	180.60	4746.51	-4293.70	0.08	4.96	4291.92	145943.30	2003853.08	
8684.00	92.20	180.50	4745.91	-4324.69	-0.22	7.10	4322.91	145912.31	2003852.78	
8715.00	93.00	180.40	4744.51	-4355.66	-0.47	2.60	4353.87	145881.34	2003852.53	
8747.00	92.20	180.30	4743.06	-4387.63	-0.66	2.52	4385.83	145849.38	2003852.34	
8778.00	91.30	180.10	4742.11	-4418.61	-0.77	2.97	4416.80	145818.39	2003852.23	
8810.00	89.70	179.90	4741.83	-4450.61	-0.77	5.04	4448.79	145786.39	2003852.23	
8840.00	89.80	179.70	4741.96	-4480.61	-0.66	0.75	4478.77	145756.39	2003852.34	
8869.00	89.60	179.20	4742.11	-4509.61	-0.39	1.86	4507.75	145727.40	2003852.61	
8900.00	89.60	179.10	4742.33	-4540.60	0.07	0.32	4538.72	145696.40	2003853.07	
8930.00	90.00	179.40	4742.43	-4570.60	0.47	1.67	4568.69	145666.40	2003853.47	
8959.00	89.90	179.00	4742.46	-4599.60	0.87	1.42	4597.66	145637.40	2003853.87	
8989.00	89.80	179.40	4742.54	-4629.59	1.29	1.37	4627.64	145607.41	2003854.29	
9018.00	89.90	179.50	4742.61	-4658.59	1.57	0.49	4656.61	145578.41	2003854.57	
9047.00	90.20	179.50	4742.59	-4687.59	1.82	1.03	4685.59	145549.41	2003854.82	
9118.00	90.20	179.50	4742.34	-4758.59	2.44	0.00	4756.54	145478.41	2003855.44	Survey projected