

**CONFIDENTIAL****WELL COMPLETION FORM****WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # 34574  
 Name: Shell Gulf of Mexico Inc.  
 Address 1: 150 N DAIRY-ASHFORD (77079)  
 Address 2: PO BOX 576 (77001-0576)  
 City: HOUSTON State: TX Zip: 77001 + 0576  
 Contact Person: Damonica Pierson  
 Phone: ( 832 ) 337-2172  
 CONTRACTOR: License # 34718  
 Name: Nabors Drilling USA, LP  
 Wellsite Geologist: Bess Colberg  
 Purchaser:

## Designate Type of Completion:

- New Well  Re-Entry  Workover
- Oil  WSW  SWD  SLOW  
 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 #:

08/29/2012	10/08/2012	12/28/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-077-21847-01-00

Spot Description:  
 W2 NE NE NW Sec. 8 Twp. 34 S. R. 7  East  West  
 330 Feet from  North /  South Line of Section  
 2165 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

 NE  NW  SE  SW

County: Harper

Lease Name: Harris Farms 3407 Well #: 8-2H

Field Name: Wildcat

Producing Formation: Mississippi

Elevation: Ground: 1347 Kelly Bushing: 1375

Total Depth: 9095 Plug Back Total Depth:

Amount of Surface Pipe Set and Cemented at: 0 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: 0 ppm Fluid volume: 0 bbls

Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Plumb Thicket Landfill

Lease Name: N/A License #: 99999

Quarter SW Sec. 4 Twp. 31 S. R. 6  East  West

County: Harper Permit #: KDHE Permit No. 0842

**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: 07/06/2012  
 Confidential Release Date:  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
 ALT  I  II  III Approved by: NAOMI JAMES Date: 01/10/2013

Pvt. Alum Cap,  
LS 1360, 0.5"  
Below Ground  
in Gravel Road  
NAD 27 Kansas South  
N: 161122.42  
E: 2113363.54

# T34S, R7W, 6th P.M.

SGOMI

Well location, HARRIS FARMS 3407 #8-2H, located as shown in the NE 1/4 NW 1/4 of Section 8, T34S, R7W, 6th P.M., Harper County, Kansas.

## BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE NORTHEAST CORNER OF SECTION 22, T33S, R7W, 6th P.M. TAKEN FROM THE ANTHONY, QUADRANGLE, KANSAS, HARPER COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 1348 FEET.

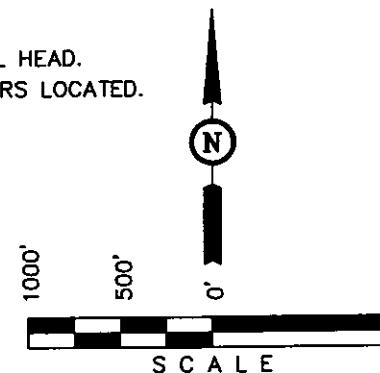
## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.

## LEGEND:

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

5/8" Rebar, 0.9"  
Below Ground in  
Gravel Road  
NAD 27 Kansas South  
N: 158477.37  
E: 2118691.32



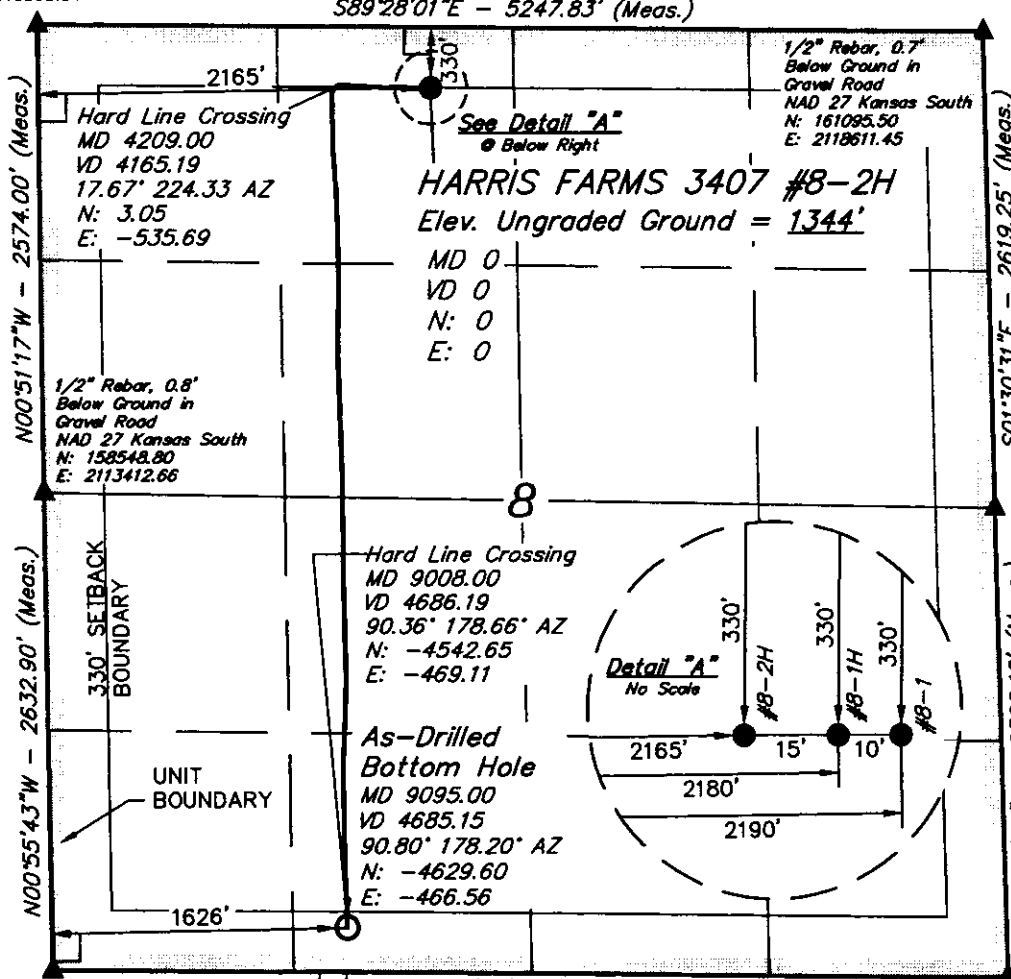
## CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Robert J. Smith*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 1559  
STATE OF KANSAS  
118-12

**UNTAH ENGINEERING & LAND SURVEYING**  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

589°28'01"E - 5247.83' (Meas.)



**HARRIS FARMS 3407 #8-2H**  
Elev. Ungraded Ground = 1344'

MD 0  
VD 0  
N: 0  
E: 0

Hard Line Crossing  
MD 9008.00  
VD 4686.19  
90.36° 178.66° AZ  
N: -4542.65  
E: -469.11

As-Drilled  
Bottom Hole  
MD 9095.00  
VD 4685.15  
90.80° 178.20° AZ  
N: -4629.60  
E: -466.56

Detail "A"  
No Scale

1" Steel Bar 3.5"  
Below Ground  
NAD 27 Kansas South  
N: 155916.35  
E: 2113466.30

3/4" Rebar, 0.5"  
Below Ground in  
Gravel Road  
NAD 27 Kansas South  
N: 155896.51  
E: 2118774.37

N89°26'20"W - 5307.99' (Meas.)

NAD 83 (#8-2H AS-DRILLED BOTTOM HOLE) LATITUDE = 37°05'41.50" (37.094861) LONGITUDE = 98°06'20.82" (98.105783)	NAD 83 (#8-2H SURFACE LOCATION) LATITUDE = 37°06'27.28" (37.107578) LONGITUDE = 98°06'15.05" (98.104181)
NAD 27 (#8-2H AS-DRILLED BOTTOM HOLE) LATITUDE = 37°05'41.42" (37.094839) LONGITUDE = 98°06'19.59" (98.105442)	NAD 27 (#8-2H SURFACE LOCATION) LATITUDE = 37°06'27.19" (37.107553) LONGITUDE = 98°06'13.82" (98.103839)
STATE PLANE NAD 27 (KANSAS SOUTH) N: 156149.28 E: 2115087.84	STATE PLANE NAD 27 (KANSAS SOUTH) N: 160780.94 E: 2119535.11

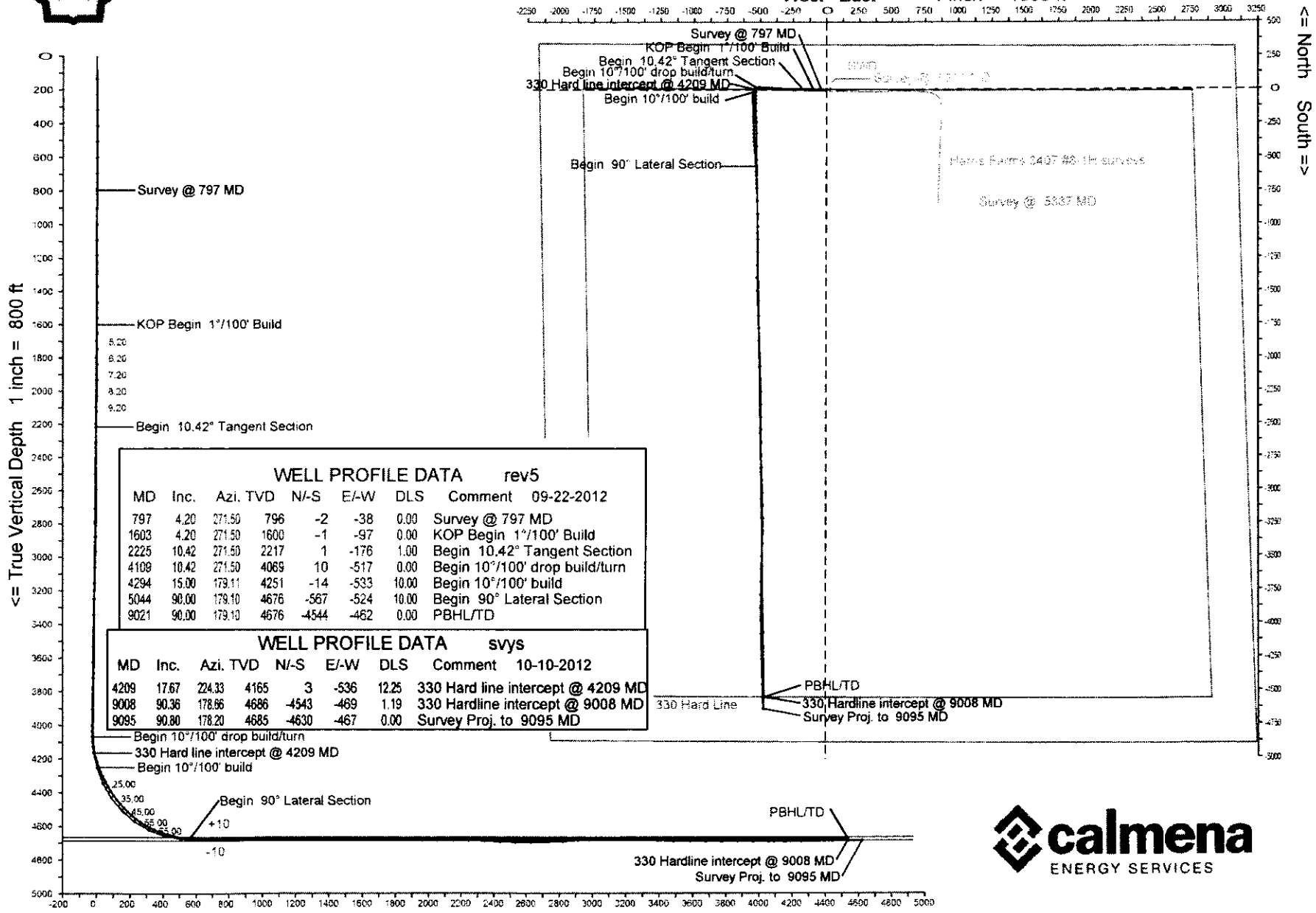
NOTE:  
AS-DRILLED WELL BORE PATH  
AND INFORMATION  
PROVIDED BY SGOMI.

SCALE 1" = 1000'	DATE SURVEYED: 10-10-12	DATE DRAWN: 11-20-12
PARTY L.S. J.P. C.C.	REFERENCES G.L.O. PLAT	
WEATHER WARM	FILE SGOMI	



# Shell Exploration and Production Company Harris Farms 3407 #8-2H (F01) Harper County, Kansas

<= West East => 1 inch = 1000 ft



WELL PROFILE DATA rev5								
MD	Inc.	Azi.	TVD	N-S	E-W	DLS	Comment	09-22-2012
797	4.20	271.50	796	-2	-38	0.00	Survey @ 797 MD	
1603	4.20	271.50	1600	-1	-97	0.00	KOP Begin 1"/100' Build	
2225	10.42	271.50	2217	1	-176	1.00	Begin 10.42° Tangent Section	
4109	10.42	271.50	4069	10	-517	0.00	Begin 10"/100' drop build/turn	
4294	15.00	179.11	4251	-14	-533	10.00	Begin 10"/100' build	
5044	90.00	179.10	4676	-567	-524	10.00	Begin 90° Lateral Section	
9021	90.00	179.10	4676	-4544	-462	0.00	PBHL/TD	

WELL PROFILE DATA svys								
MD	Inc.	Azi.	TVD	N-S	E-W	DLS	Comment	10-10-2012
4209	17.67	224.33	4165	3	-536	12.25	330 Hard line intercept @ 4209 MD	
9008	90.36	178.66	4686	-4543	-469	1.19	330 Hardline intercept @ 9008 MD	
9095	90.80	178.20	4685	-4630	-467	0.00	Survey Proj. to 9095 MD	



**Calmena Energy Services**

Company: Shell Exploration and Production Company  
 Well: Harris Farms 3407 #8-2H  
 Location: Harper County, Kansas Sect8-34S-7W

Date: 10-Oct-2012  
 Surveys  
 Page 1  
 Job#: 6718

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.1° Az (feet)	Grid Y	NAD27 KS south gr elev=1343 RKB 1370.5 Grid X	Comments
<b>Surface Location</b>								<b>160780.94</b>	<b>2115535.11</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	160780.94	2115535.11	
134.00	0.70	198.70	134.00	-0.78	-0.26	0.52	0.77	160780.16	2115534.85	
226.00	1.60	257.40	225.98	-1.59	-1.70	1.49	1.56	160779.35	2115533.41	
318.00	3.10	261.80	317.90	-2.22	-5.41	1.64	2.14	160778.72	2115529.70	
415.00	3.90	264.40	414.72	-2.92	-11.29	0.84	2.74	160778.02	2115523.82	
507.00	4.30	273.60	506.48	-3.01	-17.85	0.84	2.73	160777.93	2115517.26	
601.00	3.90	274.40	600.24	-2.54	-24.55	0.43	2.16	160778.40	2115510.56	
694.00	3.80	268.90	693.03	-2.36	-30.79	0.41	1.87	160778.58	2115504.32	
788.00	4.20	271.50	786.80	-2.33	-37.34	0.47	1.74	160778.61	2115497.77	
797.00	4.20	271.50	795.78	-2.31	-38.00	0.00	1.71	160778.63	2115497.11	
904.00	3.80	268.60	902.52	-2.29	-45.46	0.42	1.58	160778.65	2115489.65	
1000.00	3.60	271.20	998.32	-2.31	-51.66	0.27	1.50	160778.63	2115483.45	
1094.00	3.70	271.10	1092.13	-2.19	-57.64	0.11	1.28	160778.75	2115477.47	
1186.00	3.50	265.00	1183.95	-2.38	-63.40	0.47	1.38	160778.56	2115471.71	
1280.00	3.50	261.30	1277.77	-3.06	-69.10	0.24	1.97	160777.88	2115466.01	
1374.00	3.00	254.80	1371.62	-4.14	-74.31	0.66	2.97	160776.80	2115460.80	
1468.00	4.40	274.40	1465.43	-4.51	-80.28	1.99	3.25	160776.43	2115454.83	
1562.00	3.80	268.90	1559.19	-4.29	-86.99	0.76	2.92	160776.65	2115448.12	
1654.00	5.60	270.40	1650.87	-4.32	-94.52	1.96	2.83	160776.62	2115440.59	
1749.00	5.30	267.40	1745.44	-4.48	-103.54	0.44	2.86	160776.46	2115431.57	
1843.00	5.90	270.50	1838.99	-4.64	-112.71	0.71	2.87	160776.30	2115422.40	
1938.00	7.50	276.00	1933.34	-3.95	-123.76	1.81	2.00	160776.99	2115411.35	
2033.00	7.40	274.00	2027.54	-2.87	-136.03	0.29	0.74	160778.07	2115399.08	
2129.00	8.80	276.80	2122.58	-1.57	-149.49	1.51	-0.77	160779.37	2115385.62	
2225.00	10.50	274.00	2217.22	-0.09	-165.51	1.84	-2.51	160780.85	2115369.60	
2319.00	9.80	270.40	2309.75	0.56	-182.05	1.00	-3.42	160781.50	2115353.06	
2415.00	10.80	271.40	2404.20	0.84	-199.21	1.06	-3.97	160781.78	2115335.90	
2511.00	10.00	266.90	2498.63	0.61	-216.53	1.19	-4.01	160781.55	2115318.58	
2607.00	11.60	267.30	2592.92	-0.30	-234.49	1.67	-3.38	160780.64	2115300.62	
2702.00	10.70	267.00	2686.13	-1.21	-252.84	0.95	-2.76	160779.73	2115282.27	

**Calmena Energy Services**

Company: Shell Exploration and Production Company  
 Well: Harris Farms 3407 #8-2H  
 Location: Harper County, Kansas Sect8-34S-7W

Date: 10-Oct-2012  
 Surveys  
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 Job#: 6718

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.1° Az (feet)	Grid Y	NAD27 KS south gr elev=1343 RKB 1370.5 Grid X	Comments
2799.00	11.20	275.90	2781.37	-0.71	-271.21	1.82	-3.55	160780.23	2115263.90	
2894.00	10.90	273.80	2874.61	0.83	-289.35	0.53	-5.37	160781.77	2115245.76	
2990.00	10.20	270.20	2968.99	1.46	-306.90	1.00	-6.28	160782.40	2115228.21	
3086.00	10.80	279.30	3063.38	2.94	-324.28	1.83	-8.04	160783.88	2115210.83	
3181.00	10.30	276.30	3156.78	5.31	-341.51	0.78	-10.68	160786.25	2115193.60	
3276.00	10.40	273.10	3250.23	6.71	-358.51	0.61	-12.34	160787.65	2115176.60	
3372.00	10.80	275.30	3344.60	8.01	-376.12	0.59	-13.92	160788.95	2115158.99	
3468.00	10.60	273.50	3438.93	9.38	-393.89	0.41	-15.57	160790.32	2115141.22	
3564.00	12.00	275.00	3533.06	10.79	-412.64	1.49	-17.27	160791.73	2115122.47	
3659.00	11.40	272.20	3626.09	12.01	-431.86	0.87	-18.79	160792.95	2115103.25	
3756.00	10.80	268.70	3721.28	12.17	-450.53	0.93	-19.25	160793.11	2115084.58	
3851.00	11.10	275.90	3814.55	12.91	-468.53	1.47	-20.27	160793.85	2115066.58	
3946.00	10.40	273.30	3907.88	14.34	-486.18	0.90	-21.98	160795.28	2115048.93	
4042.00	9.80	276.00	4002.40	15.70	-502.96	0.80	-23.59	160796.64	2115032.15	
4074.00	9.30	267.60	4033.95	15.87	-508.25	4.62	-23.85	160796.81	2115026.86	
4106.00	10.60	259.70	4065.47	15.24	-513.73	5.88	-23.31	160796.18	2115021.38	
4138.00	13.10	249.80	4096.79	13.46	-520.03	10.04	-21.63	160794.40	2115015.08	
4169.00	15.40	239.00	4126.84	10.12	-526.86	11.31	-18.40	160791.06	2115008.25	
4201.00	17.20	227.20	4157.56	4.72	-533.97	11.75	-13.11	160785.66	2115001.14	
4209.00	17.67	224.33	4165.19	3.05	-535.69	12.25	-11.46	160783.99	2114999.42	330 Hard line intercept
4233.00	19.30	216.60	4187.96	-2.74	-540.60	12.25	-5.75	160778.20	2114994.51	
4265.00	19.50	204.10	4218.16	-11.87	-545.94	12.97	3.29	160769.07	2114989.17	
4297.00	22.40	196.00	4248.04	-22.61	-549.80	12.79	13.97	160758.33	2114985.31	
4329.00	23.90	187.20	4277.48	-34.91	-552.29	11.77	26.23	160746.03	2114982.82	
4361.00	24.80	181.20	4306.63	-48.05	-553.25	8.22	39.35	160732.89	2114981.86	
4393.00	27.30	179.60	4335.38	-62.10	-553.34	8.11	53.40	160718.84	2114981.77	
4425.00	30.00	179.10	4363.46	-77.44	-553.16	8.47	68.74	160703.50	2114981.95	
4456.00	32.10	178.10	4390.02	-93.42	-552.77	6.98	84.73	160687.52	2114982.34	
4489.00	35.10	177.40	4417.50	-111.67	-552.04	9.17	102.98	160669.27	2114983.07	
4520.00	38.90	177.80	4442.25	-130.30	-551.27	12.28	121.63	160650.64	2114983.84	

**Calmena Energy Services**

Company: Shell Exploration and Production Company  
 Well: Harris Farms 3407 #8-2H  
 Location: Harper County, Kansas Sect8-34S-7W

Date: 10-Oct-2012  
 Surveys  
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 Job#: 6718

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/-S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.1° Az (feet)	Grid Y	Grid X	Comments
4553.00	42.00	178.00	4467.36	-151.70	-550.48	9.40	143.03	160629.24	2114984.63	
4584.00	44.50	177.90	4489.94	-172.92	-549.72	8.07	164.27	160608.02	2114985.39	
4616.00	46.00	178.70	4512.47	-195.64	-549.05	5.01	186.99	160585.30	2114986.06	
4648.00	49.10	179.60	4534.06	-219.24	-548.70	9.91	210.60	160561.70	2114986.41	
4680.00	52.40	179.40	4554.31	-244.02	-548.49	10.32	235.37	160536.92	2114986.62	
4712.00	56.50	179.30	4572.91	-270.05	-548.19	12.82	261.40	160510.89	2114986.92	
4744.00	60.10	178.60	4589.72	-297.26	-547.69	11.40	288.62	160483.68	2114987.42	
4776.00	62.60	177.70	4605.06	-325.33	-546.78	8.19	316.70	160455.61	2114988.33	
4808.00	65.40	176.90	4619.09	-354.06	-545.42	9.03	345.44	160426.88	2114989.69	
4840.00	68.90	175.80	4631.51	-383.48	-543.54	11.39	374.89	160397.46	2114991.57	
4872.00	72.60	175.40	4642.06	-413.60	-541.22	11.62	405.04	160367.34	2114993.89	
4903.00	75.80	175.10	4650.50	-443.32	-538.75	10.36	434.80	160337.62	2114996.36	
4923.00	78.30	175.20	4654.98	-462.74	-537.11	12.51	454.24	160318.20	2114998.00	
5001.00	82.60	176.80	4667.92	-539.45	-531.75	5.87	531.03	160241.49	2115003.36	
5033.00	83.40	177.80	4671.82	-571.17	-530.25	3.98	562.78	160209.77	2115004.86	
5065.00	84.50	177.80	4675.19	-602.97	-529.03	3.44	594.59	160177.97	2115006.08	
5097.00	85.60	177.80	4677.96	-634.83	-527.81	3.44	626.46	160146.11	2115007.30	
5128.00	88.00	177.70	4679.69	-665.75	-526.59	7.75	657.40	160115.19	2115008.52	
5160.00	90.50	177.90	4680.10	-697.73	-525.36	7.84	689.39	160083.21	2115009.75	
5192.00	91.40	177.90	4679.57	-729.70	-524.19	2.81	721.38	160051.24	2115010.92	
5288.00	92.10	177.40	4676.64	-825.57	-520.26	0.90	817.30	159955.37	2115014.85	
5383.00	90.80	178.80	4674.24	-920.49	-517.11	2.01	912.25	159860.45	2115018.00	
5478.00	90.60	179.20	4673.08	-1015.46	-515.45	0.47	1007.24	159765.48	2115019.66	
5574.00	90.70	180.20	4671.99	-1111.46	-514.95	1.05	1103.23	159669.48	2115020.16	
5670.00	89.90	180.30	4671.49	-1207.45	-515.37	0.84	1199.21	159573.49	2115019.74	
5766.00	89.60	181.50	4671.91	-1303.44	-516.88	1.29	1295.16	159477.50	2115018.23	
5861.00	88.90	180.50	4673.15	-1398.41	-518.53	1.28	1390.10	159382.53	2115016.58	
5957.00	89.50	177.50	4674.49	-1494.38	-516.86	3.19	1486.08	159286.56	2115018.25	
6052.00	90.30	178.10	4674.66	-1589.31	-513.21	1.05	1581.05	159191.63	2115021.90	
6147.00	88.30	177.70	4675.82	-1684.23	-509.73	2.15	1676.02	159096.71	2115025.38	

NAD27 KS south gr elev=1343 RKB 1370.5

**Calmena Energy Services**

Company: Shell Exploration and Production Company  
 Well: Harris Farms 3407 #8-2H  
 Location: Harper County, Kansas Sect8-34S-7W

Date: 10-Oct-2012  
 Surveys  
 Page 4  
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MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.1° Az (feet)	Grid Y	NAD27 KS south gr elev=1343 RKB 1370.5 Grid X	Comments
6241.00	88.20	178.70	4678.69	-1778.14	-506.78	1.07	1769.96	159002.80	2115028.33	
6336.00	88.60	177.90	4681.34	-1873.06	-503.96	0.94	1864.91	158907.88	2115031.15	
6432.00	89.00	177.70	4683.35	-1968.97	-500.28	0.47	1960.87	158811.97	2115034.83	
6527.00	91.20	177.60	4683.18	-2063.88	-496.38	2.32	2055.83	158717.06	2115038.73	
6623.00	89.30	178.10	4682.77	-2159.81	-492.78	2.05	2151.80	158621.13	2115042.33	
6718.00	89.10	179.20	4684.09	-2254.77	-490.54	1.18	2246.79	158526.17	2115044.57	
6814.00	87.00	180.00	4687.36	-2350.71	-489.87	2.34	2342.72	158430.23	2115045.24	
6909.00	86.90	179.60	4692.41	-2445.57	-489.54	0.43	2437.58	158335.37	2115045.57	
7004.00	89.50	179.60	4695.40	-2540.52	-488.88	2.74	2532.52	158240.43	2115046.23	
7101.00	90.20	179.20	4695.65	-2637.51	-487.86	0.83	2629.52	158143.43	2115047.25	
7196.00	91.00	178.70	4694.66	-2732.49	-486.12	0.99	2724.51	158048.45	2115048.99	
7291.00	93.50	178.30	4690.93	-2827.37	-483.64	2.66	2819.43	157953.57	2115051.47	
7386.00	94.10	178.70	4684.63	-2922.13	-481.16	0.76	2914.21	157858.81	2115053.95	
7482.00	94.70	178.40	4677.27	-3017.82	-478.74	0.70	3009.93	157763.12	2115056.37	
7578.00	91.00	178.40	4672.49	-3113.64	-476.06	3.85	3105.78	157667.30	2115059.05	
7674.00	87.80	178.70	4673.50	-3209.60	-473.63	3.35	3201.76	157571.35	2115061.48	
7770.00	85.50	181.20	4679.11	-3305.42	-473.54	3.54	3297.57	157475.52	2115061.57	
7866.00	86.80	181.60	4685.55	-3401.17	-475.88	1.42	3393.28	157379.77	2115059.23	
7962.00	89.50	182.10	4688.65	-3497.06	-478.98	2.86	3489.11	157283.88	2115056.13	
8057.00	90.20	182.10	4688.90	-3592.00	-482.46	0.74	3583.97	157188.95	2115052.65	
8153.00	89.60	181.30	4689.07	-3687.95	-485.31	1.04	3679.87	157092.99	2115049.80	
8249.00	90.40	179.90	4689.07	-3783.94	-486.32	1.68	3775.84	156997.00	2115048.79	
8345.00	89.80	179.30	4688.90	-3879.94	-485.65	0.88	3871.83	156901.00	2115049.46	
8441.00	89.10	178.90	4689.82	-3975.92	-484.14	0.84	3967.83	156805.02	2115050.97	
8536.00	89.30	179.00	4691.15	-4070.90	-482.40	0.24	4062.82	156710.04	2115052.71	
8632.00	90.40	179.20	4691.40	-4166.88	-480.89	1.16	4158.82	156614.06	2115054.22	
8727.00	91.30	178.50	4689.99	-4261.85	-478.98	1.20	4253.80	156519.09	2115056.13	
8823.00	90.30	177.40	4688.65	-4357.78	-475.55	1.55	4349.77	156423.16	2115059.56	
8918.00	91.20	178.00	4687.41	-4452.69	-471.74	1.14	4444.73	156328.25	2115063.37	
9008.00	90.36	178.66	4686.19	-4542.65	-469.11	1.19	4534.72	156238.29	2115066.00	330 Hardline intercept

**Calmena Energy Services**

Company: Shell Exploration and Production Company  
 Well: Harris Farms 3407 #8-2H  
 Location: Harper County, Kansas Sect8-34S-7W

Date: 10-Oct-2012  
 Surveys  
 Page 5  
 Job# : 6718

NAD27 KS south gr elev=1343 RKB 1370.5  
 Grid X      Comments

MD (feet)	Inclination (degrees)	Azimuth (degrees)	TVD RKB (feet)	N/S (feet)	E/-W (feet)	DLS (deg/100')	VS @ 179.1° Az (feet)	Grid Y	Grid X	Comments
9014.00	90.30	178.70	4686.15	-4548.64	-468.97	1.19	4540.72	156232.30	2115066.14	
9044.00	90.80	178.20	4685.86	-4578.63	-468.16	2.36	4570.71	156202.31	2115066.95	
9095.00	90.80	178.20	4685.15	-4629.60	-466.56	0.00	4621.70	156151.34	2115068.55	Survey Proj. to 9095 MD