

A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

October 10, 2012

Devon Energy Production Co., L.P.
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010



Attn: Patti Riechers

15-40220

Re: SPICA 25 Federal No. 003H

Please find enclosed a copy of the survey from 0.00' to 7154.00' ran on the above referenced well.

If I can be of any further service please do not hesitate to call me at 800-606-4876.

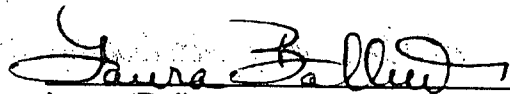
Sincerely,


Keith Havelka
Operations

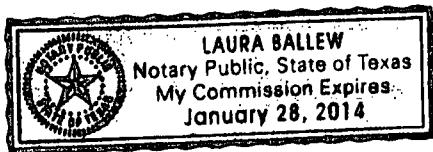
STATE OF TEXAS §

COUNTY OF NUECES §

This instrument was acknowledged before me on the 11th day of October, A.D., 2012, by Keith Havelka.



Laura Ballew
Notary Public, State of Texas





Company: Devon Energy Production Co., LP
 Lease/Well: SPICA 25 Federal / No. 003H
 Location: S25 T19s R31e
 Rig Name: HP 300
 State/County: New Mexico / Eddy
 Latitude: 32.63, Longitude: -103.83
 GRID North is 0.27 Degrees East of True North
 VS-Azi: 0.00 Degrees



Measured Depth FT
 Incl Ang Deg
 1900.00 2
 2000.00 2
 2100.00 2
 2200.00 2
 2300.00 1
 2400.00 1
 2500.00 1
 2600.00 1
 2700.00 1
 2800.00 1
 2900.00 1
 3000.00 1
 3100.00 1
 3200.00 1
 3300.00 1
 3400.00 1
 3500.00 1
 3600.00 1
 3700.00 1
 3800.00 1
 3900.00 1
 4000.00 1
 4100.00 1
 4200.00 1
 4300.00 1
 4400.00 1
 4500.00 1
 4600.00 1
 4700.00 1
 4800.00 1
 4900.00 1
 5000.00 1
 5100.00 1
 5200.00 1
 5300.00 1
 5400.00 1
 5500.00 1
 5600.00 1
 5700.00 1

RKB : 26.2'

DRILLOG HA GYRO SURVEY CALCULATIONS
 Filename: ...25 federal #3h gyro survey.ut
 Minimum Curvature Method
 Report Date/Time: 10/10/2012 / 13:40
 Vaughn Energy Services
 Gardendale, Texas
 432-563-5444
 Surveyor: Dustin Wedel
 SPICA 25 Federal No. 003H / API 30-015-40220

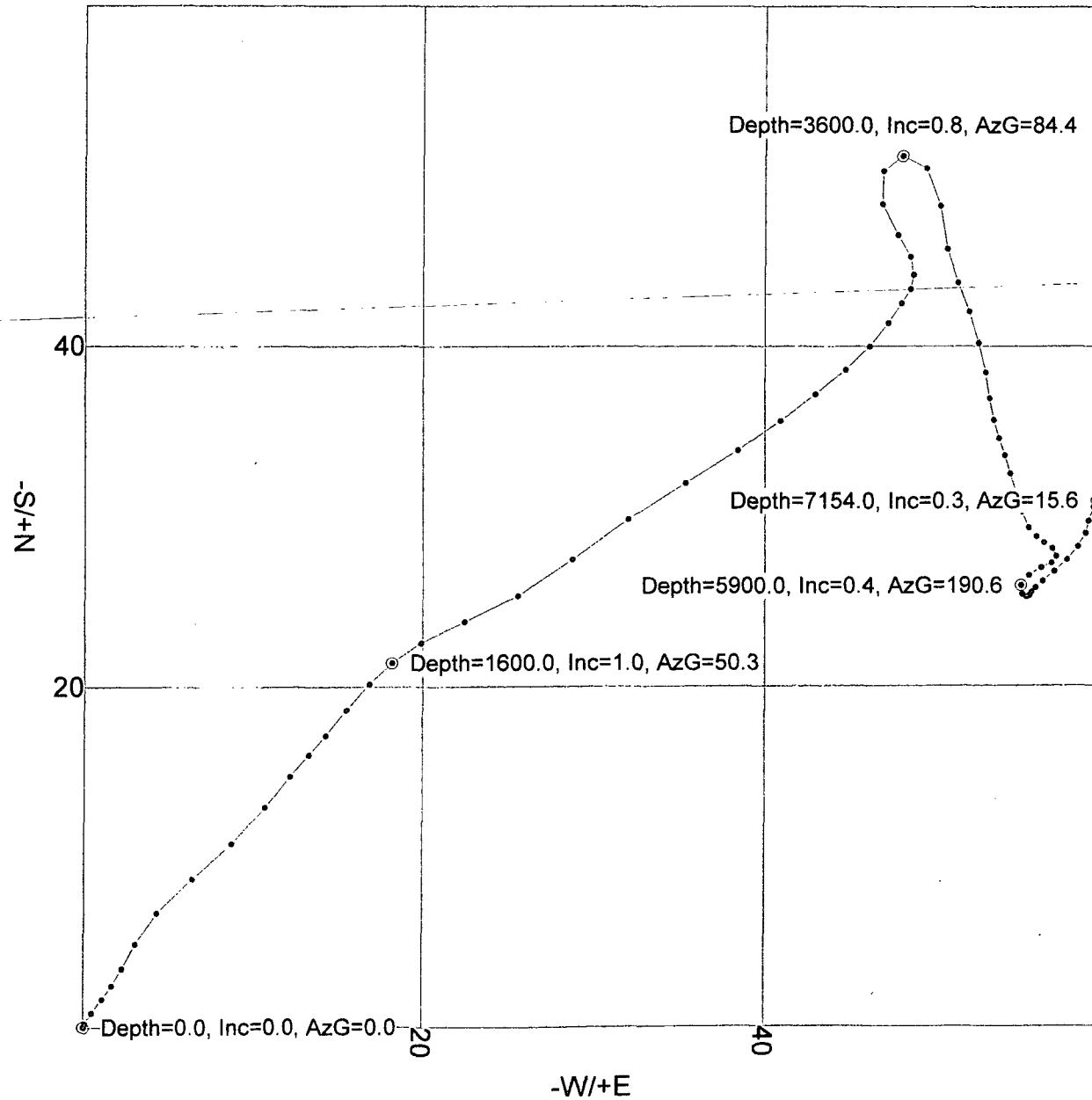


Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100	
3800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****	
3900.00	100.00	0.29	19.74	100.00	0.24	0.09	0.24	0.26	19.74	0.29
4000.00	200.00	0.59	39.49	200.00	0.88	0.50	0.88	1.01	29.62	0.33
4100.00	300.00	0.57	36.21	299.99	1.67	1.12	1.67	2.01	33.74	0.04
4200.00	400.00	0.55	32.93	399.99	2.47	1.67	2.47	2.98	34.02	0.04
4300.00	500.00	0.81	30.23	499.98	3.48	2.28	3.48	4.17	33.25	0.26
4400.00	600.00	1.07	27.54	599.97	4.92	3.07	4.92	5.80	31.97	0.26
4500.00	700.00	1.47	39.59	699.94	6.73	4.32	6.73	8.00	32.67	0.48
4600.00	800.00	1.87	51.64	799.90	8.73	6.41	8.73	10.84	36.29	0.53
4700.00	900.00	1.73	45.49	899.85	10.80	8.77	10.80	13.91	39.06	0.24
4800.00	1000.00	1.58	39.34	999.81	12.92	10.71	12.92	16.79	39.66	0.23
4900.00	1100.00	1.16	40.59	1099.78	14.76	12.25	14.76	19.18	39.69	0.42
5000.00	1200.00	0.74	41.84	1199.77	16.01	13.33	16.01	20.83	39.80	0.42
5100.00	1300.00	0.98	40.04	1299.75	17.14	14.31	17.14	22.33	39.86	0.24
5200.00	1400.00	1.22	38.24	1399.74	18.63	15.52	18.63	24.25	39.80	0.25
5300.00	1500.00	1.11	44.29	1499.72	20.16	16.86	20.16	26.28	39.90	0.17
5400.00	1600.00	0.99	50.35	1599.70	21.40	18.19	21.40	28.09	40.37	0.16
5500.00	1700.00	1.41	59.20	1699.68	22.58	19.92	22.58	30.11	41.41	0.46
5600.00	1800.00	1.84	68.05	1799.64	23.81	22.46	23.81	32.73	43.33	0.49

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	2.08	60.23	1899.58	25.31	25.53	25.31	35.95	45.24	0.36
2000.00	2.33	52.41	1999.50	27.46	28.72	27.46	39.73	46.28	0.39
2100.00	2.29	55.92	2099.42	29.82	31.99	29.82	43.73	47.01	0.15
2200.00	2.25	59.43	2199.34	31.94	35.34	31.94	47.64	47.89	0.14
2300.00	1.91	56.57	2299.28	33.86	38.42	33.86	51.21	48.61	0.36
2400.00	1.56	53.71	2399.23	35.58	40.91	35.58	54.22	48.98	0.36
2500.00	1.39	51.27	2499.20	37.15	42.95	37.15	56.78	49.14	0.18
2600.00	1.21	48.84	2599.17	38.60	44.69	38.60	59.05	49.18	0.18
2700.00	1.07	41.72	2699.15	39.99	46.11	39.99	61.04	49.06	0.20
2800.00	0.93	34.61	2799.14	41.36	47.19	41.36	62.75	48.77	0.19
2900.00	0.69	32.96	2899.13	42.53	47.97	42.53	64.11	48.45	0.24
3000.00	0.45	31.32	2999.12	43.37	48.51	43.37	65.06	48.20	0.24
3100.00	0.57	356.60	3099.12	44.20	48.68	44.20	65.75	47.77	0.32
3200.00	0.68	341.89	3199.11	45.26	48.47	45.26	66.31	46.96	0.20
3300.00	1.02	321.97	3299.10	46.52	47.73	46.52	66.66	45.74	0.44
3400.00	1.35	342.04	3399.08	48.34	46.82	48.34	67.30	44.09	0.53
3500.00	1.07	27.71	3499.06	50.29	46.90	50.29	68.76	43.00	0.97
3600.00	0.79	84.38	3599.05	51.19	48.02	51.19	70.18	43.17	0.92
3700.00	1.21	138.35	3699.04	50.46	49.41	50.46	70.62	44.39	0.98
3800.00	1.63	175.32	3799.01	48.25	50.23	48.25	69.65	46.15	0.99
3900.00	1.33	165.86	3898.97	45.70	50.63	45.70	68.21	47.93	0.38
4000.00	1.04	156.39	3998.95	43.75	51.27	43.75	67.40	49.53	0.36
4100.00	1.07	161.03	4098.94	42.03	51.94	42.03	66.82	51.02	0.09
4200.00	1.11	165.67	4198.92	40.20	52.49	40.20	66.12	52.55	0.10
4300.00	0.96	168.73	4298.90	38.44	52.89	38.44	65.39	53.99	0.16
4400.00	0.81	171.79	4398.89	36.92	53.16	36.92	64.72	55.22	0.16
4500.00	0.70	166.27	4498.88	35.63	53.40	35.63	64.20	56.29	0.13
4600.00	0.59	160.74	4598.87	34.55	53.72	34.55	63.87	57.25	0.13
4700.00	0.62	162.14	4698.87	33.55	54.05	33.55	63.62	58.17	0.04
4800.00	0.66	163.54	4798.86	32.49	54.38	32.49	63.35	59.15	0.04
4900.00	0.67	163.33	4898.86	31.38	54.71	31.38	63.07	60.16	0.01
5000.00	0.68	163.13	4998.85	30.25	55.05	30.25	62.81	61.21	0.01
5100.00	0.50	146.33	5098.84	29.32	55.46	29.32	62.74	62.13	0.25
5200.00	0.32	129.53	5198.84	28.78	55.92	28.78	62.89	62.76	0.22
5300.00	0.34	126.96	5298.84	28.43	56.37	28.43	63.13	63.23	0.02
5400.00	0.36	124.38	5398.84	28.08	56.86	28.08	63.41	63.72	0.02
5500.00	0.34	186.84	5498.84	27.61	57.08	27.61	63.41	64.18	0.36
5600.00	0.32	249.29	5598.83	27.23	56.78	27.23	62.97	64.38	0.34
5700.00	0.43	242.44	5698.83	26.95	56.19	26.95	62.32	64.37	0.12



Vaughn Energy Services
Gardendale, Texas
432-563-5444
Surveyor: Dustin Wedel
SPICA 25 Federal No. 003H / API 30-015-40220



VES Survey Date: 10/05/2012



Directional Survey

District PERMIAN BASIN	County EDDY	Field Name HACKBERRY	Project Group PB NEW MEXICO	State/Province NM
Surface Legal Location SEC25 T19S R31E	API/UWI 3001540220	Latitude (°) 32° 37' 43.99" N	Longitude (°) 103° 49' 48.807" W	Ground Elev... 3,499.20
			KB - GL (ft) 26.20	Orig KB Elev (ft) 3,525.40
				Tubing Head Elevation (ft)

Wellbores				
Wellbore Name OH	Parent Wellbore OH	Property Number 31512	Kick Off Depth (ftKB)	Vertical Section Direction (°) 89.63
Actual Deviation Survey MWD, Proposed? No	Definitive? Yes	Proposed? No	Proposed Deviation Survey MWD, Proposed? No	

Deviation Survey				
Date 10/6/2012	Description MWD			
MD Tie In (ftKB) 7,154.00	TVD Tie In (ftKB) 7,152.79	Inclination Tie In (°) 0.29	Azimuth Tie In (°) 15.63	NSTie In (ft) 30.89
				EW Tie In (ft) 59.47

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/6/2012	7,163.00	0.44	30.06	7,161.79	59.69	30.94	59.49	1.94	MWD	SCHLUMBERGER
10/6/2012	7,226.00	2.64	259.20	7,224.77	58.39	30.88	58.19	4.68	MWD	SCHLUMBERGER
10/6/2012	7,321.00	5.54	259.20	7,319.52	51.72	29.61	51.53	3.05	MWD	SCHLUMBERGER
10/6/2012	7,416.00	7.30	259.46	7,413.92	41.27	27.65	41.10	1.85	MWD	SCHLUMBERGER
10/6/2012	7,510.00	9.41	260.51	7,506.91	27.81	25.29	27.64	2.25	MWD	SCHLUMBERGER
10/6/2012	7,605.00	12.40	261.30	7,600.19	10.04	22.46	9.90	3.15	MWD	SCHLUMBERGER
10/6/2012	7,636.00	13.37	262.10	7,630.41	3.19	21.47	3.06	3.18	MWD	SCHLUMBERGER
10/6/2012	7,731.00	14.07	261.22	7,722.70	-19.12	18.19	-19.24	0.77	MWD	SCHLUMBERGER
10/6/2012	7,826.00	13.28	261.57	7,815.00	-41.35	14.83	-41.44	0.84	MWD	SCHLUMBERGER
10/6/2012	7,920.00	12.13	259.81	7,906.70	-61.77	11.50	-61.84	1.29	MWD	SCHLUMBERGER
10/6/2012	8,015.00	12.66	258.40	7,999.49	-81.81	7.64	-81.86	0.64	MWD	SCHLUMBERGER
10/6/2012	8,110.00	11.08	253.57	8,092.45	-100.80	2.97	-100.82	1.96	MWD	SCHLUMBERGER
10/6/2012	8,204.00	12.31	258.32	8,184.50	-119.31	-1.62	-119.30	1.66	MWD	SCHLUMBERGER
10/6/2012	8,299.00	13.19	260.34	8,277.16	-139.93	-5.48	-139.90	1.04	MWD	SCHLUMBERGER
10/6/2012	8,394.00	9.32	262.89	8,370.32	-158.28	-8.26	-158.23	4.11	MWD	SCHLUMBERGER
10/6/2012	8,488.00	5.72	274.14	8,463.50	-170.51	-8.86	-170.46	4.12	MWD	SCHLUMBERGER
10/6/2012	8,583.00	5.01	273.17	8,558.08	-179.37	-8.29	-179.32	0.75	MWD	SCHLUMBERGER
10/6/2012	8,678.00	2.20	283.28	8,652.88	-185.28	-7.64	-185.24	3.02	MWD	SCHLUMBERGER
10/6/2012	8,772.00	0.26	62.14	8,746.86	-186.85	-7.13	-186.80	2.56	MWD	SCHLUMBERGER
10/6/2012	8,804.00	1.67	77.35	8,778.86	-186.33	-6.99	-186.29	4.44	MWD	SCHLUMBERGER
10/6/2012	8,835.00	3.87	84.38	8,809.82	-184.84	-6.79	-184.80	7.17	MWD	SCHLUMBERGER
10/6/2012	8,867.00	6.24	84.12	8,841.69	-182.04	-6.51	-182.00	7.41	MWD	SCHLUMBERGER
10/6/2012	8,898.00	9.23	81.83	8,872.41	-177.90	-5.98	-177.86	9.69	MWD	SCHLUMBERGER
10/6/2012	8,930.00	11.87	80.95	8,903.86	-172.10	-5.10	-172.07	8.27	MWD	SCHLUMBERGER
10/6/2012	8,961.00	14.68	82.09	8,934.03	-165.05	-4.05	-165.03	9.10	MWD	SCHLUMBERGER
10/6/2012	8,993.00	17.76	83.15	8,964.75	-156.18	-2.91	-156.16	9.67	MWD	SCHLUMBERGER
10/6/2012	9,024.00	20.66	82.97	8,994.02	-146.05	-1.68	-146.04	9.36	MWD	SCHLUMBERGER
10/6/2012	9,056.00	23.39	83.15	9,023.69	-134.13	-0.23	-134.13	8.53	MWD	SCHLUMBERGER
10/10/2012	9,088.00	25.94	84.03	9,052.76	-120.85	1.25	-120.86	8.05	MWD	SCHLUMBERGER
10/10/2012	9,119.00	29.11	85.00	9,080.25	-106.58	2.62	-106.60	10.33	MWD	SCHLUMBERGER
10/10/2012	9,151.00	31.83	85.52	9,107.83	-90.40	3.95	-90.43	8.54	MWD	SCHLUMBERGER
10/10/2012	9,182.00	35.44	86.58	9,133.64	-73.27	5.13	-73.30	11.80	MWD	SCHLUMBERGER
10/10/2012	9,214.00	38.43	87.46	9,159.21	-54.06	6.12	-54.10	9.49	MWD	SCHLUMBERGER
10/10/2012	9,245.00	41.06	87.02	9,183.05	-34.26	7.08	-34.31	8.53	MWD	SCHLUMBERGER
10/10/2012	9,277.00	44.41	87.28	9,206.55	-12.57	8.16	-12.62	10.48	MWD	SCHLUMBERGER
10/10/2012	9,308.00	47.75	87.81	9,228.05	9.74	9.11	9.68	10.84	MWD	SCHLUMBERGER
10/10/2012	9,340.00	51.00	88.60	9,248.88	34.02	9.87	33.96	10.33	MWD	SCHLUMBERGER
10/10/2012	9,371.00	55.05	89.57	9,267.52	58.78	10.26	58.71	13.30	MWD	SCHLUMBERGER
10/10/2012	9,403.00	58.30	89.30	9,285.10	85.51	10.52	85.45	10.18	MWD	SCHLUMBERGER
10/10/2012	9,434.00	61.20	88.16	9,300.71	112.28	11.12	112.22	9.88	MWD	SCHLUMBERGER
10/10/2012	9,466.00	65.25	87.63	9,315.13	140.83	12.17	140.76	12.74	MWD	SCHLUMBERGER
10/10/2012	9,497.00	69.38	86.67	9,327.08	169.40	13.60	169.32	13.63	MWD	SCHLUMBERGER
10/10/2012	9,529.00	73.07	85.61	9,337.38	199.64	15.64	199.54	11.95	MWD	SCHLUMBERGER
10/10/2012	9,560.00	77.65	84.64	9,345.21	229.53	18.19	229.42	15.08	MWD	SCHLUMBERGER
10/10/2012	9,592.00	82.13	84.82	9,350.83	260.91	21.08	260.78	14.01	MWD	SCHLUMBERGER
10/10/2012	9,624.00	87.05	84.82	9,353.84	292.65	23.96	292.50	15.37	MWD	SCHLUMBERGER
10/10/2012	9,719.00	91.80	89.65	9,354.80	387.50	28.54	387.33	7.13	MWD	SCHLUMBERGER



Directional Survey

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Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/10/2012	9,813.00	92.33	89.83	9,351.41	481.44	28.96	481.26	0.60	MWD	SCHLUMBERGER
10/12/2012	9,908.00	93.03	89.83	9,346.97	576.34	29.24	576.16	0.74	MWD	SCHLUMBERGER
10/12/2012	10,002.00	91.54	89.57	9,343.22	670.26	29.74	670.08	1.61	MWD	SCHLUMBERGER
10/12/2012	10,097.00	91.80	89.48	9,340.45	765.22	30.52	765.04	0.29	MWD	SCHLUMBERGER
10/12/2012	10,191.00	90.66	89.83	9,338.43	859.19	31.09	859.01	1.27	MWD	SCHLUMBERGER
10/12/2012	10,285.00	90.22	90.18	9,337.71	953.19	31.08	953.01	0.60	MWD	SCHLUMBERGER
10/12/2012	10,380.00	90.40	89.57	9,337.20	1,048.19	31.29	1,048.01	0.67	MWD	SCHLUMBERGER
10/12/2012	10,475.00	90.92	89.30	9,336.10	1,143.18	32.22	1,143.00	0.62	MWD	SCHLUMBERGER
10/12/2012	10,569.00	91.80	90.09	9,333.87	1,237.15	32.73	1,236.97	1.26	MWD	SCHLUMBERGER
10/12/2012	10,664.00	93.39	90.71	9,329.57	1,332.04	32.06	1,331.86	1.80	MWD	SCHLUMBERGER
10/12/2012	10,758.00	91.28	90.88	9,325.74	1,425.94	30.76	1,425.77	2.25	MWD	SCHLUMBERGER
10/12/2012	10,853.00	91.28	92.29	9,323.62	1,520.86	28.13	1,520.71	1.48	MWD	SCHLUMBERGER
10/12/2012	10,948.00	91.36	91.76	9,321.43	1,615.75	24.78	1,615.62	0.56	MWD	SCHLUMBERGER
10/12/2012	11,042.00	91.19	91.15	9,319.34	1,709.68	22.39	1,709.57	0.67	MWD	SCHLUMBERGER
10/12/2012	11,137.00	90.75	91.06	9,317.73	1,804.63	20.56	1,804.54	0.47	MWD	SCHLUMBERGER
10/12/2012	11,231.00	90.66	89.21	9,316.58	1,898.62	20.34	1,898.53	1.97	MWD	SCHLUMBERGER
10/12/2012	11,326.00	89.34	88.77	9,316.58	1,993.61	22.01	1,993.51	1.46	MWD	SCHLUMBERGER
10/12/2012	11,420.00	89.78	88.51	9,317.30	2,087.59	24.24	2,087.48	0.54	MWD	SCHLUMBERGER
10/12/2012	11,515.00	89.69	88.60	9,317.74	2,182.57	26.64	2,182.45	0.13	MWD	SCHLUMBERGER
10/12/2012	11,609.00	86.09	90.18	9,321.20	2,276.49	27.64	2,276.36	4.18	MWD	SCHLUMBERGER
10/12/2012	11,704.00	85.74	90.36	9,327.96	2,371.24	27.19	2,371.12	0.41	MWD	SCHLUMBERGER
10/12/2012	11,799.00	89.96	90.71	9,331.53	2,466.14	26.31	2,466.03	4.46	MWD	SCHLUMBERGER
10/12/2012	11,893.00	90.40	91.50	9,331.23	2,560.11	24.49	2,560.01	0.96	MWD	SCHLUMBERGER
10/12/2012	11,988.00	89.87	91.59	9,331.01	2,655.06	21.93	2,654.97	0.57	MWD	SCHLUMBERGER
10/12/2012	12,082.00	89.52	91.59	9,331.51	2,749.00	19.32	2,748.93	0.37	MWD	SCHLUMBERGER
10/12/2012	12,177.00	89.08	90.18	9,332.67	2,843.97	17.86	2,843.91	1.55	MWD	SCHLUMBERGER
10/12/2012	12,271.00	89.78	89.83	9,333.60	2,937.96	17.85	2,937.91	0.83	MWD	SCHLUMBERGER
10/12/2012	12,366.00	89.60	90.01	9,334.12	3,032.96	17.98	3,032.91	0.27	MWD	SCHLUMBERGER
10/12/2012	12,460.00	91.54	88.77	9,333.18	3,126.95	18.98	3,126.89	2.45	MWD	SCHLUMBERGER
10/16/2012	12,555.00	92.51	88.69	9,329.83	3,221.88	21.09	3,221.81	1.02	MWD	SCHLUMBERGER
10/16/2012	12,649.00	90.75	88.69	9,327.15	3,315.82	23.23	3,315.74	1.87	MWD	SCHLUMBERGER
10/16/2012	12,744.00	91.10	88.34	9,325.62	3,410.79	25.70	3,410.70	0.52	MWD	SCHLUMBERGER
10/16/2012	12,839.00	90.40	89.57	9,324.38	3,505.77	27.43	3,505.67	1.49	MWD	SCHLUMBERGER
10/16/2012	12,934.00	90.92	89.92	9,323.28	3,600.77	27.85	3,600.66	0.66	MWD	SCHLUMBERGER
10/16/2012	13,028.00	90.22	90.01	9,322.35	3,694.76	27.91	3,694.66	0.75	MWD	SCHLUMBERGER
10/16/2012	13,123.00	88.20	90.36	9,323.66	3,789.74	27.60	3,789.64	2.16	MWD	SCHLUMBERGER
10/16/2012	13,218.00	87.49	90.09	9,327.23	3,884.67	27.23	3,884.57	0.80	MWD	SCHLUMBERGER
10/16/2012	13,312.00	88.02	90.44	9,330.91	3,978.59	26.79	3,978.50	0.68	MWD	SCHLUMBERGER
10/16/2012	13,407.00	88.29	90.62	9,333.97	4,073.53	25.92	4,073.45	0.34	MWD	SCHLUMBERGER
10/16/2012	13,501.00	87.67	90.01	9,337.28	4,167.46	25.40	4,167.38	0.92	MWD	SCHLUMBERGER
10/16/2012	13,596.00	87.49	89.57	9,341.29	4,262.38	25.75	4,262.30	0.50	MWD	SCHLUMBERGER
10/16/2012	13,690.00	88.20	89.74	9,344.83	4,356.31	26.31	4,356.23	0.78	MWD	SCHLUMBERGER
10/16/2012	13,785.00	88.29	89.92	9,347.74	4,451.26	26.59	4,451.18	0.21	MWD	SCHLUMBERGER
10/16/2012	13,854.00	88.46	89.74	9,349.69	4,520.24	26.80	4,520.16	0.36	MWD	SCHLUMBERGER
10/16/2012	13,930.00	88.46	89.74	9,351.74	4,596.21	27.14	4,596.13	0.00	BIT	SCHLUMBERGER