



Directional Survey

District DELAWARE BASIN	County LEA	Field Name JOHNSON RANCH	Project Group DELAWARE BASIN REG	State/Province NM			
Surface Legal Location SEC34 T23S R33E	API/UWI 3002541252	Latitude (°) 32° 15' 17.253" N	Longitude (°) 103° 33' 38.506" W	Ground Elev... 3,640.70	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70	Tubing Head Elevation (ft)

Wellbores

Wellbore Name OH	Parent Wellbore OH	Kick Off Depth (ftKB)	Vertical Section Direction (°) 356.40
Actual Deviation Survey VES GYRO, Proposed? No	Definitive? No	Proposed? No	Proposed Deviation Survey

Deviation Survey

Date 10/3/2013		Description FLOW DRIFT			
MD Tie In (ftKB) 0.00	TVD Tie In (ftKB) 0.00	Inclination Tie In (°) 0.00	Azimuth Tie In (°) 0.00	NSTie In (ft) 0.00	EW Tie In (ft) 0.00

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/3/2013	182.00	1.20	189.00						SS	
10/3/2013	340.00	1.00	196.00							
10/3/2013	498.00	0.60	194.00							
10/3/2013	592.00	0.80	195.00							
10/3/2013	686.00	0.50	211.00							
10/3/2013	968.00	0.20	196.00							

Wellbore Name ST01	Parent Wellbore OH	Kick Off Depth (ftKB) 10,901.0	Vertical Section Direction (°) 356.40
Actual Deviation Survey	Definitive?	Proposed?	Proposed Deviation Survey

Deviation Survey

Date		Description			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company

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Directional Survey

District DELAWARE BASIN	County LEA	Field Name JOHNSON RANCH	Project Group DELAWARE BASIN REG	State/Province NM			
Surface Legal Location SEC34 T23S R33E	API/UWI 3002541252	Latitude (°) 32° 15' 17.253" N	Longitude (°) 103° 33' 38.506" W	Ground Elev... 3,640.70	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70	Tubing Head Elevation (ft)

Wellbores

Wellbore Name OH	Parent Wellbore OH	Kick Off Depth (ftKB)	Vertical Section Direction (°) 356.40
Actual Deviation Survey VES GYRO, Proposed? No	Definitive? No	Proposed? No	Proposed Deviation Survey

Deviation Survey

Date 10/5/2013		Description VES GYRO			
MD Tie In (ftKB) 0.00	TVD Tie In (ftKB) 0.00	Inclination Tie In (°) 0.00	Azimuth Tie In (°) 0.00	NSTie In (ft) 0.00	EW Tie In (ft) 0.00

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/5/2013									GYRO	VAUHGN ENERGY SERVICES
10/5/2013	0.00			0.00	0.00	0.00	0.00	0.00	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	100.00	0.49	244.32	100.00	-0.16	-0.19	-0.39	0.49	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	200.00	0.88	228.70	199.99	-0.79	-0.88	-1.35	0.43	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	300.00	1.18	216.25	299.98	-2.05	-2.21	-2.53	0.37	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	400.00	0.90	219.68	399.96	-3.41	-3.65	-3.64	0.29	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	500.00	0.73	221.48	499.95	-4.44	-4.73	-4.57	0.17	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	600.00	0.84	223.11	599.94	-5.39	-5.74	-5.49	0.11	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	700.00	0.66	227.79	699.93	-6.25	-6.67	-6.42	0.19	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	800.00	0.44	232.48	799.93	-6.82	-7.29	-7.15	0.22	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	900.00	0.30	256.38	899.92	-7.08	-7.58	-7.71	0.21	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,000.00	0.39	229.46	999.92	-7.33	-7.86	-8.22	0.18	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,100.00	0.36	237.42	1,099.92	-7.69	-8.26	-8.74	0.06	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,200.00	0.35	234.37	1,199.92	-8.00	-8.60	-9.26	0.02	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,264.00	0.41	213.17	1,263.92	-8.29	-8.91	-9.54	0.24	GYRO	VAUHGN ENERGY SERVICES

Wellbore Name ST01	Parent Wellbore OH	Kick Off Depth (ftKB) 10,901.0	Vertical Section Direction (°) 356.40
Actual Deviation Survey	Definitive?	Proposed?	Proposed Deviation Survey

Deviation Survey

Date		Description			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company



Directional Survey

District DELAWARE BASIN	County LEA	Field Name JOHNSON RANCH	Project Group DELAWARE BASIN REG	State/Province NM
Surface Legal Location SEC34 T23S R33E	API/UWI 3002541252	Latitude (°) 32° 15' 17.253" N	Longitude (°) 103° 33' 38.506" W	Ground Elev... 3,640.70
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70
				Tubing Head Elevation (ft)

Wellbores

Wellbore Name OH	Parent Wellbore OH	Kick Off Depth (ftKB)	Vertical Section Direction (°) 356.40
Actual Deviation Survey VES GYRO, Proposed? No	Definitive? No	Proposed? No	Proposed Deviation Survey

Deviation Survey

Date 10/6/2013		Description WEATHERFORD			
MD Tie In (ftKB) 1,264.00	TVD Tie In (ftKB) 1,263.92	Inclination Tie In (°) 0.41	Azimuth Tie In (°) 213.17	NSTie In (ft) -8.89	EW Tie In (ft) -9.53

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/6/2013									MWD	WEATHERFORD
10/6/2013	0.00								MWD	WEATHERFORD
10/6/2013	1,412.00	0.63	209.51						MWD	WEATHERFORD
10/6/2013	1,444.00	1.15	223.78						MWD	WEATHERFORD
10/6/2013	1,507.00	2.06	243.49						MWD	WEATHERFORD
10/6/2013	1,602.00	3.73	254.45						MWD	WEATHERFORD
10/6/2013	1,696.00	5.77	258.64						MWD	WEATHERFORD
10/6/2013	1,791.00	7.16	260.40						MWD	WEATHERFORD
10/6/2013	1,886.00	9.23	257.13						MWD	WEATHERFORD
10/6/2013	1,980.00	9.43	257.88						MWD	WEATHERFORD
10/6/2013	2,075.00	8.65	258.51						MWD	WEATHERFORD
10/6/2013	2,169.00	8.91	255.51						MWD	WEATHERFORD
10/6/2013	2,264.00	9.24	253.87						MWD	WEATHERFORD
10/6/2013	2,359.00	8.91	255.85						MWD	WEATHERFORD
10/6/2013	2,454.00	8.58	256.61						MWD	WEATHERFORD
10/6/2013	2,549.00	9.19	256.06						MWD	WEATHERFORD
10/6/2013	2,643.00	9.58	254.18						MWD	WEATHERFORD
10/6/2013	2,738.00	9.37	255.10						MWD	WEATHERFORD
10/6/2013	2,832.00	8.98	255.88						MWD	WEATHERFORD
10/6/2013	2,927.00	9.31	254.44						MWD	WEATHERFORD
10/6/2013	3,022.00	9.67	251.62						MWD	WEATHERFORD
10/6/2013	3,116.00	9.07	252.10						MWD	WEATHERFORD
10/6/2013	3,211.00	9.29	252.07						MWD	WEATHERFORD
10/6/2013	3,305.00	10.61	251.80						MWD	WEATHERFORD
10/6/2013	3,400.00	11.03	252.08						MWD	WEATHERFORD
10/6/2013	3,495.00	10.51	253.27						MWD	WEATHERFORD
10/6/2013	3,589.00	9.69	253.03						MWD	WEATHERFORD
10/6/2013	3,684.00	8.76	253.52						MWD	WEATHERFORD
10/6/2013	3,779.00	9.17	252.77						MWD	WEATHERFORD
10/6/2013	3,874.00	9.23	253.42						MWD	WEATHERFORD
10/6/2013	3,968.00	8.73	254.42						MWD	WEATHERFORD
10/6/2013	4,063.00	9.60	249.32						MWD	WEATHERFORD
10/6/2013	4,158.00	10.06	246.96						MWD	WEATHERFORD
10/6/2013	4,252.00	9.48	248.16						MWD	WEATHERFORD
10/6/2013	4,347.00	8.75	246.92						MWD	WEATHERFORD
10/6/2013	4,441.00	8.08	246.05						MWD	WEATHERFORD
10/6/2013	4,536.00	8.09	249.60						MWD	WEATHERFORD
10/6/2013	4,631.00	7.69	252.75						MWD	WEATHERFORD
10/6/2013	4,725.00	7.70	253.78						MWD	WEATHERFORD
10/6/2013	4,805.00	7.98	253.43						MWD	WEATHERFORD
10/6/2013	4,899.00	7.82	248.18						MWD	WEATHERFORD
10/6/2013	4,994.00	9.84	246.69						MWD	WEATHERFORD
10/6/2013	5,089.00	10.94	249.76						MWD	WEATHERFORD
10/6/2013	5,183.00	10.35	250.17						MWD	WEATHERFORD
10/6/2013	5,231.00	9.91	250.13						MWD	WEATHERFORD
10/6/2013	5,487.00	9.96	262.99						MWD	WEATHERFORD
10/6/2013	5,582.00	9.57	261.87						MWD	WEATHERFORD



THISTLE UNIT 47H

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Directional Survey

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			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70
				Tubing Head Elevation (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/6/2013	5,676.00	9.53	261.55						MWD	WEATHERFORD
10/6/2013	5,771.00	10.31	252.83						MWD	WEATHERFORD
10/6/2013	5,865.00	10.15	252.66						MWD	WEATHERFORD
10/6/2013	5,960.00	9.93	250.24						MWD	WEATHERFORD
10/6/2013	6,054.00	9.61	249.56						MWD	WEATHERFORD
10/6/2013	6,149.00	9.36	254.78						MWD	WEATHERFORD
10/6/2013	6,244.00	8.47	256.46						MWD	WEATHERFORD
10/6/2013	6,339.00	8.21	254.25						MWD	WEATHERFORD
10/6/2013	6,433.00	7.80	254.53						MWD	WEATHERFORD
10/6/2013	6,528.00	9.92	254.38						MWD	WEATHERFORD
10/6/2013	6,622.00	9.75	254.17						MWD	WEATHERFORD
10/6/2013	6,811.00	9.09	252.68						MWD	WEATHERFORD
10/6/2013	6,906.00	8.67	254.30						MWD	WEATHERFORD
10/6/2013	7,001.00	9.07	257.94						MWD	WEATHERFORD
10/6/2013	7,095.00	8.78	259.37						MWD	WEATHERFORD
10/6/2013	7,190.00	9.77	251.21						MWD	WEATHERFORD
10/6/2013	7,285.00	9.33	251.80						MWD	WEATHERFORD
10/6/2013	7,474.00	8.55	252.72						MWD	WEATHERFORD
10/6/2013	7,568.00	10.05	252.06						MWD	WEATHERFORD
10/6/2013	7,663.00	9.68	251.77						MWD	WEATHERFORD
10/6/2013	7,851.00	7.70	250.37						MWD	WEATHERFORD
10/6/2013	7,946.00	8.20	252.39						MWD	WEATHERFORD
10/6/2013	8,041.00	9.46	254.30						MWD	WEATHERFORD
10/6/2013	8,135.00	9.38	254.88						MWD	WEATHERFORD
10/6/2013	8,230.00	8.59	253.64						MWD	WEATHERFORD
10/6/2013	8,324.00	9.95	254.96						MWD	WEATHERFORD
10/6/2013	8,419.00	9.46	254.02						MWD	WEATHERFORD
10/6/2013	8,513.00	8.83	254.92						MWD	WEATHERFORD
10/6/2013	8,606.00	8.31	255.35						MWD	WEATHERFORD
10/6/2013	8,702.00	9.52	254.06						MWD	WEATHERFORD
10/6/2013	8,797.00	9.14	256.65						MWD	WEATHERFORD
10/6/2013	8,892.00	8.45	255.72						MWD	WEATHERFORD
10/6/2013	8,987.00	9.99	254.43						MWD	WEATHERFORD
10/6/2013	9,081.00	9.58	254.69						MWD	WEATHERFORD
10/6/2013	9,176.00	7.97	253.32						MWD	WEATHERFORD
10/6/2013	9,270.00	7.61	253.06						MWD	WEATHERFORD
10/6/2013	9,365.00	8.16	259.05						MWD	WEATHERFORD
10/6/2013	9,459.00	8.80	256.14						MWD	WEATHERFORD
10/6/2013	9,554.00	10.84	256.28						MWD	WEATHERFORD
10/6/2013	9,649.00	9.58	252.18						MWD	WEATHERFORD
10/6/2013	9,743.00	9.20	255.53						MWD	WEATHERFORD
10/6/2013	9,838.00	9.65	257.08						MWD	WEATHERFORD
10/6/2013	9,933.00	11.52	255.02						MWD	WEATHERFORD
10/6/2013	10,027.00	10.81	256.06						MWD	WEATHERFORD
10/6/2013	10,122.00	12.00	255.05						MWD	WEATHERFORD
10/6/2013	10,216.00	13.07	257.06						MWD	WEATHERFORD
10/6/2013	10,311.00	12.44	256.03						MWD	WEATHERFORD
10/6/2013	10,406.00	11.24	255.57						MWD	WEATHERFORD
10/6/2013	10,500.00	10.57	256.16						MWD	WEATHERFORD
10/6/2013	10,595.00	10.73	254.96						MWD	WEATHERFORD
10/6/2013	10,681.00	9.81	254.40						MWD	WEATHERFORD
10/6/2013	10,783.00	9.51	260.13						MWD	WEATHERFORD
10/6/2013	10,815.00	8.92	259.15						MWD	WEATHERFORD
10/6/2013	10,885.00	8.93	263.49						MWD	WEATHERFORD
10/6/2013	10,917.00	10.62	273.55						MWD	WEATHERFORD



Directional Survey

District DELAWARE BASIN	County LEA	Field Name JOHNSON RANCH	Project Group DELAWARE BASIN REG	State/Province NM			
Surface Legal Location SEC34 T23S R33E	API/UWI 3002541252	Latitude (°) 32° 15' 17.253" N	Longitude (°) 103° 33' 38.506" W	Ground Elev... 3,640.70	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70	Tubing Head Elevation (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/6/2013	10,948.00	13.91	284.81						MWD	WEATHERFORD
10/6/2013	10,980.00	16.91	292.78						MWD	WEATHERFORD
10/6/2013	11,011.00	19.82	299.59						MWD	WEATHERFORD
10/6/2013	11,043.00	22.42	309.29						MWD	WEATHERFORD
10/6/2013	11,074.00	23.39	317.41						MWD	WEATHERFORD
10/6/2013	11,137.00	29.09	327.70						MWD	WEATHERFORD
10/6/2013	11,169.00	29.85	331.02						MWD	WEATHERFORD
10/6/2013	11,200.00	31.31	335.90						MWD	WEATHERFORD
10/6/2013	11,232.00	33.06	342.04						MWD	WEATHERFORD
10/6/2013	11,263.00	35.24	345.61						MWD	WEATHERFORD
10/6/2013	11,294.00	37.23	346.32						MWD	WEATHERFORD
10/6/2013	11,326.00	40.31	346.73						MWD	WEATHERFORD
10/6/2013	11,357.00	43.18	348.83						MWD	WEATHERFORD
10/6/2013	11,389.00	47.43	347.49						MWD	WEATHERFORD
10/6/2013	11,421.00	51.49	348.19						MWD	WEATHERFORD
10/6/2013	11,452.00	55.14	350.75						MWD	WEATHERFORD
10/6/2013	11,484.00	59.30	352.36						MWD	WEATHERFORD
10/6/2013	11,515.00	64.40	353.93						MWD	WEATHERFORD
10/6/2013	11,547.00	68.30	352.13						MWD	WEATHERFORD

Wellbore Name ST01	Parent Wellbore OH	Kick Off Depth (ftKB) 10,901.0	Vertical Section Direction (°) 356.40
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Actual Deviation Survey	Definitive?	Proposed?	Proposed Deviation Survey
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Deviation Survey

Date		Description			
MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company



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			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70
				Tubing Head Elevation (ft)

Wellbores

Wellbore Name OH	Parent Wellbore OH	Kick Off Depth (ftKB)	Vertical Section Direction (°) 356.40
Actual Deviation Survey	Definitive?	Proposed?	Proposed Deviation Survey

Deviation Survey

Date	Description
MD Tie In (ftKB)	TVD Tie In (ftKB)
Inclination Tie In (°)	Azimuth Tie In (°)
NS Tie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
Wellbore Name ST01			Parent Wellbore OH			Kick Off Depth (ftKB) 10,901.0			Vertical Section Direction (°) 356.40	
Actual Deviation Survey MWD ST01, Proposed? No				Definitive? Yes		Proposed? No		Proposed Deviation Survey		

Deviation Survey

Date 10/28/2013	Description MWD ST01
MD Tie In (ftKB)	TVD Tie In (ftKB)
Inclination Tie In (°)	Azimuth Tie In (°)
NS Tie In (ft)	EW Tie In (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/5/2013	100.00	0.49	244.32	100.00	-0.16	-0.19	-0.39	0.49	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	200.00	0.88	228.70	199.99	-0.79	-0.88	-1.35	0.43	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	300.00	1.18	216.25	299.98	-2.05	-2.21	-2.53	0.37	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	400.00	0.90	219.68	399.96	-3.41	-3.65	-3.64	0.29	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	500.00	0.73	221.48	499.95	-4.44	-4.73	-4.57	0.17	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	600.00	0.84	223.11	599.94	-5.39	-5.74	-5.49	0.11	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	700.00	0.66	227.79	699.93	-6.25	-6.67	-6.42	0.19	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	800.00	0.44	232.48	799.93	-6.82	-7.29	-7.15	0.22	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	900.00	0.30	256.38	899.92	-7.08	-7.58	-7.71	0.21	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,000.00	0.39	229.46	999.92	-7.33	-7.86	-8.22	0.18	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,100.00	0.36	237.42	1,099.92	-7.69	-8.26	-8.74	0.06	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,200.00	0.35	234.37	1,199.92	-8.00	-8.60	-9.26	0.02	GYRO	VAUHGN ENERGY SERVICES
10/5/2013	1,264.00	0.41	213.17	1,263.92	-8.29	-8.91	-9.54	0.24	GYRO	VAUHGN ENERGY SERVICES
10/6/2013	1,412.00	0.63	209.51	1,411.91	-9.40	-10.06	-10.23	0.15	MWD	WEATHERFORD
10/6/2013	1,444.00	1.15	223.78	1,443.91	-9.76	-10.44	-10.54	1.75	MWD	WEATHERFORD
10/6/2013	1,507.00	2.06	243.49	1,506.88	-10.63	-11.41	-11.99	1.67	MWD	WEATHERFORD
10/6/2013	1,602.00	3.73	254.45	1,601.76	-11.94	-13.00	-16.50	1.84	MWD	WEATHERFORD
10/6/2013	1,696.00	5.77	258.64	1,695.43	-13.21	-14.75	-24.08	2.20	MWD	WEATHERFORD
10/6/2013	1,791.00	7.16	260.40	1,789.82	-14.47	-16.68	-34.60	1.48	MWD	WEATHERFORD
10/6/2013	1,886.00	9.23	257.13	1,883.85	-16.32	-19.36	-47.86	2.23	MWD	WEATHERFORD
10/6/2013	1,980.00	9.43	257.88	1,976.61	-18.67	-22.66	-62.74	0.25	MWD	WEATHERFORD
10/6/2013	2,075.00	8.65	258.51	2,070.42	-20.81	-25.71	-77.35	0.83	MWD	WEATHERFORD
10/6/2013	2,169.00	8.91	255.51	2,163.32	-23.15	-28.94	-91.33	0.56	MWD	WEATHERFORD
10/6/2013	2,264.00	9.24	253.87	2,257.13	-26.20	-32.90	-105.78	0.44	MWD	WEATHERFORD
10/6/2013	2,359.00	8.91	255.85	2,350.95	-29.20	-36.82	-120.24	0.48	MWD	WEATHERFORD
10/6/2013	2,454.00	8.58	256.61	2,444.84	-31.75	-40.26	-134.26	0.37	MWD	WEATHERFORD
10/6/2013	2,549.00	9.19	256.06	2,538.70	-34.32	-43.73	-148.52	0.65	MWD	WEATHERFORD
10/6/2013	2,643.00	9.58	254.18	2,631.44	-37.32	-47.67	-163.33	0.53	MWD	WEATHERFORD
10/6/2013	2,738.00	9.37	255.10	2,725.15	-40.51	-51.81	-178.41	0.27	MWD	WEATHERFORD
10/6/2013	2,832.00	8.98	255.88	2,817.94	-43.35	-55.57	-192.92	0.44	MWD	WEATHERFORD
10/6/2013	2,927.00	9.31	254.44	2,911.74	-46.29	-59.44	-207.51	0.42	MWD	WEATHERFORD
10/6/2013	3,022.00	9.67	251.62	3,005.44	-49.92	-64.02	-222.49	0.62	MWD	WEATHERFORD
10/6/2013	3,116.00	9.07	252.10	3,098.18	-53.76	-68.78	-237.03	0.64	MWD	WEATHERFORD
10/6/2013	3,211.00	9.29	252.07	3,191.97	-57.51	-73.45	-251.45	0.23	MWD	WEATHERFORD
10/6/2013	3,305.00	10.61	251.80	3,284.55	-61.57	-78.48	-266.89	1.41	MWD	WEATHERFORD
10/6/2013	3,400.00	11.03	252.08	3,377.86	-66.02	-84.01	-283.85	0.45	MWD	WEATHERFORD



THISTLE UNIT 47H

WEST UNRESTRICTED

Directional Survey

District DELAWARE BASIN	County LEA	Field Name JOHNSON RANCH	Project Group DELAWARE BASIN REG	State/Province NM
Surface Legal Location SEC34 T23S R33E	API/UWI 3002541252	Latitude (°) 32° 15' 17.253" N	Longitude (°) 103° 33' 38.506" W	Ground Elev. 3,640.70
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70
				Tubing Head Elevation (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/6/2013	3,495.00	10.51	253.27	3,471.19	-70.24	-89.30	-300.79	0.60	MWD	WEATHERFORD
10/6/2013	3,589.00	9.69	253.03	3,563.73	-74.02	-94.08	-316.57	0.87	MWD	WEATHERFORD
10/6/2013	3,684.00	8.76	253.52	3,657.50	-77.48	-98.47	-331.15	0.98	MWD	WEATHERFORD
10/6/2013	3,779.00	9.17	252.77	3,751.34	-80.87	-102.76	-345.32	0.45	MWD	WEATHERFORD
10/6/2013	3,874.00	9.23	253.42	3,845.12	-84.37	-107.18	-359.85	0.13	MWD	WEATHERFORD
10/6/2013	3,968.00	8.73	254.42	3,937.96	-87.54	-111.24	-373.95	0.56	MWD	WEATHERFORD
10/6/2013	4,063.00	9.60	249.32	4,031.75	-91.37	-115.98	-388.31	1.25	MWD	WEATHERFORD
10/6/2013	4,158.00	10.06	246.96	4,125.36	-96.45	-122.02	-403.35	0.64	MWD	WEATHERFORD
10/6/2013	4,252.00	9.48	248.16	4,217.99	-101.61	-128.12	-418.09	0.65	MWD	WEATHERFORD
10/6/2013	4,347.00	8.75	246.92	4,311.79	-106.47	-133.86	-432.00	0.80	MWD	WEATHERFORD
10/6/2013	4,441.00	8.08	246.05	4,404.78	-111.15	-139.34	-444.62	0.73	MWD	WEATHERFORD
10/6/2013	4,536.00	8.09	249.60	4,498.84	-115.40	-144.38	-456.98	0.53	MWD	WEATHERFORD
10/6/2013	4,631.00	7.69	252.75	4,592.94	-118.84	-148.60	-469.32	0.62	MWD	WEATHERFORD
10/6/2013	4,725.00	7.70	253.78	4,686.09	-121.70	-152.22	-481.37	0.15	MWD	WEATHERFORD
10/6/2013	4,805.00	7.98	253.43	4,765.34	-124.11	-155.30	-491.84	0.36	MWD	WEATHERFORD
10/6/2013	4,899.00	7.82	248.18	4,858.45	-127.58	-159.54	-504.03	0.79	MWD	WEATHERFORD
10/6/2013	4,994.00	9.84	246.69	4,952.32	-132.34	-165.16	-517.49	2.14	MWD	WEATHERFORD
10/6/2013	5,089.00	10.94	249.76	5,045.76	-137.66	-171.49	-533.40	1.30	MWD	WEATHERFORD
10/6/2013	5,183.00	10.35	250.17	5,138.15	-142.57	-177.44	-549.71	0.63	MWD	WEATHERFORD
10/6/2013	5,231.00	9.91	250.13	5,185.40	-144.93	-180.30	-557.66	0.92	MWD	WEATHERFORD
10/6/2013	5,424.00	10.13	263.58	5,375.48	-150.42	-187.85	-590.14	1.22	MWD	WEATHERFORD
10/6/2013	5,487.00	9.96	262.99	5,437.51	-151.02	-189.13	-601.06	0.32	MWD	WEATHERFORD
10/6/2013	5,582.00	9.57	261.87	5,531.14	-152.13	-191.25	-617.03	0.46	MWD	WEATHERFORD
10/6/2013	5,676.00	9.53	261.55	5,623.84	-153.41	-193.50	-632.46	0.07	MWD	WEATHERFORD
10/6/2013	5,771.00	10.31	252.83	5,717.42	-156.07	-197.17	-648.36	1.78	MWD	WEATHERFORD
10/6/2013	5,865.00	10.15	252.66	5,809.93	-160.01	-202.12	-664.31	0.17	MWD	WEATHERFORD
10/6/2013	5,960.00	9.93	250.24	5,903.47	-164.27	-207.38	-680.01	0.50	MWD	WEATHERFORD
10/6/2013	6,054.00	9.61	249.56	5,996.11	-168.80	-212.86	-694.99	0.36	MWD	WEATHERFORD
10/6/2013	6,149.00	9.36	254.78	6,089.81	-172.66	-217.66	-709.87	0.94	MWD	WEATHERFORD
10/6/2013	6,244.00	8.47	256.46	6,183.66	-175.42	-221.33	-724.13	0.98	MWD	WEATHERFORD
10/6/2013	6,339.00	8.21	254.25	6,277.66	-178.06	-224.80	-737.46	0.43	MWD	WEATHERFORD
10/6/2013	6,433.00	7.80	254.53	6,370.74	-180.78	-228.33	-750.07	0.44	MWD	WEATHERFORD
10/6/2013	6,528.00	9.92	254.38	6,464.60	-183.81	-232.25	-764.16	2.23	MWD	WEATHERFORD
10/6/2013	6,622.00	9.75	254.17	6,557.22	-187.18	-236.60	-779.62	0.18	MWD	WEATHERFORD
10/6/2013	6,717.00	9.12	253.91	6,650.94	-190.52	-240.88	-794.59	0.66	MWD	WEATHERFORD
10/6/2013	6,811.00	9.09	252.68	6,743.75	-193.89	-245.16	-808.84	0.21	MWD	WEATHERFORD
10/6/2013	6,906.00	8.67	254.30	6,837.61	-197.17	-249.33	-822.89	0.51	MWD	WEATHERFORD
10/6/2013	7,001.00	9.07	257.94	6,931.48	-199.77	-252.83	-837.11	0.73	MWD	WEATHERFORD
10/6/2013	7,095.00	8.78	259.37	7,024.34	-201.74	-255.70	-851.41	0.39	MWD	WEATHERFORD
10/6/2013	7,190.00	9.77	251.21	7,118.10	-204.74	-259.64	-866.16	1.73	MWD	WEATHERFORD
10/6/2013	7,285.00	9.33	251.80	7,211.78	-208.79	-264.64	-881.11	0.47	MWD	WEATHERFORD
10/6/2013	7,379.00	8.97	251.88	7,304.59	-212.55	-269.30	-895.31	0.38	MWD	WEATHERFORD
10/6/2013	7,474.00	8.55	252.72	7,398.48	-216.08	-273.70	-909.10	0.46	MWD	WEATHERFORD
10/6/2013	7,568.00	10.05	252.06	7,491.24	-219.76	-278.30	-923.57	1.60	MWD	WEATHERFORD
10/6/2013	7,663.00	9.68	251.77	7,584.83	-223.83	-283.35	-939.04	0.39	MWD	WEATHERFORD
10/6/2013	7,757.00	8.84	249.04	7,677.61	-227.98	-288.41	-953.30	1.01	MWD	WEATHERFORD
10/6/2013	7,851.00	7.70	250.37	7,770.63	-231.88	-293.11	-965.97	1.23	MWD	WEATHERFORD
10/6/2013	7,946.00	8.20	252.39	7,864.72	-235.27	-297.30	-978.42	0.60	MWD	WEATHERFORD
10/6/2013	8,041.00	9.46	254.30	7,958.59	-238.55	-301.46	-992.40	1.36	MWD	WEATHERFORD
10/6/2013	8,135.00	9.38	254.88	8,051.32	-241.70	-305.55	-1,007.23	0.13	MWD	WEATHERFORD
10/6/2013	8,230.00	8.59	253.64	8,145.16	-244.81	-309.57	-1,021.51	0.86	MWD	WEATHERFORD
10/6/2013	8,324.00	9.95	254.96	8,237.93	-247.97	-313.65	-1,036.09	1.46	MWD	WEATHERFORD
10/6/2013	8,419.00	9.46	254.02	8,331.57	-251.28	-317.93	-1,051.52	0.54	MWD	WEATHERFORD
10/6/2013	8,513.00	8.83	254.92	8,424.37	-254.37	-321.93	-1,065.91	0.69	MWD	WEATHERFORD
10/6/2013	8,606.00	8.31	255.35	8,516.33	-257.08	-325.49	-1,079.31	0.56	MWD	WEATHERFORD



Directional Survey

District DELAWARE BASIN	County LEA	Field Name JOHNSON RANCH	Project Group DELAWARE BASIN REG	State/Province NM
Surface Legal Location SEC34 T23S R33E	API/UWI 3002541252	Latitude (°) 32° 15' 17.253" N	Longitude (°) 103° 33' 38.506" W	Ground Elev... 3,640.70
			KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70
				Tubing Head Elevation (ft)

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS ("100ft)	Survey Tool	Survey Company
10/6/2013	8,702.00	9.52	254.06	8,611.17	-260.10	-329.42	-1,093.66	1.28	MWD	WEATHERFORD
10/6/2013	8,797.00	9.14	256.65	8,704.91	-263.06	-333.32	-1,108.55	0.60	MWD	WEATHERFORD
10/6/2013	8,892.00	8.45	255.72	8,798.80	-265.63	-336.79	-1,122.66	0.74	MWD	WEATHERFORD
10/6/2013	8,987.00	9.99	254.43	8,892.57	-268.63	-340.72	-1,137.36	1.64	MWD	WEATHERFORD
10/6/2013	9,081.00	9.58	254.69	8,985.20	-271.91	-344.98	-1,152.76	0.44	MWD	WEATHERFORD
10/6/2013	9,176.00	7.97	253.32	9,079.08	-275.01	-348.95	-1,166.69	1.71	MWD	WEATHERFORD
10/6/2013	9,270.00	7.61	253.06	9,172.22	-277.92	-352.64	-1,178.89	0.38	MWD	WEATHERFORD
10/6/2013	9,365.00	8.16	259.05	9,266.32	-280.23	-355.75	-1,191.53	1.04	MWD	WEATHERFORD
10/6/2013	9,459.00	8.80	256.14	9,359.29	-282.37	-358.74	-1,205.06	0.82	MWD	WEATHERFORD
10/6/2013	9,554.00	10.84	256.28	9,452.90	-285.23	-362.60	-1,220.79	2.15	MWD	WEATHERFORD
10/6/2013	9,649.00	9.58	252.18	9,546.39	-288.74	-367.14	-1,237.00	1.53	MWD	WEATHERFORD
10/6/2013	9,743.00	9.20	255.53	9,639.13	-292.08	-371.41	-1,251.72	0.71	MWD	WEATHERFORD
10/6/2013	9,838.00	9.65	257.08	9,732.85	-294.80	-375.09	-1,266.83	0.54	MWD	WEATHERFORD
10/6/2013	9,933.00	11.52	255.02	9,826.23	-297.96	-379.32	-1,283.76	2.01	MWD	WEATHERFORD
10/6/2013	10,027.00	10.81	256.06	9,918.45	-301.40	-383.87	-1,301.38	0.79	MWD	WEATHERFORD
10/6/2013	10,122.00	12.00	255.05	10,011.57	-304.94	-388.57	-1,319.57	1.27	MWD	WEATHERFORD
10/6/2013	10,216.00	13.07	257.06	10,103.33	-308.59	-393.47	-1,339.37	1.23	MWD	WEATHERFORD
10/6/2013	10,311.00	12.44	256.03	10,195.99	-312.18	-398.34	-1,359.77	0.71	MWD	WEATHERFORD
10/6/2013	10,406.00	11.24	255.57	10,288.96	-315.76	-403.12	-1,378.67	1.27	MWD	WEATHERFORD
10/6/2013	10,500.00	10.57	256.16	10,381.26	-319.01	-407.46	-1,395.91	0.72	MWD	WEATHERFORD
10/6/2013	10,595.00	10.73	254.96	10,474.63	-322.31	-411.84	-1,412.91	0.29	MWD	WEATHERFORD
10/6/2013	10,689.00	9.81	256.40	10,567.12	-325.44	-416.00	-1,429.15	1.02	MWD	WEATHERFORD
10/6/2013	10,783.00	9.51	260.13	10,659.79	-327.68	-419.21	-1,444.58	0.74	MWD	WEATHERFORD
10/6/2013	10,815.00	8.92	259.15	10,691.38	-328.28	-420.13	-1,449.62	1.91	MWD	WEATHERFORD
10/6/2013	10,885.00	8.93	263.49	10,760.53	-329.24	-421.77	-1,460.35	0.96	MWD	WEATHERFORD
10/6/2013	10,917.00	12.30	257.36	10,791.98	-329.90	-422.80	-1,466.15	11.09	MWD	WEATHERFORD
10/6/2013	10,948.00	17.74	265.64	10,821.91	-330.49	-423.88	-1,474.08	18.82	MWD	WEATHERFORD
10/6/2013	10,980.00	22.39	268.56	10,851.96	-330.32	-424.40	-1,485.04	14.86	MWD	WEATHERFORD
10/6/2013	11,012.00	25.55	272.93	10,881.20	-329.31	-424.20	-1,498.03	11.32	MWD	WEATHERFORD
10/6/2013	11,043.00	29.67	277.78	10,908.67	-327.03	-422.82	-1,512.32	15.13	MWD	WEATHERFORD
10/6/2013	11,075.00	33.23	282.84	10,935.97	-322.98	-419.80	-1,528.72	13.84	MWD	WEATHERFORD
10/6/2013	11,106.00	37.10	286.76	10,961.31	-317.32	-415.22	-1,545.97	14.45	MWD	WEATHERFORD
10/6/2013	11,138.00	40.60	292.24	10,986.23	-309.42	-408.49	-1,564.86	15.32	MWD	WEATHERFORD
10/6/2013	11,169.00	44.20	296.66	11,009.13	-299.58	-399.82	-1,583.86	15.07	MWD	WEATHERFORD
10/6/2013	11,201.00	47.71	299.51	11,031.37	-287.48	-388.98	-1,604.14	12.70	MWD	WEATHERFORD
10/6/2013	11,232.00	51.15	303.29	11,051.54	-273.97	-376.70	-1,624.22	14.45	MWD	WEATHERFORD
10/6/2013	11,264.00	55.04	307.74	11,070.75	-257.81	-361.82	-1,645.02	16.47	MWD	WEATHERFORD
10/6/2013	11,295.00	58.85	310.94	11,087.66	-240.11	-345.34	-1,665.10	15.03	MWD	WEATHERFORD
10/6/2013	11,327.00	62.66	315.22	11,103.30	-219.79	-326.27	-1,685.46	16.67	MWD	WEATHERFORD
10/6/2013	11,358.00	64.54	319.01	11,117.09	-198.30	-305.92	-1,704.35	12.52	MWD	WEATHERFORD
10/6/2013	11,389.00	65.56	321.97	11,130.16	-175.54	-284.24	-1,722.23	9.26	MWD	WEATHERFORD
10/6/2013	11,421.00	67.32	326.59	11,142.96	-150.70	-260.43	-1,739.34	14.33	MWD	WEATHERFORD
10/6/2013	11,452.00	68.91	331.70	11,154.52	-125.14	-235.74	-1,754.08	16.13	MWD	WEATHERFORD
10/6/2013	11,484.00	70.31	336.23	11,165.68	-97.42	-208.80	-1,767.23	13.97	MWD	WEATHERFORD
10/6/2013	11,515.00	70.60	340.48	11,176.05	-69.65	-181.65	-1,778.01	12.95	MWD	WEATHERFORD
10/6/2013	11,547.00	70.45	344.93	11,186.72	-40.35	-152.86	-1,786.97	13.12	MWD	WEATHERFORD
10/6/2013	11,578.00	72.09	349.04	11,196.68	-11.40	-124.26	-1,793.58	13.62	MWD	WEATHERFORD
10/6/2013	11,607.00	74.34	352.32	11,205.06	16.22	-96.87	-1,798.07	13.32	MWD	WEATHERFORD
10/6/2013	11,638.00	78.51	353.62	11,212.33	46.30	-66.97	-1,801.75	14.06	MWD	WEATHERFORD
10/6/2013	11,670.00	80.79	354.28	11,218.08	77.75	-35.67	-1,805.07	7.41	MWD	WEATHERFORD
10/6/2013	11,701.00	82.77	354.96	11,222.51	108.41	-5.12	-1,807.95	6.75	MWD	WEATHERFORD
10/6/2013	11,733.00	84.74	355.69	11,225.99	140.21	26.58	-1,810.54	6.56	MWD	WEATHERFORD
10/6/2013	11,764.00	87.41	356.38	11,228.12	171.14	57.43	-1,812.68	8.89	MWD	WEATHERFORD
10/6/2013	11,796.00	89.86	357.22	11,228.88	203.12	89.37	-1,814.46	8.09	MWD	WEATHERFORD
10/6/2013	11,859.00	90.56	359.21	11,228.65	266.09	152.34	-1,816.42	3.35	MWD	WEATHERFORD



THISTLE UNIT 47H

WEST UNRESTRICTED

Directional Survey

District DELAWARE BASIN	County LEA	Field Name JOHNSON RANCH	Project Group DELAWARE BASIN REG	State/Province NM		
Surface Legal Location SEC34 T23S R33E	API/UWI 3002541252	Latitude (°) 32° 15' 17.253" N	Longitude (°) 103° 33' 38.506" W	Ground Elev... 3,640.70	KB - GL (ft) 25.00	Orig KB Elev (ft) 3,665.70
Tubing Head Elevation (ft)						

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
10/6/2013	11,954.00	87.48	0.42	11,230.27	360.89	247.31	-1,816.73	3.48	MWD	WEATHERFORD
10/6/2013	12,048.00	87.55	1.04	11,234.35	454.54	341.21	-1,815.53	0.66	MWD	WEATHERFORD
10/6/2013	12,143.00	87.90	1.96	11,238.12	549.08	436.10	-1,813.05	1.04	MWD	WEATHERFORD
10/6/2013	12,237.00	89.44	1.97	11,240.30	642.61	530.02	-1,809.83	1.64	MWD	WEATHERFORD
10/6/2013	12,331.00	90.14	1.85	11,240.65	736.18	623.97	-1,806.69	0.76	MWD	WEATHERFORD
10/6/2013	12,426.00	90.84	2.51	11,239.83	830.69	718.89	-1,803.08	1.01	MWD	WEATHERFORD
10/6/2013	12,521.00	91.40	2.90	11,237.98	925.10	813.77	-1,798.60	0.72	MWD	WEATHERFORD
10/6/2013	12,616.00	92.31	3.79	11,234.90	1,019.35	908.55	-1,793.06	1.34	MWD	WEATHERFORD
10/6/2013	12,710.00	90.70	3.17	11,232.43	1,112.60	1,002.35	-1,787.36	1.84	MWD	WEATHERFORD
10/6/2013	12,805.00	89.16	1.30	11,232.55	1,207.10	1,097.27	-1,783.65	2.55	MWD	WEATHERFORD
10/6/2013	12,899.00	89.09	1.00	11,233.98	1,300.76	1,191.24	-1,781.76	0.33	MWD	WEATHERFORD
10/6/2013	12,994.00	89.09	1.26	11,235.49	1,395.43	1,286.21	-1,779.89	0.27	MWD	WEATHERFORD
10/6/2013	13,088.00	89.02	1.18	11,237.04	1,489.08	1,380.17	-1,777.89	0.11	MWD	WEATHERFORD
10/6/2013	13,182.00	88.60	0.14	11,239.00	1,582.80	1,474.14	-1,776.81	1.19	MWD	WEATHERFORD
10/6/2013	13,277.00	89.44	358.49	11,240.62	1,677.66	1,569.12	-1,777.94	1.95	MWD	WEATHERFORD
10/6/2013	13,372.00	90.49	355.91	11,240.68	1,772.64	1,664.00	-1,782.58	2.93	MWD	WEATHERFORD
10/6/2013	13,466.00	91.47	355.60	11,239.07	1,866.62	1,757.72	-1,789.54	1.09	MWD	WEATHERFORD
10/6/2013	13,561.00	91.82	355.88	11,236.34	1,961.57	1,852.42	-1,796.59	0.47	MWD	WEATHERFORD
10/6/2013	13,655.00	92.59	356.20	11,232.73	2,055.50	1,946.13	-1,803.08	0.89	MWD	WEATHERFORD
10/6/2013	13,749.00	90.91	356.61	11,229.86	2,149.46	2,039.89	-1,808.97	1.84	MWD	WEATHERFORD
10/6/2013	13,844.00	89.02	356.25	11,229.91	2,244.45	2,134.71	-1,814.89	2.03	MWD	WEATHERFORD
10/6/2013	13,938.00	88.67	356.83	11,231.81	2,338.43	2,228.51	-1,820.56	0.72	MWD	WEATHERFORD
10/6/2013	14,033.00	88.74	358.14	11,233.96	2,433.39	2,323.40	-1,824.73	1.38	MWD	WEATHERFORD
10/6/2013	14,128.00	88.53	358.68	11,236.22	2,528.30	2,418.33	-1,827.36	0.61	MWD	WEATHERFORD
10/6/2013	14,222.00	87.76	359.24	11,239.26	2,622.16	2,512.27	-1,829.07	1.01	MWD	WEATHERFORD
10/6/2013	14,317.00	87.97	358.78	11,242.80	2,716.99	2,607.19	-1,830.71	0.53	MWD	WEATHERFORD
10/6/2013	14,411.00	88.18	357.94	11,245.96	2,810.88	2,701.09	-1,833.40	0.92	MWD	WEATHERFORD
10/6/2013	14,506.00	89.16	356.89	11,248.16	2,905.84	2,795.97	-1,837.68	1.51	MWD	WEATHERFORD
10/6/2013	14,601.00	89.72	357.06	11,249.09	3,000.83	2,890.83	-1,842.69	0.62	MWD	WEATHERFORD
10/6/2013	14,695.00	90.28	357.93	11,249.09	3,094.81	2,984.74	-1,846.80	1.10	MWD	WEATHERFORD
10/6/2013	14,790.00	90.91	359.03	11,248.11	3,189.74	3,079.70	-1,849.32	1.33	MWD	WEATHERFORD
10/6/2013	14,885.00	90.21	359.21	11,247.18	3,284.63	3,174.68	-1,850.78	0.76	MWD	WEATHERFORD
10/6/2013	14,979.00	89.37	359.55	11,247.52	3,378.50	3,268.68	-1,851.80	0.96	MWD	WEATHERFORD
10/6/2013	15,074.00	89.30	358.73	11,248.62	3,473.39	3,363.66	-1,853.22	0.87	MWD	WEATHERFORD
10/6/2013	15,168.00	89.93	358.74	11,249.26	3,567.31	3,457.63	-1,855.30	0.67	MWD	WEATHERFORD
10/6/2013	15,263.00	91.19	358.42	11,248.33	3,662.23	3,552.60	-1,857.65	1.37	MWD	WEATHERFORD
10/6/2013	15,357.00	93.78	357.87	11,244.25	3,756.09	3,646.45	-1,860.69	2.82	MWD	WEATHERFORD
10/6/2013	15,452.00	93.92	358.35	11,237.87	3,850.83	3,741.19	-1,863.82	0.53	MWD	WEATHERFORD
10/6/2013	15,546.00	93.78	358.51	11,231.56	3,944.56	3,834.94	-1,866.39	0.23	MWD	WEATHERFORD
10/6/2013	15,641.00	92.80	359.05	11,226.11	4,039.32	3,929.76	-1,868.41	1.18	MWD	WEATHERFORD
10/6/2013	15,735.00	92.66	359.27	11,221.63	4,133.11	4,023.64	-1,869.78	0.28	MWD	WEATHERFORD
10/6/2013	15,830.00	90.49	358.92	11,219.02	4,227.96	4,118.59	-1,871.28	2.31	MWD	WEATHERFORD
10/6/2013	15,924.00	88.11	357.89	11,220.17	4,321.89	4,212.54	-1,873.90	2.76	MWD	WEATHERFORD
10/6/2013	16,019.00	87.48	357.27	11,223.83	4,416.80	4,307.38	-1,877.91	0.93	MWD	WEATHERFORD
10/6/2013	16,113.00	88.11	357.65	11,227.44	4,510.71	4,401.22	-1,882.07	0.78	MWD	WEATHERFORD
10/6/2013	16,208.00	87.76	357.77	11,230.87	4,605.62	4,496.08	-1,885.86	0.39	MWD	WEATHERFORD
10/6/2013	16,301.00	87.34	358.02	11,234.84	4,698.51	4,588.93	-1,889.28	0.53	MWD	WEATHERFORD
10/6/2013	16,380.00	87.34	358.02	11,238.51	4,777.39	4,667.80	-1,892.00	0.00	BIT	WEATHERFORD