

Well Name: COTTON DRAW UNIT 240H

Sub-Division DELAWARE BASIN		Region EDDY COUNTY CORE		Field Name PADUCA		County EDDY		State/Province NM		
Surface Legal Location SEC13 T25S R31E		APN 3001543215		Latitude (°) 32° 8' 12.645" N		Longitude (°) 103° 44' 1.363" W		Orig KB Elevation (ft) 3,424.40		
								Ground Elev MSL (ft) 3,399.40		
								KB - GL (ft) 25.00		
Wellbores										
Wellbore Name OH		Parent Wellbore				SAP Well ID 38685		Vertical Section Direction (°)		
Kick Offs & Key Depths										
Date 8/7/2015		Type CURVE				Top Depth (ftKB) 9,883.0				
Actual Deviation Survey EXTREME, Proposed? No		Definitive? No		Proposed? No		Proposed Deviation Survey				
Deviation Survey										
Date 7/27/2015		Description EXTREME								
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)	DLB (ft/100ft)	Survey Tool	Survey Company
7/28/2015	138.84	0.70	138.84	0.00	0.00	0.00	0.00	0.00	MWD	EXTREME TOOL
7/27/2015	170.00	0.22	20.76	170.00	0.48	-0.48	0.80	0.49	MWD	EXTREME TOOL
7/27/2015	200.00	0.31	249.62	200.00	0.45	-0.45	0.74	1.61	MWD	EXTREME TOOL
7/27/2015	263.00	0.40	243.56	262.99	0.61	-0.61	0.39	0.15	MWD	EXTREME TOOL
7/27/2015	324.00	0.48	246.24	323.99	0.81	-0.81	-0.04	0.14	MWD	EXTREME TOOL
7/27/2015	416.00	0.00	6.74	415.99	0.96	-0.96	-0.39	0.52	MWD	EXTREME TOOL
7/27/2015	505.00	1.10	264.04	504.99	1.04	-1.05	-1.24	1.24	MWD	EXTREME TOOL
7/27/2015	596.00	0.00	6.74	595.98	1.13	-1.14	-2.11	1.21	MWD	EXTREME TOOL
7/28/2015	670.00	1.19	269.05	669.98	1.14	-1.15	-2.88	1.61	MWD	EXTREME TOOL
7/28/2015	759.00	1.19	122.05	758.97	1.64	-1.66	-3.02	2.56	MWD	EXTREME TOOL
7/28/2015	850.00	1.10	294.76	849.96	1.78	-1.79	-3.01	2.51	MWD	EXTREME TOOL
7/28/2015	942.00	1.01	288.56	941.95	1.14	-1.17	-4.58	0.16	MWD	EXTREME TOOL
7/28/2015	1,032.00	1.10	288.12	1,031.93	0.61	-0.65	-6.15	0.10	MWD	EXTREME TOOL
7/28/2015	1,123.00	1.10	288.34	1,122.91	0.06	-0.10	-7.81	0.00	MWD	EXTREME TOOL
7/28/2015	1,219.00	1.01	282.23	1,218.90	-0.42	0.37	-9.51	0.15	MWD	EXTREME TOOL
7/28/2015	1,314.00	0.79	281.13	1,313.89	-0.73	0.67	-10.98	0.23	MWD	EXTREME TOOL
7/28/2015	1,407.00	0.70	273.75	1,406.88	-0.90	0.83	-12.17	0.14	MWD	EXTREME TOOL
7/28/2015	1,503.00	0.62	281.75	1,502.87	-1.05	0.98	-13.27	0.13	MWD	EXTREME TOOL
7/28/2015	1,597.00	0.62	271.33	1,596.87	-1.17	1.09	-14.27	0.12	MWD	EXTREME TOOL
7/28/2015	1,692.00	0.62	270.54	1,691.86	-1.19	1.11	-15.30	0.01	MWD	EXTREME TOOL
7/28/2015	1,786.00	0.48	283.55	1,785.86	-1.29	1.21	-16.19	0.20	MWD	EXTREME TOOL
7/28/2015	1,864.00	0.40	273.93	1,863.85	-1.39	1.30	-16.78	0.14	MWD	EXTREME TOOL
7/28/2015	1,971.00	0.22	260.65	1,970.85	-1.39	1.30	-17.36	0.18	MWD	EXTREME TOOL
7/28/2015	2,066.00	0.31	260.00	2,065.85	-1.31	1.22	-17.79	0.09	MWD	EXTREME TOOL
7/28/2015	2,160.00	0.22	280.52	2,159.85	-1.31	1.21	-18.22	0.14	MWD	EXTREME TOOL
7/28/2015	2,255.00	0.09	287.94	2,254.85	-1.36	1.27	-18.47	0.14	MWD	EXTREME TOOL
7/28/2015	2,448.00	0.22	219.74	2,447.85	-1.13	1.03	-18.85	0.11	MWD	EXTREME TOOL
7/28/2015	2,540.00	0.09	193.42	2,539.85	-0.92	0.82	-18.98	0.16	MWD	EXTREME TOOL
7/28/2015	2,726.00	0.09	190.03	2,725.85	-0.64	0.54	-19.04	0.00	MWD	EXTREME TOOL
7/28/2015	2,822.00	0.22	163.53	2,821.85	-0.38	0.28	-19.00	0.15	MWD	EXTREME TOOL
7/28/2015	2,915.00	0.09	52.53	2,914.85	-0.26	0.16	-18.89	0.29	MWD	EXTREME TOOL
7/28/2015	3,010.00	0.09	33.02	3,009.85	-0.36	0.27	-18.79	0.03	MWD	EXTREME TOOL
7/28/2015	3,108.00	0.09	55.12	3,107.85	-0.47	0.37	-18.68	0.04	MWD	EXTREME TOOL
7/28/2015	3,202.00	0.31	116.82	3,201.85	-0.40	0.30	-18.40	0.30	MWD	EXTREME TOOL
7/28/2015	3,295.00	0.70	39.13	3,294.84	-0.72	0.63	-17.81	0.76	MWD	EXTREME TOOL
7/28/2015	3,390.00	0.31	104.43	3,389.84	-1.11	1.02	-17.20	0.67	MWD	EXTREME TOOL
7/28/2015	3,483.00	0.22	83.64	3,482.84	-1.06	0.97	-16.78	0.14	MWD	EXTREME TOOL
7/28/2015	3,579.00	0.40	15.53	3,578.84	-1.40	1.32	-16.50	0.39	MWD	EXTREME TOOL
7/28/2015	3,674.00	0.31	9.42	3,673.84	-1.97	1.89	-16.37	0.10	MWD	EXTREME TOOL
7/28/2015	3,768.00	0.70	62.94	3,767.83	-2.48	2.40	-15.82	0.61	MWD	EXTREME TOOL
7/28/2015	3,863.00	0.31	23.88	3,862.83	-2.98	2.90	-15.20	0.53	MWD	EXTREME TOOL
7/28/2015	3,955.00	0.40	78.15	3,954.83	-3.27	3.19	-14.78	0.36	MWD	EXTREME TOOL
7/28/2015	4,051.00	0.40	111.15	4,050.83	-3.22	3.14	-14.14	0.24	MWD	EXTREME TOOL
7/28/2015	4,146.00	0.62	141.52	4,145.82	-2.69	2.62	-13.51	0.36	MWD	EXTREME TOOL
7/28/2015	4,350.00	0.35	124.78	4,349.82	-1.46	1.40	-12.32	0.15	MWD	PATHFINDER ENERGY SE...
7/28/2015	4,446.00	0.35	83.17	4,445.81	-1.33	1.27	-11.78	0.26	MWD	PATHFINDER ENERGY SE...
7/28/2015	4,540.00	0.26	77.99	4,539.81	-1.41	1.35	-11.29	0.10	MWD	PATHFINDER ENERGY SE...
7/28/2015	4,635.00	0.35	98.39	4,634.81	-1.41	1.35	-10.79	0.15	MWD	PATHFINDER ENERGY SE...
7/28/2015	4,729.00	0.26	96.93	4,728.81	-1.33	1.28	-10.30	0.10	MWD	PATHFINDER ENERGY SE...
7/28/2015	4,824.00	0.18	118.35	4,823.81	-1.24	1.18	-9.95	0.12	MWD	PATHFINDER ENERGY SE...
7/28/2015	4,918.00	0.09	164.80	4,917.81	-1.09	1.04	-9.80	0.14	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,013.00	0.26	162.53	5,012.81	-0.82	0.76	-9.72	0.18	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,107.00	0.26	151.47	5,106.81	-0.42	0.37	-9.55	0.05	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,201.00	0.35	143.90	5,200.81	0.00	-0.05	-9.28	0.10	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,296.00	0.44	146.49	5,295.80	0.54	-0.58	-8.91	0.10	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,390.00	0.53	133.78	5,389.80	1.14	-1.19	-8.40	0.15	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,484.00	0.53	133.39	5,483.80	1.74	-1.78	-7.77	0.00	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,579.00	0.62	121.46	5,578.79	2.32	-2.36	-7.01	0.16	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,673.00	1.58	58.82	5,672.78	1.92	-1.95	-5.47	1.50	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,768.00	2.46	47.51	5,767.72	-0.12	0.11	-2.84	1.01	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,862.00	3.69	44.04	5,861.58	-3.64	3.64	0.75	1.32	MWD	PATHFINDER ENERGY SE...
7/28/2015	5,956.00	3.69	43.19	5,955.38	-8.00	8.02	4.92	0.06	MWD	PATHFINDER ENERGY SE...
7/28/2015	6,051.00	4.75	40.38	6,050.13	-13.20	13.25	9.56	1.14	MWD	PATHFINDER ENERGY SE...
7/28/2015	6,145.00	4.66	40.55	6,143.81	-19.04	19.11	14.57	0.10	MWD	PATHFINDER ENERGY SE...
7/28/2015	6,240.00	4.75	41.52	6,238.49	-24.89	24.99	19.68	0.13	MWD	PATHFINDER ENERGY SE...

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DELAWARE BASIN		EDDY COUNTY CORE		PADUCA		EDDY		NM					
Surface Legal Location		APRAV		Latitude (°)		Longitude (°)		Orig KB Elevation (ft)		Ground Elev MSL (ft)		KB - GL (ft)	
SEC13 T25S R31E		3001543215		32° 8' 12.645" N		103° 44' 1.363" W		3,424.40		3,399.40		25:00	
Survey Data													
Date	MD (ft)	Incl (°)	Azm (°)	TVD (ft)	VS (ft)	N/S (ft)	EW (ft)	OLS (ft/100ft)	Survey Tool	Survey Company			
7/28/2015	6,334.00	4.57	45.95	6,332.18	-30.38	30.51	24.95	0.43	MWD	PATHFINDER ENERGY SE...			
7/28/2015	6,428.00	4.66	42.97	6,425.87	-35.75	35.91	30.25	0.27	MWD	PATHFINDER ENERGY SE...			
7/28/2015	6,522.00	4.48	44.72	6,519.57	-41.12	41.31	35.43	0.24	MWD	PATHFINDER ENERGY SE...			
7/28/2015	6,617.00	4.66	45.34	6,614.27	-46.44	46.66	40.79	0.20	MWD	PATHFINDER ENERGY SE...			
7/28/2015	6,711.00	4.48	46.02	6,707.97	-51.65	51.89	46.15	0.20	MWD	PATHFINDER ENERGY SE...			
7/28/2015	6,805.00	4.22	44.49	6,801.70	-56.64	56.91	51.21	0.30	MWD	PATHFINDER ENERGY SE...			
7/28/2015	6,899.00	4.75	42.72	6,895.41	-61.94	62.23	56.28	0.58	MWD	PATHFINDER ENERGY SE...			
7/28/2015	6,994.00	4.84	39.57	6,990.08	-67.89	68.21	61.50	0.29	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,088.00	4.40	45.12	7,083.78	-73.46	73.82	66.58	0.67	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,183.00	4.40	45.87	7,178.50	-78.55	78.92	71.78	0.06	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,277.00	5.36	38.69	7,272.16	-84.45	84.86	77.11	1.21	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,371.00	5.28	40.06	7,365.75	-91.16	91.60	82.64	0.16	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,466.00	5.01	39.51	7,460.37	-97.68	98.14	88.09	0.29	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,560.00	4.84	40.93	7,554.02	-103.82	104.31	93.30	0.22	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,655.00	5.28	35.05	7,648.65	-110.39	110.91	98.44	0.72	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,749.00	5.10	34.23	7,742.27	-117.36	117.91	103.27	0.21	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,844.00	5.01	36.02	7,836.90	-124.18	124.76	108.08	0.19	MWD	PATHFINDER ENERGY SE...			
7/28/2015	7,938.00	4.40	34.54	7,930.58	-130.45	131.05	112.54	0.66	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,032.00	4.40	35.68	8,024.30	-136.33	136.94	116.69	0.09	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,125.00	3.17	36.93	8,117.10	-141.26	141.90	120.32	1.33	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,219.00	1.32	40.34	8,211.02	-144.15	144.80	122.58	1.97	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,314.00	0.44	68.30	8,306.01	-145.12	145.77	123.63	1.00	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,408.00	0.70	49.97	8,400.01	-145.62	146.27	124.40	0.33	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,503.00	0.62	30.92	8,495.00	-146.43	147.09	125.11	0.24	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,598.00	0.70	30.41	8,589.99	-147.36	148.03	125.67	0.08	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,692.00	0.62	355.65	8,683.99	-148.37	149.03	125.92	0.43	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,787.00	0.53	252.57	8,778.98	-148.75	149.41	125.46	0.95	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,881.00	0.62	276.72	8,872.98	-148.68	149.34	124.54	0.27	MWD	PATHFINDER ENERGY SE...			
7/28/2015	8,976.00	0.88	275.12	8,967.97	-148.82	149.47	123.30	0.27	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,070.00	1.14	278.08	9,061.96	-149.02	149.66	121.66	0.28	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,165.00	0.97	326.41	9,156.94	-149.83	150.46	120.28	0.92	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,259.00	0.70	346.44	9,250.93	-151.05	151.69	119.70	0.42	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,354.00	0.35	107.54	9,345.93	-151.53	152.16	119.84	0.98	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,448.00	0.35	111.53	9,439.93	-151.33	151.97	120.39	0.03	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,542.00	0.00	332.40	9,533.93	-151.23	151.86	120.65	0.37	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,636.00	0.26	329.05	9,627.93	-151.41	152.05	120.54	0.28	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,730.00	0.88	350.74	9,721.92	-152.31	152.94	120.32	0.69	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,824.00	1.41	1.65	9,815.90	-154.18	154.81	120.23	0.61	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,852.00	1.49	7.39	9,843.89	-154.88	155.52	120.29	0.59	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,915.00	2.46	175.35	9,906.88	-154.35	154.98	120.51	6.24	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,947.00	5.72	180.02	9,938.79	-152.07	152.70	120.56	10.23	MWD	PATHFINDER ENERGY SE...			
7/28/2015	9,978.00	9.23	182.23	9,969.53	-148.04	148.67	120.46	11.36	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,010.00	12.40	184.46	10,000.95	-142.05	142.68	120.10	9.99	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,041.00	14.68	185.87	10,031.09	-134.82	135.45	119.44	7.43	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,073.00	18.03	183.37	10,061.79	-125.85	126.47	118.73	10.70	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,104.00	20.75	183.06	10,091.03	-115.58	116.20	118.15	8.78	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,136.00	23.57	183.02	10,120.66	-103.53	104.15	117.52	8.81	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,167.00	26.82	181.63	10,148.71	-90.35	90.96	116.99	10.66	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,199.00	29.63	180.72	10,176.90	-75.22	75.83	116.68	8.88	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,230.00	31.92	182.05	10,203.54	-59.37	59.98	116.30	7.71	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,261.00	35.26	182.83	10,229.36	-42.24	42.85	115.56	10.86	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,293.00	38.60	183.90	10,254.93	-23.05	23.66	114.42	10.63	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,324.00	41.77	185.03	10,278.61	-3.12	3.72	112.86	10.49	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,356.00	45.55	188.39	10,301.76	-18.79	-18.21	110.26	13.86	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,387.00	48.89	189.25	10,322.81	-41.25	-40.69	108.77	10.96	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,418.00	51.79	187.78	10,342.60	-64.83	-64.29	103.24	10.04	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,450.00	55.66	186.65	10,361.53	-90.40	-89.88	100.01	12.42	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,482.00	59.27	185.83	10,378.74	-117.20	-116.69	97.08	11.49	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,513.00	62.61	184.87	10,393.79	-144.16	-143.67	94.56	11.11	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,544.00	66.65	183.95	10,407.07	-172.07	-171.59	92.41	13.31	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,576.00	69.56	182.63	10,419.00	-201.70	-201.23	90.74	9.87	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,607.00	71.58	182.16	10,429.31	-230.90	-230.43	89.49	6.67	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,638.00	73.16	182.36	10,438.70	-260.42	-259.95	88.32	5.13	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,670.00	75.18	182.22	10,447.43	-291.17	-290.71	87.09	6.33	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,701.00	77.82	182.31	10,454.67	-321.28	-320.83	85.90	8.52	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,732.00	80.02	181.24	10,460.63	-351.68	-351.24	84.96	7.86	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,764.00	81.95	180.27	10,465.64	-383.28	-382.84	84.54	6.73	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,796.00	83.45	179.89	10,468.94	-409.06	-408.63	84.51	5.95	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,884.00	86.35	180.26	10,477.30	-502.68	-502.24	84.38	3.11	MWD	PATHFINDER ENERGY SE...			
7/28/2015	10,979.00	87.14	180.22	10,482.69	-597.52	-597.09	83.99	0.83	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,073.00	89.34	181.75	10,485.58	-691.45	-691.02	82.37	2.85	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,167.00	89.25	181.51	10,486.74	-785.38	-784.98	79.70	0.27	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,262.00	89.08	181.33	10,488.12	-880.33	-879.94	77.34	0.26	MWD	PATHFINDER ENERGY SE...			
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Well Name: COTTON DRAW UNIT 240H

Sub-Division		Region		Field Name		County		State/Province					
DELAWARE BASIN		EDDY COUNTY CORE		PADUCA		EDDY		NM					
Surface Legal Location		AP/WVP		Latitude (°)		Longitude (°)		Orig KB Elevation (ft)		Ground Elev MSL (ft)		KB - GL (ft)	
SEC13 T25S R31E		3001543215		32° 8' 12.645" N		103° 44' 1.363" W		3,424.40		3,399.40		25.00	
Survey Data													
Date	MD (ft)	Incl (°)	Azm (°)	TVD (ft)	VS (ft)	N/S (ft)	EW (ft)	OLS (ft/100ft)	Survey Tool	Survey Company			
7/28/2015	11,356.00	88.64	181.07	10,489.99	974.28	-973.90	75.37	0.54	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,450.00	88.11	181.45	10,492.66	1,068.21	-1,067.84	73.31	0.69	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,545.00	87.58	181.23	10,496.23	1,163.10	-1,162.74	71.09	0.60	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,639.00	89.16	180.64	10,498.90	1,257.04	-1,256.69	69.55	1.79	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,733.00	88.90	180.20	10,500.49	1,351.02	-1,350.67	68.87	0.54	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,827.00	89.69	180.63	10,501.65	1,445.00	-1,444.66	68.18	0.96	MWD	PATHFINDER ENERGY SE...			
7/28/2015	11,922.00	89.52	180.76	10,502.31	1,539.98	-1,539.65	67.02	0.24	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,016.00	89.16	180.94	10,503.39	1,633.96	-1,633.64	65.61	0.42	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,110.00	90.48	180.53	10,503.68	1,727.94	-1,727.63	64.40	1.47	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,205.00	89.78	179.77	10,503.47	1,822.94	-1,822.62	64.15	1.09	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,299.00	90.66	180.67	10,503.11	1,916.93	-1,916.62	63.79	1.34	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,393.00	90.00	180.33	10,502.57	2,010.92	-2,010.61	62.97	0.79	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,488.00	89.52	180.30	10,502.96	2,105.91	-2,105.61	62.45	0.51	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,582.00	88.37	180.22	10,504.69	2,199.89	-2,199.59	62.02	1.23	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,676.00	90.31	180.77	10,505.78	2,293.87	-2,293.58	61.21	2.15	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,771.00	89.69	181.80	10,505.78	2,388.83	-2,388.55	59.08	1.27	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,865.00	88.72	182.68	10,507.08	2,482.73	-2,482.47	55.40	1.39	MWD	PATHFINDER ENERGY SE...			
7/28/2015	12,960.00	88.90	182.85	10,509.05	2,577.57	-2,577.34	50.82	0.26	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,054.00	90.40	185.16	10,509.63	2,671.29	-2,671.10	44.26	2.93	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,149.00	91.54	183.34	10,508.02	2,765.98	-2,765.82	37.22	2.26	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,243.00	90.57	183.06	10,506.29	2,859.78	-2,859.65	31.97	1.07	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,337.00	91.89	181.87	10,504.27	2,953.65	-2,953.54	27.93	1.89	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,431.00	91.89	181.87	10,501.17	3,047.53	-3,047.44	24.87	0.00	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,525.00	91.10	181.77	10,498.72	3,141.43	-3,141.36	21.88	0.85	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,619.00	91.19	182.04	10,496.84	3,235.34	-3,235.29	18.76	0.30	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,713.00	88.99	181.15	10,496.69	3,329.29	-3,329.25	16.14	2.52	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,808.00	87.58	181.41	10,499.54	3,424.20	-3,424.18	14.02	1.51	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,903.00	88.46	180.48	10,502.82	3,519.12	-3,519.11	12.45	1.35	MWD	PATHFINDER ENERGY SE...			
7/28/2015	13,997.00	88.90	180.85	10,504.98	3,613.08	-3,613.07	11.36	0.61	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,092.00	86.70	179.94	10,508.63	3,708.00	-3,708.00	10.71	2.51	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,186.00	85.74	180.24	10,514.83	3,801.79	-3,801.79	10.56	1.07	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,281.00	86.70	179.36	10,521.09	3,896.58	-3,896.58	10.89	1.37	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,375.00	88.29	179.40	10,525.20	3,990.49	-3,990.48	11.91	1.69	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,470.00	90.75	178.91	10,525.99	4,085.47	-4,085.46	13.31	2.64	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,565.00	90.22	178.49	10,525.19	4,180.46	-4,180.43	15.46	0.71	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,659.00	89.52	178.81	10,525.40	4,274.44	-4,274.41	17.68	0.82	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,753.00	89.25	179.03	10,526.41	4,368.43	-4,368.38	19.45	0.37	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,847.00	88.81	178.85	10,528.00	4,462.40	-4,462.35	21.19	0.51	MWD	PATHFINDER ENERGY SE...			
7/28/2015	14,941.00	87.85	179.04	10,530.74	4,556.35	-4,556.30	22.92	1.04	MWD	PATHFINDER ENERGY SE...			
7/28/2015	15,009.00	87.14	179.29	10,533.72	4,624.29	-4,624.22	23.91	1.11	MWD	PATHFINDER ENERGY SE...			
7/28/2015	15,068.00	87.14	179.29	10,536.66	4,683.21	-4,683.15	24.64	0.00	MWD	PATHFINDER ENERGY SE...			