

Results of Directional Survey

API number:	30-025-41148		
OGRID:		Operator:	DEVON ENERGY PRODUCTION COMPANY, LP
		Property:	CAPROCK 27 STATE FEDERAL COM # 1H

surface	ULSTR:	N	27	T 18S	R 34E
				420 FSL	1980 FWL

BH Loc	ULSTR:	C	27	T 18S	R 34E
14474	MD	9849.9	TVD	290 FNL	1941 FWL
				4990 FSL	

Top Perf/OH	ULSTR:	N	27	T 18S	R 34E
10384	MD	10118.4	TVD	917 FSL	1980 FWL

Bot Perf/OH	ULSTR:	C	27	T 18S	R 34E
14399	MD	9866.0	TVD	363 FNL	1942 FWL
				4917 FSL	

	MD	N/S	E/W	VD
	10370	483.20	1.33	10117.64
TOP PERFS/OH	10384	497.08	-0.31	10118.40
	10402	514.93	-2.42	10119.38
	14383	4481.21	-37.44	9869.41
BOT PERFS/OH	14399	4496.84	-37.73	9865.98
	14474	4570.09	-39.10	9849.93

NEXT TO LAST	14383	4481.21	-37.44	9869.41
LAST READING	14474	4570.09	-39.10	9849.93
TD	14474	4570.09	-39.10	9849.93

Surface Location	420	FS	1980	FW
Projected BHL	4990	FS	1941	FW
Location of				
Top Perfs/OH	917	FS	1980	FW
Bottom Perfs/OH	4917	FS	1942	FW

SUMMARY of Subsurface Locations

Surface Location	N-27-18S-34E	420	FS	1980	FW	Vert. Depth
Top Perfs/OH	N-27-18S-34E	917	FS	1980	FW	10118.40
Bottom Perfs/OH	C-27-18S-34E	4917	FS	1942	FW	9865.98
Projected TD	C-27-18S-34E	4990	FS	1941	FW	9849.93

OCT 22 2013



A GYRO TECHNOLOGIES INC. COMPANY

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

July 12 2013

HOEBS OCD

OCT 04 2013

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

RECEIVED

Attn: Patti Riechers

Re: **Caprock 27 State Federal Com No. 001H**

Please find enclosed a copy of the survey from 0 00' to 10520 00' ran on the above referenced well.

If I can be of any further service please do not hesitate to call me at 800-606-4976

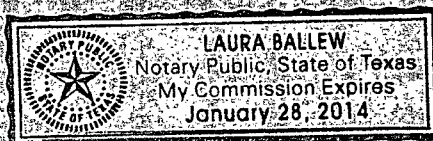
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §

COUNTY OF NUECES §

This instrument was acknowledged before me on the 12th day of July
A.D. 2013, by Keith Havelka




Laura Ballew
Notary Public, State of Texas

Company: Devon Energy Production Co.
Lease/Well: Caprock 27 State Federal Com/No. 001H



Rig Name: McVay Rig #8
State/County: New Mexico/Lea
Latitude: 32.71, Longitude: -103.55
GRID North is 0.42 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB = 18 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...ck 27 state fed com #1h_01.ut

Minimum Curvature Method

Report Date/Time: 7/12/2013 / 13:06

Vaughn Energy Services

Ft.Worth TX

817-741-3610

Surveyor: Kenny Gabel

Caprock 27 State Federal Com No. 001H / API 30-025-41148

RECEIVED
OCT 04 2013
HOEBS OGD

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.21	92.18	100.00	-0.01	0.18	-0.01	0.18	92.18	0.21
200.00	1.15	105.41	199.99	-0.28	1.32	-0.28	1.35	101.94	0.95
300.00	0.92	119.36	299.98	-0.94	2.99	-0.94	3.13	107.45	0.34
400.00	1.07	126.58	399.96	-1.89	4.44	-1.89	4.82	113.05	0.19
500.00	0.94	124.35	499.95	-2.90	5.86	-2.90	6.54	116.37	0.14
600.00	1.04	122.83	599.93	-3.86	7.30	-3.86	8.25	117.86	0.10
700.00	0.50	117.98	699.92	-4.55	8.44	-4.55	9.59	118.34	0.54
800.00	0.29	76.95	799.92	-4.70	9.07	-4.70	10.21	117.39	0.34
900.00	0.18	65.11	899.92	-4.57	9.45	-4.57	10.50	115.82	0.12
1000.00	0.14	49.98	999.92	-4.43	9.69	-4.43	10.66	114.57	0.06
1100.00	0.21	42.02	1099.92	-4.21	9.91	-4.21	10.77	113.04	0.08
1200.00	0.09	47.74	1199.92	-4.02	10.09	-4.02	10.86	111.75	0.13
1300.00	0.19	39.50	1299.92	-3.84	10.25	-3.84	10.95	110.55	0.11
1400.00	0.12	41.71	1399.92	-3.63	10.43	-3.63	11.05	109.20	0.07
1500.00	0.22	59.73	1499.92	-3.46	10.66	-3.46	11.21	107.97	0.11
1600.00	0.26	52.25	1599.91	-3.23	11.01	-3.23	11.47	106.34	0.05
1700.00	0.28	34.89	1699.91	-2.89	11.32	-2.89	11.68	104.32	0.08
1800.00	0.09	1.20	1799.91	-2.62	11.46	-2.62	11.76	102.86	0.21

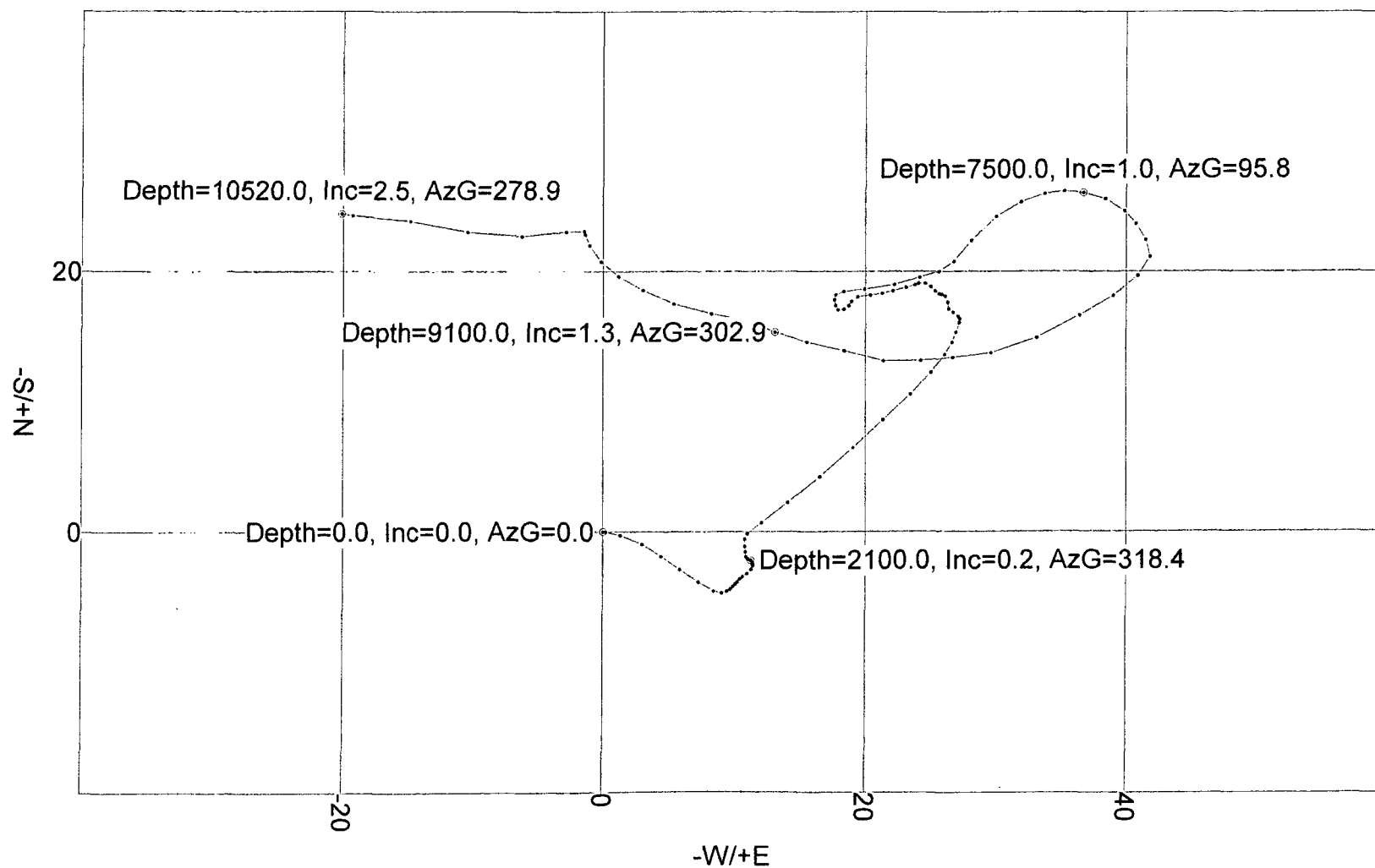
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.08	357.15	1899.91	-2.48	11.46	-2.48	11.72	102.19	0.01
2000.00	0.05	332.96	1999.91	-2.37	11.43	-2.37	11.68	101.70	0.03
2100.00	0.21	318.36	2099.91	-2.19	11.29	-2.19	11.50	100.96	0.16
2200.00	0.14	238.23	2199.91	-2.11	11.06	-2.11	11.26	100.81	0.23
2300.00	0.26	356.80	2299.91	-1.95	10.95	-1.95	11.12	100.08	0.35
2400.00	0.20	348.10	2399.91	-1.55	10.90	-1.55	11.01	98.09	0.08
2500.00	0.29	356.74	2499.91	-1.13	10.85	-1.13	10.91	95.94	0.10
2600.00	0.33	0.07	2599.91	-0.59	10.83	-0.59	10.85	93.13	0.04
2700.00	0.30	55.12	2699.91	-0.16	11.05	-0.16	11.05	90.81	0.29
2800.00	1.25	51.55	2799.90	0.67	12.12	0.67	12.14	86.82	0.95
2900.00	1.66	52.20	2899.86	2.24	14.12	2.24	14.30	80.98	0.41
3000.00	1.95	49.99	2999.81	4.22	16.57	4.22	17.10	75.70	0.29
3100.00	1.88	46.14	3099.76	6.45	19.05	6.45	20.12	71.29	0.15
3200.00	1.73	47.06	3199.71	8.62	21.34	8.62	23.01	68.01	0.14
3300.00	1.54	47.49	3299.67	10.56	23.44	10.56	25.71	65.76	0.19
3400.00	1.16	37.77	3399.64	12.27	25.05	12.27	27.89	63.91	0.44
3500.00	0.80	36.11	3499.63	13.63	26.08	13.63	29.43	62.41	0.36
3600.00	0.44	22.45	3599.62	14.54	26.64	14.54	30.35	61.37	0.39
3700.00	0.54	20.22	3699.62	15.34	26.95	15.34	31.01	60.35	0.10
3800.00	0.32	11.61	3799.61	16.05	27.17	16.05	31.55	59.42	0.23
3900.00	0.06	338.01	3899.61	16.37	27.20	16.37	31.75	58.96	0.28
4000.00	0.21	325.81	3999.61	16.57	27.08	16.57	31.75	58.54	0.15
4100.00	0.35	297.68	4099.61	16.86	26.71	16.86	31.58	57.73	0.20
4200.00	0.16	332.63	4199.61	17.13	26.37	17.13	31.44	57.00	0.24
4300.00	0.43	358.22	4299.61	17.62	26.30	17.62	31.66	56.17	0.30
4400.00	0.23	302.72	4399.61	18.11	26.11	18.11	31.78	55.26	0.36
4500.00	0.14	281.14	4499.61	18.24	25.83	18.24	31.62	54.77	0.12
4600.00	0.07	291.58	4599.61	18.29	25.65	18.29	31.50	54.51	0.07
4700.00	0.38	305.22	4699.61	18.51	25.32	18.51	31.36	53.83	0.31
4800.00	0.18	343.86	4799.60	18.85	25.00	18.85	31.31	52.99	0.27
4900.00	0.47	282.59	4899.60	19.08	24.56	19.08	31.10	52.15	0.42
5000.00	0.16	229.94	4999.60	19.08	24.05	19.08	30.70	51.56	0.39
5100.00	0.20	261.39	5099.60	18.97	23.77	18.97	30.41	51.41	0.10
5200.00	0.61	252.04	5199.60	18.78	23.09	18.78	29.76	50.88	0.41
5300.00	0.62	258.55	5299.59	18.51	22.05	18.51	28.79	50.00	0.07
5400.00	0.31	254.25	5399.59	18.33	21.26	18.33	28.07	49.24	0.32
5500.00	0.75	263.99	5499.59	18.18	20.35	18.18	27.29	48.21	0.45
5600.00	0.35	259.02	5599.58	18.06	19.39	18.06	26.50	47.04	0.40
5700.00	0.39	209.28	5699.58	17.70	18.92	17.70	25.91	46.91	0.31

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
5800.00	0.07	227.63	5799.58	17.37	18.71	17.37	25.53	47.14	0.32
5900.00	0.44	235.20	5899.58	17.11	18.35	17.11	25.09	47.01	0.37
6000.00	0.25	315.75	5999.57	17.04	17.89	17.04	24.71	46.39	0.47
6100.00	0.21	351.80	6099.57	17.38	17.71	17.38	24.81	45.54	0.15
6200.00	0.31	348.21	6199.57	17.82	17.63	17.82	25.07	44.68	0.11
6300.00	0.24	50.72	6299.57	18.23	17.74	18.23	25.43	44.22	0.29
6400.00	0.51	75.89	6399.57	18.47	18.33	18.47	26.02	44.79	0.31
6500.00	1.32	86.53	6499.56	18.65	19.91	18.65	27.28	46.88	0.82
6600.00	1.34	75.60	6599.53	19.01	22.19	19.01	29.22	49.42	0.25
6700.00	0.95	72.67	6699.51	19.55	24.12	19.55	31.05	50.98	0.39
6800.00	0.84	73.07	6799.50	20.01	25.62	20.01	32.51	52.01	0.11
6900.00	0.80	38.56	6899.49	20.77	26.76	20.77	33.87	52.18	0.49
7000.00	1.62	39.87	6999.46	22.40	28.10	22.40	35.94	51.44	0.82
7100.00	1.44	53.89	7099.43	24.23	30.03	24.23	38.59	51.10	0.42
7200.00	1.11	65.60	7199.40	25.37	31.93	25.37	40.78	51.52	0.42
7300.00	1.10	75.57	7299.39	26.01	33.74	26.01	42.61	52.37	0.19
7400.00	0.68	94.42	7399.37	26.21	35.27	26.21	43.94	53.38	0.51
7500.00	1.00	95.85	7499.36	26.07	36.72	26.07	45.04	54.62	0.32
7600.00	1.01	115.97	7599.35	25.60	38.38	25.60	46.14	56.30	0.35
7700.00	1.00	128.51	7699.33	24.67	39.86	24.67	46.88	58.25	0.22
7800.00	0.54	157.11	7799.32	23.69	40.73	23.69	47.12	59.81	0.59
7900.00	1.11	146.23	7899.31	22.45	41.45	22.45	47.14	61.56	0.59
8000.00	0.62	201.11	7999.30	21.14	41.79	21.14	46.83	63.17	0.91
8100.00	1.38	217.17	8099.29	19.68	40.87	19.68	45.36	64.29	0.80
8200.00	1.47	242.88	8199.26	18.13	39.00	18.13	43.01	65.06	0.64
8300.00	1.97	237.54	8299.21	16.63	36.41	16.63	40.02	65.45	0.52
8400.00	2.25	246.75	8399.14	14.93	33.15	14.93	36.36	65.76	0.44
8500.00	2.02	257.07	8499.07	13.76	29.64	13.76	32.68	65.09	0.45
8600.00	1.40	271.25	8599.03	13.40	26.70	13.40	29.87	63.36	0.74
8700.00	1.46	258.66	8699.00	13.17	24.23	13.17	27.58	61.47	0.32
8800.00	1.87	278.36	8798.96	13.16	21.37	13.16	25.09	58.37	0.70
8900.00	1.67	290.98	8898.91	13.92	18.39	13.92	23.06	52.89	0.44
9000.00	1.69	275.24	8998.87	14.57	15.57	14.57	21.33	46.89	0.46
9100.00	1.32	302.88	9098.83	15.33	13.13	15.33	20.19	40.58	0.80
9200.00	1.36	282.18	9198.81	16.21	11.00	16.21	19.59	34.16	0.48
9300.00	1.85	280.26	9298.77	16.75	8.25	16.75	18.67	26.23	0.49
9400.00	1.57	290.53	9398.72	17.52	5.39	17.52	18.33	17.10	0.41
9500.00	1.38	297.91	9498.69	18.56	3.04	18.56	18.81	9.32	0.27
9600.00	1.10	302.32	9598.67	19.63	1.18	19.63	19.67	3.43	0.29

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
9700.00	0.94	319.37	9698.65	20.77	-0.17	20.77	20.77	359.54	0.34
9800.00	0.84	332.57	9798.64	22.04	-1.04	22.04	22.06	357.30	0.23
9900.00	0.22	1.66	9898.64	22.88	-1.37	22.88	22.92	356.58	0.65
10000.00	0.12	307.19	9998.64	23.13	-1.45	23.13	23.18	356.42	0.18
10100.00	1.46	265.32	10098.62	23.09	-2.80	23.09	23.26	353.09	1.37
10200.00	2.45	263.03	10198.56	22.73	-6.18	22.73	23.55	344.78	0.99
10300.00	2.42	286.29	10298.48	23.06	-10.33	23.06	25.27	335.87	0.98
10400.00	2.73	276.21	10398.38	23.91	-14.73	23.91	28.09	328.37	0.55
10500.00	2.48	274.52	10498.27	24.34	-19.26	24.34	31.04	321.65	0.26
10520.00	2.47	278.88	10518.25	24.44	-20.12	24.44	31.66	320.55	0.94



Vaughn Energy Services
Ft. Worth TX
817-741-3610
Surveyor: Kenny Gabel
Caprock 27 State Federal Com No. 001H / API 30-025-41148





A Schlumberger Company

HOBBS OCD

OCT 04 2013

DIRECTIONAL SURVEY REPORT

RECEIVED

DEVON ENERGY PRODUCTION CO., L.P.

CAPROCK 27 STATE COM 1H

LEA COUNTY, NEW MEXICO

PREPARED BY: KIRK DAVIS



A Schlumberger Company

August 29, 2013

Devon Energy
20 N. Broadway
Oklahoma City, OK

RE: DEVON ENERGY PRODUCTION CO., L.P.
CAPROCK 27 STATE COM 1H
LEA COUNTY, NEW MEXICO
API No: 30-025-41148
Rig: MCVAY 8
PES File No.: 13MLD0504

Dear Sir or Madam:

We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

DIRECTIONAL SURVEY DATA

- 1 – Original survey report
- 1 – Survey report copies

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (432) 687-1647.

Sincerely,

A handwritten signature in black ink, appearing to be "K. Davis", written over a horizontal line.

KIRK DAVIS
M/LWD Field Service Manager
Schlumberger Technology Corp.



A Schlumberger Company

**STATE OF TEXAS
MIDLAND COUNTY**

I, **BILL KITCHENS** certify that; I am employed by PathFinder, a Schlumberger company.; that I did on the day(s) of **7/13/13** through **7/30/13** conduct or supervise the taking of a **Measurement While Drilling** survey from a depth of **9673 feet** to a depth of **14383 feet**; that the data is true, correct, complete and within the limitations of the tool as set forth by PathFinder, a Schlumberger company.; that I am authorized and qualified to make this report; that this survey was conducted at the request of **DEVON ENERGY PRODUCTION CO., L.P.** for the **CAPROCK 27 STATE COM 1H** Well API No. **30-025-41148** in **LEA COUNTY, NEW MEXICO**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by PathFinder, a Schlumberger company.

A handwritten signature in black ink, appearing to read "Bill Kitchens", written over a horizontal line.

BILL KITCHENS
Field Engineer



A Schlumberger Company

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: SCHLUMBERGER TECHNOLOGY CORP.
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) BILL KITCHENS
B) TOM GRUELLE
3. POSITION OF SAID PERSON(S): (A) SURVEYORS (FIELD ENGINEER)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 7/13/13 TO 7/30/13
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: LEA COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

DEVON ENERGY PRODUCTION CO., L.P.
CAPROCK 27 STATE COM 1H
LEA COUNTY, NEW MEXICO
API NO.: 30-025-41148
RIG: MCVAY 8
9. SURVEY CERTIFIED FROM: 9673 TO 14383 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4531.17 FEET ON A BEARING OF 359.51 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED DEPTH OF 14434.00 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

A handwritten signature in black ink, appearing to be "K.D.", written over a horizontal line.

KIRK DAVIS
M/LWD Field Service Manager

PathFinder – a Schlumberger company

BHL Report

Page 01/01
Tie-In Date: 07/12/2013
Date Completed: 07/30/2013

DEVON ENERGY PRODUCTION COMPANY, LP
CAPROCK 27 STATE COM 1H
LEA COUNTY, NM
API#: 30-025-41148 Rig: MCVAY 8
PathFinder Office Supervisor: JOE HOGAN
PathFinder Field Engineers: BILL KITCHENS
 TOM GRUELLE

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.42.44.5367 N LON: 103.33.1.0927 W
GRID Reference: NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 782175.1000 Y: 623781.5000
North Aligned To: GRID NORTH
Total Magnetic Correction: 6.93° EAST TO GRID
Vertical Section Plane: 359.53
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude: 4008.40' Ground To MSL

Measured Depth	14434.00	(feet)
Inclination	102.36	(deg)
Azimuth	358.93	(deg)
True Vertical Depth	9858.43	(feet)
Vertical Section	4531.17	(feet)
Survey X cord	782136.74	(feet)
Survey Y cord	628312.51	(feet)
Survey Lat	32.72482528 N	(deg)
Survey Lon	103.55031942 W	(deg)
Rectangular Corr. N/S	4531.01 N	(feet)
Rectangular Corr. E/W	38.36 W	(feet)
Closure Distance	4531.17	(feet)
Direction of Closure	359.51	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
CAPROCK 27 STATE COM 1H
LEA COUNTY, NM
API#: 30-025-41148 Rig: MCVAY 8
PathFinder Office Supervisor: JOE HOGAN
PathFinder Field Engineers: BILL KITCHENS
TOM GRUELLE

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.42.44.5367 N LON: 103.33.1.0927 W
GRID Reference: NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 782175.1000 Y: 623781.5000
North Aligned To: GRID NORTH
Total Magnetic Correction: 6.93° EAST TO GRID
Vertical Section Plane: 359.53
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude: 4008.40' Ground To MSL

Survey Calculations by RX5 V6.04D using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
TIED INTO VAUGIN ENERGY SERVICES GYRO SURVEY AT 9651.20'MD.								
9651.20	1.00	310.35	9649.68	0.00	20.18	20.18 N 0.42 E	20.18@ 1.19	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.								
9673.00	7.47	2.93	9671.41	21.80	21.72	21.72 N 0.35 E	21.72@ 0.92	31.69
9705.00	9.23	12.78	9703.07	32.00	26.29	26.30 N 1.02 E	26.32@ 2.22	7.07
9737.00	14.42	18.84	9734.39	32.00	32.55	32.58 N 2.88 E	32.71@ 5.05	16.66
9771.00	18.99	17.21	9766.94	34.00	41.83	41.88 N 5.88 E	42.29@ 8.00	13.51
9803.00	23.57	15.83	9796.75	32.00	52.93	53.01 N 9.17 E	53.80@ 9.81	14.40
9835.00	26.47	13.32	9825.75	32.00	66.00	66.11 N 12.56 E	67.29@ 10.76	9.65
9897.00	32.98	9.86	9879.56	62.00	96.06	96.21 N 18.64 E	98.00@ 10.96	10.86
9929.00	35.88	8.01	9905.95	32.00	113.91	114.09 N 21.44 E	116.08@ 10.64	9.63
9960.00	38.78	6.27	9930.60	31.00	132.54	132.74 N 23.76 E	134.85@ 10.15	9.95
9991.00	42.30	4.34	9954.16	31.00	152.58	152.79 N 25.62 E	154.93@ 9.52	12.05
10023.00	45.37	2.40	9977.24	32.00	174.69	174.91 N 26.91 E	176.97@ 8.75	10.47
10054.00	48.98	0.69	9998.31	31.00	197.41	197.64 N 27.51 E	199.54@ 7.92	12.33
10086.00	53.02	359.78	10018.44	32.00	222.27	222.50 N 27.61 E	224.21@ 7.07	12.82
10117.00	56.81	358.40	10036.26	31.00	247.63	247.86 N 27.20 E	249.35@ 6.26	12.76
10149.00	60.32	356.93	10052.95	32.00	274.91	275.13 N 26.08 E	276.37@ 5.41	11.65
10180.00	64.46	354.82	10067.31	31.00	302.32	302.52 N 24.09 E	303.48@ 4.55	14.65
10212.00	67.97	353.63	10080.22	32.00	331.47	331.65 N 21.14 E	332.33@ 3.65	11.48
10244.00	71.23	352.93	10091.37	32.00	361.28	361.43 N 17.63 E	361.86@ 2.79	10.39
10275.00	73.60	352.48	10100.73	31.00	390.62	390.74 N 13.88 E	390.99@ 2.03	7.77
10307.00	77.65	352.19	10108.68	32.00	421.36	421.46 N 9.74 E	421.57@ 1.32	12.69
10338.00	81.87	352.12	10114.19	31.00	451.61	451.67 N 5.58 E	451.71@ 0.71	13.61
10370.00	85.74	352.57	10117.64	32.00	483.17	483.20 N 1.35 E	483.20@ 0.16	12.17
10402.00	88.02	353.95	10119.38	32.00	514.93	514.92 N 2.40 W	514.93@ 359.73	8.32

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
CAPROCK 27 STATE COM 1H
LEA COUNTY, NM
API#: 30-025-41148 Rig: MCVAY 8

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS (dg/100ft)
						(ft)	(ft)	(ft)	(deg)	
10433.00	89.60	355.30	10120.03	31.00	545.81	545.78 N	5.31 W	545.81@	359.44	6.70
10551.00	93.21	355.50	10117.13	118.00	663.44	663.35 N	14.77 W	663.51@	358.72	3.06
10646.00	93.91	355.50	10111.23	95.00	758.03	757.87 N	22.21 W	758.19@	358.32	0.74
10740.00	94.53	355.77	10104.32	94.00	851.55	851.34 N	29.34 W	851.85@	358.03	0.72
10835.00	94.35	357.79	10096.96	95.00	946.15	945.90 N	34.66 W	946.54@	357.90	2.13
10929.00	94.70	357.96	10089.54	94.00	1039.82	1039.54 N	38.13 W	1040.24@	357.90	0.41
11024.00	94.79	358.67	10081.69	95.00	1134.48	1134.18 N	40.92 W	1134.92@	357.93	0.75
11119.00	93.39	359.28	10074.91	95.00	1229.23	1228.92 N	42.61 W	1229.66@	358.01	1.61
11213.00	94.00	359.20	10068.85	94.00	1323.03	1322.71 N	43.86 W	1323.44@	358.10	0.65
11308.00	93.47	0.69	10062.66	95.00	1417.82	1417.51 N	43.95 W	1418.19@	358.22	1.66
11402.00	93.21	1.04	10057.19	94.00	1511.64	1511.34 N	42.53 W	1511.94@	358.39	0.46
11496.00	91.19	2.27	10053.58	94.00	1605.50	1605.22 N	39.82 W	1605.72@	358.58	2.51
11591.00	89.96	2.36	10052.63	95.00	1700.38	1700.14 N	35.98 W	1700.52@	358.79	1.30
11686.00	90.92	1.39	10051.90	95.00	1795.29	1795.08 N	32.87 W	1795.38@	358.95	1.44
11780.00	91.10	1.66	10050.24	94.00	1889.22	1889.03 N	30.37 W	1889.28@	359.08	0.35
11875.00	92.33	1.22	10047.40	95.00	1984.12	1983.96 N	27.99 W	1984.16@	359.19	1.37
11970.00	92.42	1.39	10043.46	95.00	2079.00	2078.85 N	25.82 W	2079.01@	359.29	0.20
12064.00	92.95	2.10	10039.06	94.00	2172.82	2172.71 N	22.96 W	2172.83@	359.39	0.94
12160.00	93.12	2.71	10033.97	96.00	2268.57	2268.49 N	18.94 W	2268.57@	359.52	0.66
12255.00	93.56	2.89	10028.44	95.00	2363.25	2363.21 N	14.31 W	2363.26@	359.65	0.50
12349.00	92.51	2.27	10023.46	94.00	2456.98	2456.98 N	10.08 W	2457.00@	359.76	1.30
12444.00	92.68	2.80	10019.16	95.00	2551.75	2551.79 N	5.89 W	2551.80@	359.87	0.59
12538.00	92.95	3.15	10014.54	94.00	2645.47	2645.55 N	1.01 W	2645.55@	359.98	0.47
12633.00	92.15	2.36	10010.32	95.00	2740.23	2740.35 N	3.55 E	2740.35@	0.07	1.18
12728.00	92.15	1.39	10006.75	95.00	2835.08	2835.23 N	6.65 E	2835.24@	0.13	1.02
12822.00	91.98	359.64	10003.37	94.00	2929.00	2929.16 N	7.50 E	2929.17@	0.15	1.87
12917.00	92.68	358.14	9999.50	95.00	3023.91	3024.06 N	5.66 E	3024.07@	0.11	1.74
13012.00	93.47	358.14	9994.41	95.00	3118.75	3118.87 N	2.58 E	3118.87@	0.05	0.83

PathFinder – a Schlumberger company

Survey Report

DEVON ENERGY PRODUCTION COMPANY, LP
CAPROCK 27 STATE COM 1H
LEA COUNTY, NM
API#: 30-025-41148 Rig: MCVAY 8

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
13106.00	94.35	358.32	9988.00	94.00	3212.50	3212.61 N	0.32 W	3212.61@	359.99	0.96
13201.00	93.56	358.23	9981.45	95.00	3307.25	3307.34 N	3.17 W	3307.34@	359.95	0.84
13296.00	92.68	358.14	9976.28	95.00	3402.08	3402.15 N	6.17 W	3402.15@	359.90	0.93
13391.00	93.47	358.32	9971.18	95.00	3496.92	3496.97 N	9.10 W	3496.98@	359.85	0.85
13486.00	91.36	357.34	9967.18	95.00	3591.79	3591.81 N	12.70 W	3591.83@	359.80	2.45
13581.00	91.45	357.32	9964.85	95.00	3686.69	3686.67 N	17.12 W	3686.71@	359.73	0.10
13675.00	91.89	357.34	9962.11	94.00	3780.58	3780.53 N	21.50 W	3780.59@	359.67	0.47
13771.00	93.30	357.50	9957.76	96.00	3876.42	3876.34 N	25.82 W	3876.42@	359.62	1.48
13865.00	95.67	358.58	9950.41	94.00	3970.09	3969.98 N	29.02 W	3970.09@	359.58	2.77
13936.00	96.64	359.55	9942.80	71.00	4040.68	4040.56 N	30.17 W	4040.68@	359.57	1.93
14031.00	97.96	359.81	9930.73	95.00	4134.90	4134.79 N	30.70 W	4134.90@	359.57	1.42
14125.00	98.31	358.58	9917.43	94.00	4227.95	4227.83 N	32.01 W	4227.95@	359.57	1.35
14220.00	100.51	358.76	9901.89	95.00	4321.66	4321.52 N	34.18 W	4321.66@	359.55	2.32
14314.00	101.74	358.84	9883.76	94.00	4413.88	4413.74 N	36.12 W	4413.88@	359.53	1.31
14383.00	102.36	358.93	9869.35	69.00	4481.36	4481.20 N	37.43 W	4481.36@	359.52	0.91
STRAIGHT LINE PROJECTION TO BIT DEPTH AT 14434' MD.										
14434.00	102.36	358.93	9858.43	51.00	4531.17	4531.01 N	38.36 W	4531.17@	359.51	0.00



Directional Survey

District PERMIAN BASIN	County LEA	Field Name CORBIN	Project Group DELAWARE BASIN	State/Province NM			
Surface Legal Location SEC27 T18S R34E	API/UWI 3002541148	Latitude (°) 32° 42' 45.43" N	Longitude (°) 103° 33' 1.09" W	Ground Elev... 4,008.40	KB - GL (ft) 18.00	Orig KB Elev (ft) 4,026.40	Tubing Head Elevation (ft)

Wellbores

Wellbore Name OH	Parent Wellbore OH	Property Number 33270	Kick Off Depth (ftKB)	Vertical Section Direction (°)
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)	EWtie 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		Property Number 33270			Kick Off Depth (ftKB) 9,651.0		Vertical Section Direction (°) 359.00	
Actual Deviation Survey MWD, Proposed? No				Definitive? Yes		Proposed? No		Proposed Deviation Survey		

Deviation Survey

Date 7/13/2013		Description MWD			
MD Tie In (ftKB) 9,651.20	TVD Tie In (ftKB) 9,649.68	Inclination Tie In (°) 1.00	Azimuth Tie In (°) 310.35	NSTie In (ft) 20.18	EWtie In (ft) 0.42

Survey Data

Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	N/S (ft)	E/W (ft)	DLS (°/100ft)	Survey Tool	Survey Company
7/13/2013	9,673.00	7.47	2.93	9,671.41	21.71	21.72	0.35	31.69	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,705.00	9.23	12.78	9,703.07	26.28	26.30	1.02	7.07	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,737.00	14.42	18.84	9,734.38	32.52	32.58	2.88	16.65	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,771.00	18.99	17.21	9,766.94	41.77	41.88	5.88	13.51	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,803.00	23.57	15.83	9,796.75	52.84	53.01	9.17	14.40	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,835.00	26.47	13.32	9,825.75	65.88	66.11	12.56	9.65	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,897.00	32.98	9.86	9,879.56	95.87	96.21	18.64	10.85	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,929.00	35.88	8.01	9,905.96	113.69	114.09	21.44	9.63	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,960.00	38.78	6.27	9,930.60	132.30	132.74	23.76	9.95	MWD	PATHFINDER ENERGY SER...
7/13/2013	9,991.00	42.30	4.30	9,954.16	152.32	152.80	25.61	12.08	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,023.00	45.37	2.40	9,977.24	174.42	174.92	26.89	10.44	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,054.00	48.98	0.69	9,998.31	197.13	197.64	27.50	12.33	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,086.00	53.02	359.78	10,018.44	221.99	222.50	27.59	12.82	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,117.00	56.81	358.40	10,036.26	247.35	247.86	27.18	12.76	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,149.00	60.32	356.93	10,052.95	274.64	275.14	26.06	11.65	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,180.00	64.46	354.82	10,067.31	302.06	302.52	24.08	14.65	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,212.00	67.97	353.63	10,080.22	331.23	331.65	21.13	11.48	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,244.00	71.23	352.93	10,091.37	361.07	361.44	17.62	10.39	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,275.00	73.60	352.48	10,100.73	390.44	390.75	13.86	7.77	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,307.00	77.65	352.19	10,108.68	421.23	421.46	9.73	12.69	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,338.00	81.87	352.12	10,114.19	451.51	451.67	5.57	13.61	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,370.00	85.74	352.57	10,117.64	483.10	483.20	1.33	12.17	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,402.00	88.02	353.95	10,119.38	514.89	514.93	-2.42	8.33	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,433.00	89.60	355.30	10,120.03	545.79	545.78	-5.32	6.70	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,551.00	93.21	355.50	10,117.13	663.50	663.35	-14.78	3.06	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,646.00	93.91	355.50	10,111.23	758.14	757.87	-22.22	0.74	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,740.00	94.53	355.77	10,104.32	851.73	851.34	-29.36	0.72	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,835.00	94.35	357.79	10,096.96	946.36	945.90	-34.68	2.13	MWD	PATHFINDER ENERGY SER...
7/13/2013	10,929.00	94.70	357.96	10,089.55	1,040.05	1,039.55	-38.15	0.41	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,024.00	94.79	358.67	10,081.69	1,134.72	1,134.18	-40.93	0.75	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,119.00	93.39	359.28	10,074.91	1,229.48	1,228.92	-42.63	1.61	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,213.00	94.00	359.20	10,068.85	1,323.28	1,322.71	-43.87	0.65	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,308.00	93.47	0.69	10,062.66	1,418.06	1,417.51	-43.96	1.66	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,402.00	93.21	1.04	10,057.19	1,511.85	1,511.34	-42.55	0.46	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,496.00	91.19	2.27	10,053.58	1,605.67	1,605.22	-39.83	2.52	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,591.00	89.96	2.36	10,052.63	1,700.51	1,700.14	-36.00	1.30	MWD	PATHFINDER ENERGY SER...

Directional Survey

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Surface Legal Location SEC27 T18S R34E	API/UWI 3002541148	Latitude (") 32° 42' 45.43" N	Longitude (") 103° 33' 1.09" W	Ground Elev... 4,008.40
				KB - GL (ft) 18.00
				Orig KB Elev (ft) 4,026.40
				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
7/13/2013	11,686.00	90.92	1.39	10,051.90	1,795.38	1,795.08	-32.89	1.44	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,780.00	91.10	1.66	10,050.24	1,889.28	1,889.04	-30.39	0.35	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,875.00	92.33	1.22	10,047.40	1,984.15	1,983.96	-28.00	1.38	MWD	PATHFINDER ENERGY SER...
7/13/2013	11,970.00	92.42	1.39	10,043.46	2,078.99	2,078.85	-25.84	0.20	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,064.00	92.95	2.10	10,039.06	2,172.78	2,172.71	-22.98	0.94	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,160.00	93.12	2.71	10,033.97	2,268.47	2,268.49	-18.96	0.66	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,255.00	93.56	2.89	10,028.44	2,363.10	2,363.21	-14.32	0.50	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,349.00	92.51	2.27	10,023.46	2,456.79	2,456.98	-10.10	1.30	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,444.00	92.68	2.80	10,019.16	2,551.51	2,551.79	-5.90	0.59	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,538.00	92.95	3.15	10,014.54	2,645.17	2,645.55	-1.03	0.47	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,633.00	92.15	2.36	10,010.32	2,739.87	2,740.35	3.53	1.18	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,728.00	92.15	1.39	10,006.75	2,834.68	2,835.23	6.64	1.02	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,822.00	91.98	359.64	10,003.37	2,928.58	2,929.16	7.48	1.87	MWD	PATHFINDER ENERGY SER...
7/13/2013	12,917.00	92.68	358.14	9,999.50	3,023.50	3,024.06	5.64	1.74	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,012.00	93.47	358.14	9,994.41	3,118.35	3,118.87	2.57	0.83	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,106.00	94.35	358.32	9,988.00	3,212.13	3,212.61	-0.33	0.96	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,201.00	93.56	358.23	9,981.45	3,306.89	3,307.34	-3.18	0.84	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,296.00	92.68	358.14	9,976.27	3,401.74	3,402.15	-6.19	0.93	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,391.00	93.47	358.32	9,971.18	3,496.59	3,496.97	-9.12	0.85	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,486.00	91.36	357.34	9,967.18	3,591.48	3,591.81	-12.71	2.45	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,581.00	91.45	357.32	9,964.85	3,686.41	3,686.68	-17.14	0.10	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,675.00	91.89	357.34	9,962.11	3,780.33	3,780.53	-21.51	0.47	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,771.00	93.30	357.50	9,957.76	3,876.20	3,876.34	-25.83	1.48	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,865.00	95.67	358.58	9,950.41	3,969.89	3,969.99	-29.04	2.77	MWD	PATHFINDER ENERGY SER...
7/13/2013	13,936.00	96.64	359.55	9,942.80	4,040.48	4,040.56	-30.19	1.93	MWD	PATHFINDER ENERGY SER...
7/13/2013	14,031.00	97.96	359.81	9,930.73	4,134.70	4,134.79	-30.72	1.42	MWD	PATHFINDER ENERGY SER...
7/13/2013	14,125.00	98.31	358.58	9,917.42	4,227.75	4,227.83	-32.02	1.35	MWD	PATHFINDER ENERGY SER...
7/13/2013	14,220.00	100.51	358.76	9,901.89	4,321.46	4,321.52	-34.20	2.32	MWD	PATHFINDER ENERGY SER...
7/13/2013	14,314.00	101.70	358.84	9,883.79	4,413.70	4,413.74	-36.13	1.27	MWD	PATHFINDER ENERGY SER...
7/13/2013	14,383.00	102.36	358.93	9,869.41	4,481.19	4,481.21	-37.44	0.96	MWD	PATHFINDER ENERGY SER...
7/13/2013	14,474.00	102.36	358.93	9,849.93	4,570.08	4,570.09	-39.10	0.00	BIT	PATHFINDER ENERGY SER...