



Company: Devon Energy Production

Lease/Well: Agate PWU 21 /No 008H

Location: Sec21 T19S R29E

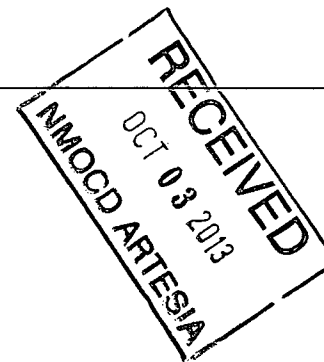
Rig Name: McVay 6

State/County: New Mexico/Eddy

Latitude: 32.64, Longitude: -104.09

GRID North is 0.13 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB 18 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: agate pwu 21 #8h-de_01.ut

Minimum Curvature Method

Report Date/Time: 10/2/2013 / 12:52

Vaughn Energy Services

West Texas

Surveyor: Chris Bankson

432-563-5444

Agate PWU 21 No 008H / API 30-015-40512

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	****
200.00	1.68	137.35	199.97	-2.16	1.99	-2.16	2.93	137.35	0.84
300.00	2.29	130.12	299.91	-4.52	4.50	-4.52	6.38	135.10	0.66
400.00	2.34	128.62	399.83	-7.08	7.62	-7.08	10.40	132.88	0.08
500.00	2.26	130.21	499.75	-9.63	10.73	-9.63	14.41	131.91	0.10
600.00	2.37	132.96	599.67	-12.31	13.75	-12.31	18.46	131.85	0.16
700.00	2.08	132.48	699.59	-14.95	16.61	-14.95	22.35	132.00	0.29
800.00	1.92	130.34	799.53	-17.27	19.23	-17.27	25.84	131.93	0.18
900.00	2.07	126.81	899.47	-19.44	21.95	-19.44	29.32	131.52	0.20
1000.00	1.97	118.27	999.41	-21.34	24.92	-21.34	32.80	130.57	0.32
1100.00	2.19	121.69	1099.34	-23.15	28.06	-23.15	36.38	129.53	0.25
1200.00	1.67	122.44	1199.28	-24.94	30.91	-24.94	39.72	128.90	0.52
1300.00	1.55	124.28	1299.24	-26.48	33.26	-26.48	42.51	128.53	0.13
1400.00	0.91	125.21	1399.22	-27.70	35.02	-27.70	44.65	128.34	0.64
1500.00	0.78	118.36	1499.21	-28.48	36.27	-28.48	46.11	128.14	0.16
1600.00	0.98	119.89	1599.20	-29.23	37.60	-29.23	47.63	127.85	0.20
1700.00	0.90	116.95	1699.19	-30.01	39.04	-30.01	49.24	127.54	0.09
1800.00	0.89	114.99	1799.17	-30.69	40.45	-30.69	50.77	127.19	0.03
1900.00	0.53	119.20	1899.17	-31.25	41.56	-31.25	51.99	126.94	0.36
2000.00	0.33	116.39	1999.16	-31.60	42.22	-31.60	52.74	126.81	0.20
2100.00	0.50	112.53	2099.16	-31.90	42.89	-31.90	53.45	126.64	0.16

15-40512

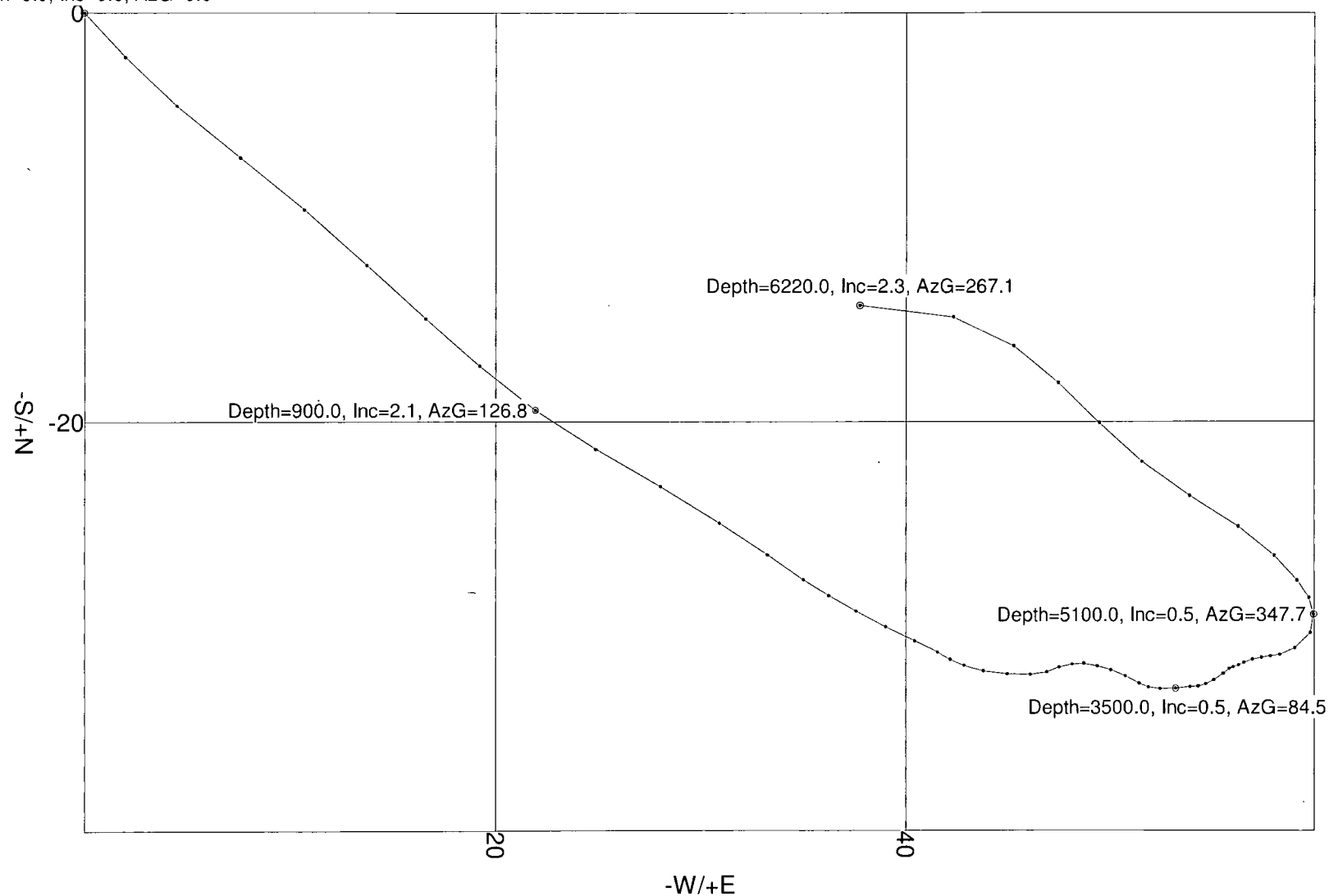
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
2200.00	0.64	100.91	2199.15	-32.17	43.83	-32.17	54.37	126.27	0.18
2300.00	0.74	93.48	2299.15	-32.31	45.02	-32.31	55.42	125.67	0.13
2400.00	0.56	88.31	2399.14	-32.34	46.15	-32.34	56.36	125.02	0.18
2500.00	0.38	71.09	2499.14	-32.22	46.96	-32.22	56.95	124.45	0.23
2600.00	0.38	69.63	2599.14	-32.00	47.58	-32.00	57.34	123.92	0.01
2700.00	0.41	82.06	2699.13	-31.83	48.24	-31.83	57.80	123.42	0.09
2800.00	0.25	96.02	2799.13	-31.80	48.82	-31.80	58.27	123.08	0.18
2900.00	0.51	104.22	2899.13	-31.94	49.47	-31.94	58.88	122.85	0.26
3000.00	0.31	107.16	2999.13	-32.13	50.15	-32.13	59.56	122.64	0.19
3100.00	0.56	116.31	3099.12	-32.42	50.86	-32.42	60.31	122.52	0.26
3200.00	0.32	121.45	3199.12	-32.79	51.54	-32.79	61.08	122.46	0.24
3300.00	0.27	99.20	3299.12	-32.97	52.01	-32.97	61.58	122.37	0.13
3400.00	0.37	95.69	3399.12	-33.04	52.56	-33.04	62.08	122.16	0.10
3500.00	0.52	84.53	3499.11	-33.03	53.32	-33.03	62.72	121.78	0.17
3600.00	0.27	82.82	3599.11	-32.96	54.01	-32.96	63.27	121.39	0.24
3700.00	0.20	82.94	3699.11	-32.91	54.42	-32.91	63.59	121.16	0.07
3800.00	0.24	66.88	3799.11	-32.80	54.78	-32.80	63.85	120.91	0.07
3900.00	0.26	59.71	3899.11	-32.61	55.17	-32.61	64.09	120.58	0.04
4000.00	0.38	53.10	3999.11	-32.30	55.63	-32.30	64.32	120.14	0.12
4100.00	0.07	30.59	4099.11	-32.05	55.92	-32.05	64.45	119.82	0.32
4200.00	0.17	76.21	4199.11	-31.96	56.10	-31.96	64.57	119.67	0.14
4300.00	0.14	65.72	4299.11	-31.88	56.36	-31.88	64.75	119.49	0.05
4400.00	0.19	65.73	4399.11	-31.76	56.62	-31.76	64.92	119.29	0.05
4500.00	0.30	72.61	4499.11	-31.61	57.02	-31.61	65.20	119.00	0.11
4600.00	0.22	81.30	4599.10	-31.50	57.46	-31.50	65.53	118.74	0.09
4700.00	0.27	82.17	4699.10	-31.44	57.89	-31.44	65.88	118.51	0.05
4800.00	0.25	78.91	4799.10	-31.37	58.34	-31.37	66.23	118.27	0.03
4900.00	0.67	61.49	4899.10	-31.05	59.06	-31.05	66.72	117.73	0.44
5000.00	0.60	28.90	4999.09	-30.32	59.82	-30.32	67.07	116.87	0.36
5100.00	0.54	347.73	5099.09	-29.39	59.97	-29.39	66.79	116.11	0.40
5200.00	0.42	337.40	5199.09	-28.59	59.73	-28.59	66.22	115.58	0.15
5300.00	0.77	318.80	5299.08	-27.75	59.15	-27.75	65.34	115.14	0.39
5400.00	1.10	317.90	5399.07	-26.54	58.07	-26.54	63.84	114.56	0.34
5500.00	1.48	303.29	5499.04	-25.11	56.34	-25.11	61.68	114.02	0.50
5600.00	1.70	301.85	5599.00	-23.62	54.00	-23.62	58.94	113.62	0.22
5700.00	1.61	308.83	5698.96	-21.96	51.65	-21.96	56.12	113.03	0.22
5800.00	1.64	316.11	5798.92	-20.05	49.56	-20.05	53.46	112.02	0.21
5900.00	1.62	312.42	5898.88	-18.07	47.53	-18.07	50.85	110.81	0.11
6000.00	1.65	306.06	5998.84	-16.27	45.33	-16.27	48.16	109.75	0.18
6100.00	2.17	287.32	6098.79	-14.86	42.36	-14.86	44.89	109.33	0.81
6220.00	2.30	267.14	6218.70	-14.31	37.78	-14.31	40.40	110.74	0.66



Vaughn Energy Services
West Texas
Surveyor: Chris Bankson
432-563-5444
Agate PWU 21 No 008H / API 30-015-40512



Depth=0.0, Inc=0.0, AzG=0.0



VES Survey Date: 05/17/2013



**DRILLING SERVICES
END OF WELL REPORT
FOR
Spencer Stuart
Devon Energy
Agate PWU 21 8H
Eddy County, New Mexico**

Weatherford Drilling Services job start date : 5-17-2013

Weatherford Drilling Services job end date : 5-25-2013

Presented By:

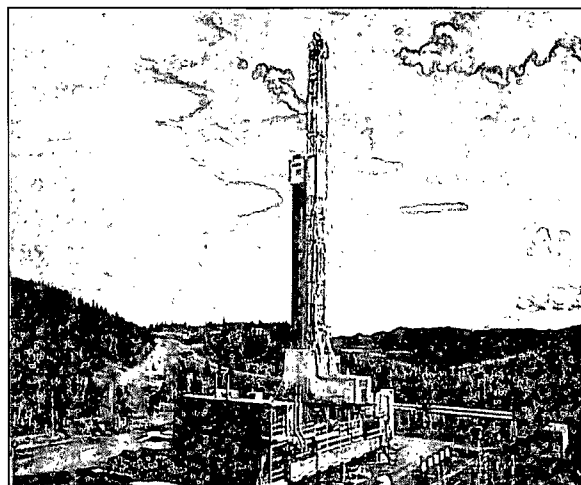
Damien Tarpley
Area Manager

Scott Dixon
Account Manager

Orry Armendariz
Directional Drilling Coordinator

Jesse Aguilar
MWD Coordinator

McVay 6





10000 West County Road 116
P.O. Box 61028
Midland, Texas 79711
Phone (432) 561-8892

May 28, 2013

Spencer Stuart
333 W. Sherridan Ave
Oklahoma City, OK 73102

Reference Well Name : Agate PWU 21 8H
Location : Eddy County, New Mexico
Wft Job # : 4029503
Rig : McVay 6

Dear Mr. Stuart

Thank you for allowing us the opportunity to provide our services on your Agate PWU 21 8H in Eddy County, New Mexico.

Please find the final End Of Well (EOW) report enclosed behind this coverletter.

The EOW report contains the following information :

Section 1 - Weatherford (Wft) Final Definitive Survey & 8.5" x 11".

* Note: This survey contains the Directional Survey's obtained by Weatherford Drilling Services via Weatherford MWD Services, and any gyro survey needed for Tie On (if required).

Section 2- Days vs. Feet Drilled (24 hrs) and Days vs. Depth Graphs

Section 3- Wft Gamma Logs

Section 4 - Wft Final BHA reports (BHA Graphic Reports, BHA Detail Reports, Motor Evaluation Reports, and BHA Slide Reports).

Section 5 - Wft Final Daily Drilling reports.

Section 6 - Wft Personnel list with contact numbers.

We at *Weatherford Drilling Services'* understand the importance of this project to you and hope that you were satisfied with our Directional Drilling and MWD services provided.

Please feel free to contact me if you have any questions.

Sincerely,

Damien Tarpley
Area Manager
Weatherford Drilling Services
Midland, TX (432) 561-8892



Weatherford®

Devon Energy
Agate PWU 21 8H
Eddy County, New Mexico

Section 1

Weatherford (Wft) Final Definitive

Plot & Survey



Agate PWU 21 8H Eddy Co, NM

KB ELEV: 3345
GL ELEV: 3326

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	6220.00	2.30	267.14	6218.70	-14.31	37.78	0.00	0.00	36.93	
2	6285.90	2.30	267.14	6284.54	-14.44	35.13	0.00	0.00	34.29	
3	6537.35	28.50	5.50	6525.80	46.32	35.86	11.50	102.49	38.36	
4	7289.17	88.96	89.99	6945.87	268.88	525.56	11.50	85.64	539.58	
5	11661.23	88.96	89.99	7025.00	269.95	4896.90	0.00	0.00	4904.34	PBHL

SITE DETAILS

Agate PWU 21 8H
Site Centre Northing: 596441.24
Easting: 616784.58
Ground Level: 3326.00
Positional Uncertainty: 0.00
Convergence: 0.13

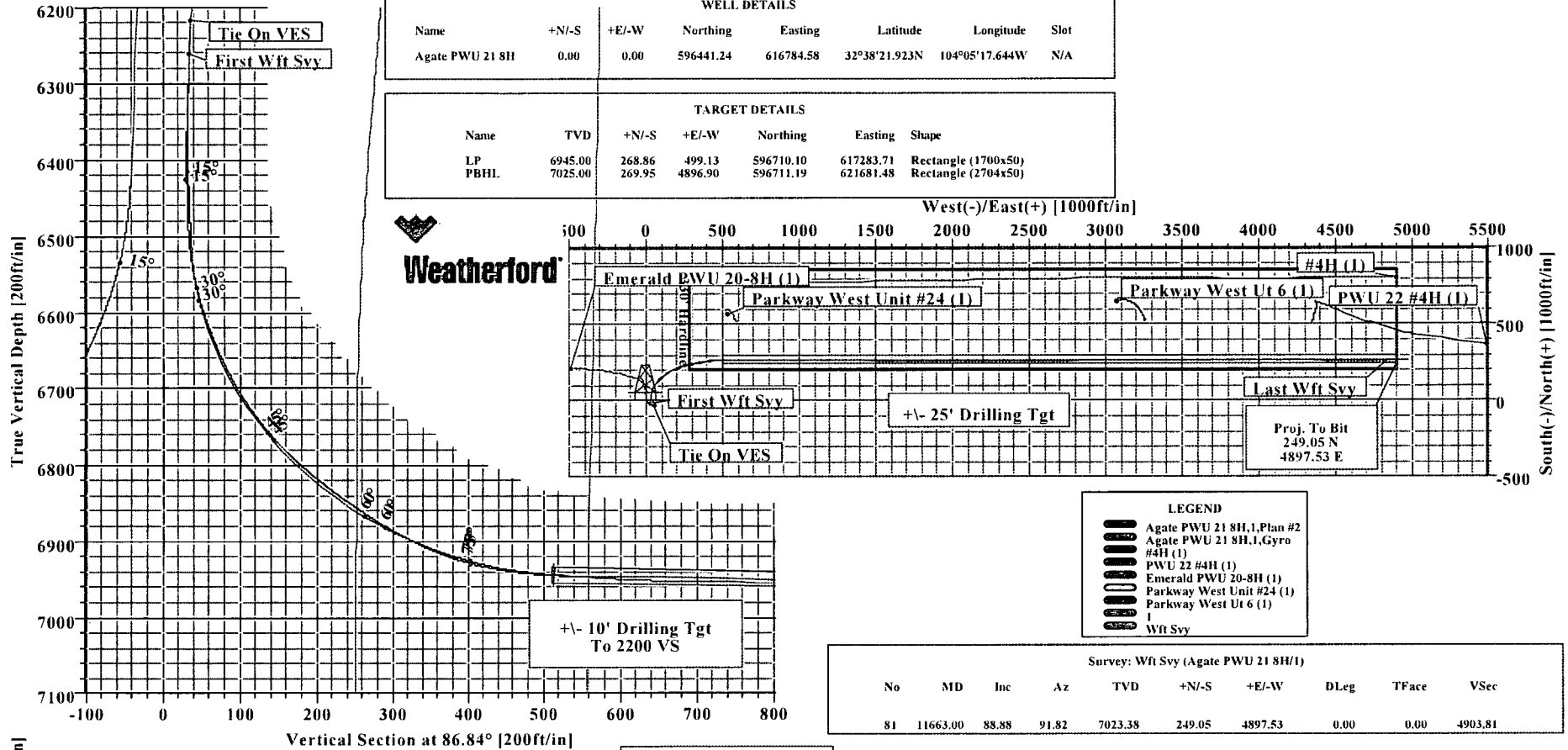
WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Agate PWU 21 8H	0.00	0.00	596441.24	616784.58	32°38'21.923N	104°05'17.644W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
LP	6945.00	268.86	499.13	596710.10	617283.71	Rectangle (1700x50)
PBHL	7025.00	269.95	4896.90	596711.19	621681.48	Rectangle (2704x50)

West(-)/East(+) [1000ft/in]

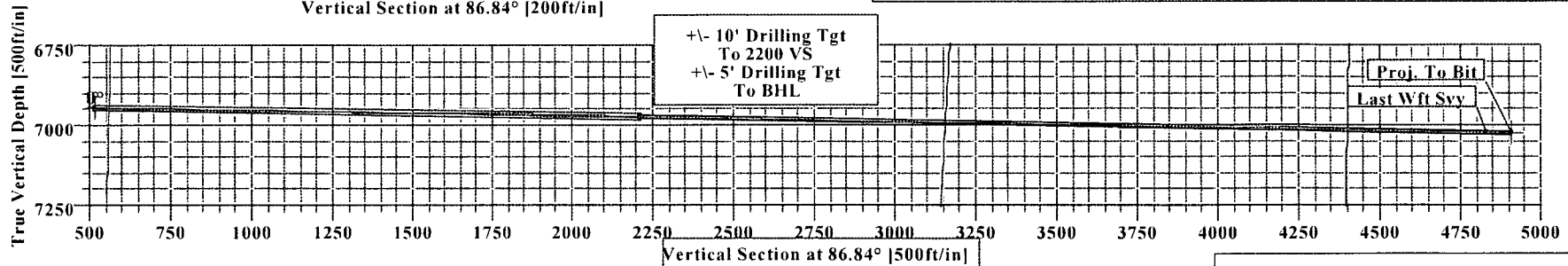


LEGEND

- Agate PWU 21 8H, 1, Plan #2
- Agate PWU 21 8H, 1, Gyro
- #4H (1)
- PWU 22 #4H (1)
- Emerald PWU 20-8H (1)
- Parkway West Unit #24 (1)
- Parkway West Ut 6 (1)
- 1
- Wft Svy

Survey: Wft Svy (Agate PWU 21 8H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
81	11663.00	88.88	91.82	7023.38	249.05	4897.53	0.00	0.00	4903.81



Survey: Wft Svy (Agate PWU 21 8H/1)

Created By: Russell W. Joyner

Date: 5/27/2013



Weatherford

WFT Survey Report X & Y's



Company: Devon Energy Date: 5/27/2013 Time: 10:48:10 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: Agate PWU 21 8H, Grid North
Site: Agate PWU 21 8H Vertical (TVD) Reference: SITE 3345.0
Well: Agate PWU 21 8H Section (VS) Reference: Well (0.00N,0.00E,86.84Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy Start Date: 5/20/2013
Company: Weatherford Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard Tied-to: User Defined

Site: Agate PWU 21 8H

Site Position: Northing: 596441.24 ft Latitude: 32 38 21.923 N
From: Map Easting: 616784.58 ft Longitude: 104 5 17.644 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3326.00 ft Grid Convergence: 0.13 deg

Well: Agate PWU 21 8H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 596441.24 ft Latitude: 32 38 21.923 N
+E/-W 0.00 ft Easting: 616784.58 ft Longitude: 104 5 17.644 W
Position Uncertainty: 0.00 ft

Wellpath: 1 Drilled From: Surface
Current Datum: SITE Height 3345.00 ft Tie-on Depth: 0.00 ft
Magnetic Data: 5/20/2013 Above System Datum: Mean Sea Level
Field Strength: 48642 nT Declination: 7.62 deg
Vertical Section: Depth From (TVD) +N/-S Mag Dip Angle: 60.43 deg
ft ft +E/-W Direction
deg
0.00 0.00 0.00 86.84

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
6220.00	2.30	267.14	6218.70	-14.31	37.78	0.00	36.93	596426.93	616822.36	Tie On VES First Wft Svy
6263.00	2.37	263.42	6261.66	-14.45	36.03	0.39	35.18	596426.79	616820.61	
6294.00	2.72	265.10	6292.63	-14.59	34.66	1.15	33.80	596426.65	616819.24	
6326.00	3.34	312.72	6324.59	-14.02	33.22	7.85	32.40	596427.22	616817.80	
6357.00	6.43	345.29	6355.48	-11.73	32.12	13.02	31.42	596429.51	616816.70	
6389.00	10.07	354.54	6387.14	-7.21	31.39	12.07	30.95	596434.03	616815.97	
6421.00	14.01	359.96	6418.43	-0.55	31.12	12.80	31.05	596440.69	616815.70	
6452.00	17.98	0.91	6448.23	7.99	31.20	12.83	31.59	596449.23	616815.78	
6484.00	22.19	3.10	6478.28	18.97	31.60	13.36	32.60	596460.21	616816.18	
6515.00	25.73	7.15	6506.60	31.49	32.76	12.59	34.44	596472.73	616817.34	
6547.00	27.73	13.56	6535.19	45.63	35.37	10.96	37.83	596486.87	616819.95	
6578.00	29.59	20.16	6562.39	59.83	39.70	11.84	42.94	596501.07	616824.28	
6610.00	31.81	25.12	6589.91	74.89	46.00	10.52	50.06	596516.13	616830.58	
6641.00	34.43	28.00	6615.88	90.02	53.59	9.86	58.47	596531.26	616838.17	
6673.00	36.20	31.07	6641.99	106.11	62.71	7.83	68.47	596547.35	616847.29	
6704.00	36.93	35.41	6666.89	121.54	72.84	8.66	79.43	596562.78	616857.42	
6736.00	38.36	41.34	6692.24	136.84	84.97	12.16	92.38	596578.08	616869.55	
6767.00	40.69	46.09	6716.15	151.08	98.61	12.31	106.79	596592.32	616883.19	
6799.00	43.00	50.87	6739.99	165.20	114.60	12.30	123.53	596606.44	616899.18	
6831.00	45.75	55.19	6762.87	178.64	132.48	12.76	142.12	596619.88	616917.06	
6862.00	48.23	59.94	6784.02	190.77	151.61	13.76	161.89	596632.01	616936.19	
6894.00	50.74	64.98	6804.82	201.99	173.17	14.31	184.04	596643.23	616957.75	
6926.00	53.33	70.07	6824.51	211.61	196.48	14.92	207.84	596652.85	616981.06	
6958.00	55.02	74.42	6843.24	219.51	221.18	12.22	232.94	596660.75	617005.76	
6989.00	56.39	77.29	6860.71	225.76	246.01	8.83	258.08	596667.00	617030.59	
7021.00	59.23	78.40	6877.76	231.46	272.48	9.35	284.83	596672.70	617057.06	
7052.00	62.26	78.52	6892.91	236.87	298.98	9.78	311.58	596678.11	617083.56	
7084.00	65.85	78.68	6906.90	242.56	327.18	11.23	340.05	596683.80	617111.76	
7116.00	69.92	79.19	6918.95	248.24	356.27	12.80	369.41	596689.48	617140.85	
7147.00	74.33	80.33	6928.46	253.48	385.30	14.65	398.68	596694.72	617169.88	



Weatherford

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Agate PWU 21 8H
Well: Agate PWU 21 8H
Wellpath: 1

Date: 5/27/2013 Time: 10:48:10 Page: 2
Co-ordinate(NE) Reference: Well: Agate PWU 21 8H, Grid North
Vertical (TVD) Reference: SITE 3345.0
Section (VS) Reference: Well (0.00N,0.00E,86.84Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
7179.00	78.75	82.33	6935.91	258.17	416.05	15.09	429.65	596699.41	617200.63	
7210.00	82.84	84.58	6940.87	261.65	446.45	15.01	460.19	596702.89	617231.03	
7241.00	85.94	87.29	6943.90	263.84	477.21	13.25	491.03	596705.08	617261.79	
7273.00	86.64	89.08	6945.97	264.85	509.13	6.00	522.95	596706.09	617293.71	
7336.00	86.79	89.36	6949.58	265.70	572.02	0.50	585.80	596706.94	617356.60	
7431.00	89.09	90.27	6952.99	266.01	666.95	2.60	680.60	596707.25	617451.53	
7527.00	89.30	90.39	6954.34	265.46	762.94	0.25	776.41	596706.70	617547.52	
7622.00	89.37	90.44	6955.45	264.77	857.93	0.09	871.22	596706.01	617642.51	
7717.00	88.53	90.27	6957.19	264.18	952.91	0.90	966.03	596705.42	617737.49	
7811.00	89.65	90.09	6958.68	263.89	1046.90	1.21	1059.85	596705.13	617831.48	
7906.00	89.72	89.98	6959.20	263.83	1141.90	0.14	1154.70	596705.07	617926.48	
8001.00	89.09	89.94	6960.19	263.89	1236.89	0.66	1249.56	596705.13	618021.47	
8095.00	89.79	91.04	6961.11	263.09	1330.88	1.39	1343.36	596704.33	618115.46	
8190.00	89.86	92.07	6961.40	260.51	1425.84	1.09	1438.04	596701.75	618210.42	
8284.00	89.72	91.48	6961.74	257.60	1519.80	0.65	1531.69	596698.84	618304.38	
8379.00	89.79	90.19	6962.15	256.22	1614.78	1.36	1626.45	596697.46	618399.36	
8474.00	89.16	89.31	6963.02	256.63	1709.78	1.14	1721.33	596697.87	618494.36	
8568.00	88.88	89.96	6964.63	257.23	1803.76	0.75	1815.20	596698.47	618588.34	
8662.00	88.11	89.84	6967.10	257.39	1897.73	0.83	1909.03	596698.63	618682.31	
8757.00	89.09	89.95	6969.42	257.57	1992.70	1.04	2003.87	596698.81	618777.28	
8851.00	88.95	90.17	6971.02	257.47	2086.69	0.28	2097.71	596698.71	618871.27	
8947.00	89.30	90.23	6972.49	257.13	2182.67	0.37	2193.53	596698.37	618967.25	
9041.00	89.93	90.44	6973.12	256.58	2276.67	0.71	2287.35	596697.82	619061.25	
9136.00	88.67	89.67	6974.28	256.49	2371.66	1.55	2382.19	596697.73	619156.24	
9231.00	87.90	89.88	6977.13	256.87	2466.62	0.84	2477.02	596698.11	619251.20	
9325.00	87.41	89.72	6980.97	257.19	2560.54	0.55	2570.82	596698.43	619345.12	
9420.00	87.69	89.07	6985.03	258.20	2655.44	0.74	2665.64	596699.44	619440.02	
9515.00	88.46	88.87	6988.22	259.90	2750.37	0.84	2760.52	596701.14	619534.95	
9609.00	88.18	88.72	6990.98	261.88	2844.31	0.34	2854.42	596703.12	619628.89	
9704.00	88.67	88.84	6993.59	263.90	2939.25	0.53	2949.33	596705.14	619723.83	
9798.00	89.86	89.75	6994.80	265.06	3033.24	1.59	3043.24	596706.30	619817.82	
9893.00	89.93	90.62	6994.97	264.75	3128.24	0.92	3138.07	596705.99	619912.82	
9988.00	89.79	91.06	6995.20	263.36	3223.22	0.49	3232.84	596704.60	620007.80	
10083.00	88.95	89.83	6996.25	262.62	3318.21	1.57	3327.64	596703.86	620102.79	
10177.00	88.18	89.52	6998.60	263.15	3412.18	0.88	3421.50	596704.39	620196.76	
10272.00	87.69	88.73	7002.02	264.60	3507.11	0.98	3516.36	596705.84	620291.69	
10367.00	87.97	87.22	7005.62	267.96	3601.98	1.62	3611.27	596709.20	620386.56	
10461.00	89.09	89.60	7008.03	270.56	3695.90	2.80	3705.20	596711.80	620480.48	
10556.00	90.00	90.50	7008.79	270.48	3790.90	1.35	3800.04	596711.72	620575.48	
10650.00	90.14	90.92	7008.67	269.32	3884.89	0.47	3893.83	596710.56	620669.47	
10745.00	89.79	90.70	7008.73	267.97	3979.88	0.44	3988.60	596709.21	620764.46	
10840.00	89.44	90.99	7009.37	266.57	4074.87	0.48	4083.37	596707.81	620859.45	
10935.00	89.16	90.29	7010.53	265.51	4169.85	0.79	4178.15	596706.75	620954.43	
11029.00	89.23	91.01	7011.85	264.44	4263.84	0.77	4271.93	596705.68	621048.42	
11124.00	89.37	91.79	7013.01	262.12	4358.80	0.83	4366.62	596703.36	621143.38	
11218.00	88.67	91.36	7014.62	259.54	4452.75	0.87	4460.29	596700.78	621237.33	
11313.00	88.88	90.79	7016.65	257.76	4547.71	0.64	4555.01	596699.00	621332.29	
11408.00	88.88	91.01	7018.51	256.27	4642.68	0.23	4649.75	596697.51	621427.26	
11502.00	88.95	91.68	7020.29	254.06	4736.64	0.72	4743.44	596695.30	621521.22	
11588.00	88.88	91.82	7021.92	251.43	4822.58	0.18	4829.11	596692.67	621607.16	Last Wft Svy
11663.00	88.88	91.82	7023.38	249.05	4897.53	0.00	4903.81	596690.29	621682.11	Proj. To Bit



Weatherford

WFT Survey Report X & Y's



Company: Devon Energy	Date: 5/27/2013	Time: 10:48:10	Page: 3
Field: Eddy Co., NM (NAD 83)	Co-ordinate(NE) Reference: Well: Agate PWU 21 8H, Grid North		
Site: Agate PWU 21 8H	Vertical (TVD) Reference: SITE 3345.0		
Well: Agate PWU 21 8H	Section (VS) Reference: Well (0.00N,0.00E,86.84Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature		Db: Sybase

Annotation

MD ft	TVD ft	
6220.00	6218.70	Tie On VES
6263.00	6261.66	First Wft Svy
11588.00	7021.92	Last Wft Svy
11663.00	7023.38	Proj. To Bit



Stimulations Summary

District PERMIAN BASIN		County EDDY		Field Name HACKBERRY		Project Group DELAWARE BASIN			State/Province NM						
Surface Legal Location SEC21 T19S R29E		API/UWI 3001540512		Latitude (°) 32° 38' 21.935" N		Longitude (°) 104° 5' 17.629" W		Ground Elev... 3,325.70		KB - GL (ft) 18.00		Orig KB Elev (ft) 3,343.70		Tubing Head Elevation (ft)	
HYDRAULIC FRAC , 6/17/2013 04:11 , BONE SPRING 1ST, OH , 11,341.0 ftKB - 11,650.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4079.32		0.0			1,624.0	4,413.0		5,640.0	80	3.43				
HYDRAULIC FRAC , 6/17/2013 09:35 , BONE SPRING 1ST, OH , 10,880.0 ftKB - 11,189.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4122.72		0.0			1,315.0	4,667.0		5,104.0	80	3.45				
HYDRAULIC FRAC , 6/18/2013 01:04 , BONE SPRING 1ST, OH , 10,418.0 ftKB - 10,728.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4166.92		0.0			1,306.0	4,578.0		5,877.0	80	3.46				
HYDRAULIC FRAC , 6/18/2013 04:22 , BONE SPRING 1ST, OH , 9,957.0 ftKB - 10,267.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown 7															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4075.98		0.0			1,335.0	4,246.0		5,877.0	80	3.45				
HYDRAULIC FRAC , 6/18/2013 10:45 , BONE SPRING 1ST, OH , 9,496.0 ftKB - 9,806.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown 11															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4073.22		0.0			1,684.0	5,011.0		6,896.0	80	3.50				
HYDRAULIC FRAC , 6/18/2013 13:45 , BONE SPRING 1ST, OH , 9,035.0 ftKB - 9,344.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown 81															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4051.31		0.0			2,353.0	6,346.0		7,730.0	80	3.58				
HYDRAULIC FRAC , 6/19/2013 01:14 , BONE SPRING 1ST, OH , 8,574.0 ftKB - 8,883.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown 14															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4065.92		0.0			2,257.0	5,656.0		7,339.0	81	3.50				
HYDRAULIC FRAC , 6/19/2013 04:47 , BONE SPRING 1ST, OH , 8,113.0 ftKB - 8,422.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown 90															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4043.20		0.0			2,085.0	4,094.0		5,593.0	80	3.71				
HYDRAULIC FRAC , 6/19/2013 11:10 , BONE SPRING 1ST, OH , 7,652.0 ftKB - 7,961.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown 93															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4031.36		0.0			2,214.0	4,424.0		6,510.0	80	3.49				
HYDRAULIC FRAC , 6/19/2013 14:22 , BONE SPRING 1ST, OH , 7,191.0 ftKB - 7,500.0 ftKB, Baker Hughes , 0.25# 100 Mesh, Prop_2.64 unknown 61															
Proppant De...	Total Clean Volu...	Pre Trt S/I Prs (psi)	Pst Trt S/I Prs (psi)	P Break (psi)	ISIP (psi)	Avg Treat Pressur...	Q Treat Avg (bbl/...	P Max (psi)	Q Treat Max (bbl/...	Conc Max...					
289,925.0	4218.49		0.0			3,737.0	5,448.0		6,379.0	80	3.69				