



A GYRO TECHNOLOGIES INC. COMPANY

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

February 8, 2013

30-015-40590

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

Attn: Patti Riechers

Re: **Agate PWU 21 No. 005H**

Please find enclosed a copy of the survey from 0.00' to 6132.00' ran on the above referenced well.

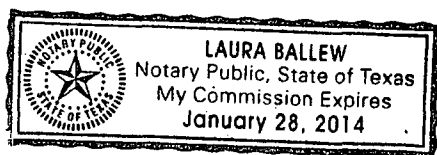
If I can be of any further service please do not hesitate to call me at 800-606-4976.

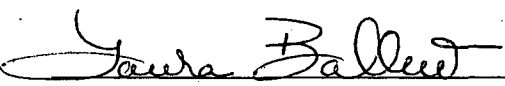
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 8th day of February, A.D., 2013, by Keith Havelka.





Laura Ballew
Notary Public, State of Texas



Company: Devon Energy Production Co., LP

Lease/Well: Agate PWU 21 / No. 005H

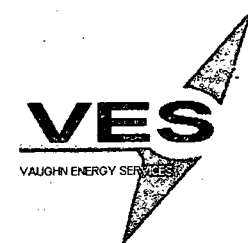
Rig Name: McVay 6

State/County: New Mexico / Eddy

Latitude: 32.65, Longitude: -104.09

GRID North is 0.13 Degrees East of True North

VS-Azi: 0.00 Degrees



Depth Reference : RKB = 18'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut

Minimum Curvature Method

Report Date/Time: 2/8/2013 / 13:20

Vaughn Energy Services

Midland, Texas

432-563-5444

Surveyor: Tim Dillon

Agate PWU 21 No. 005H / API 30-015-40590

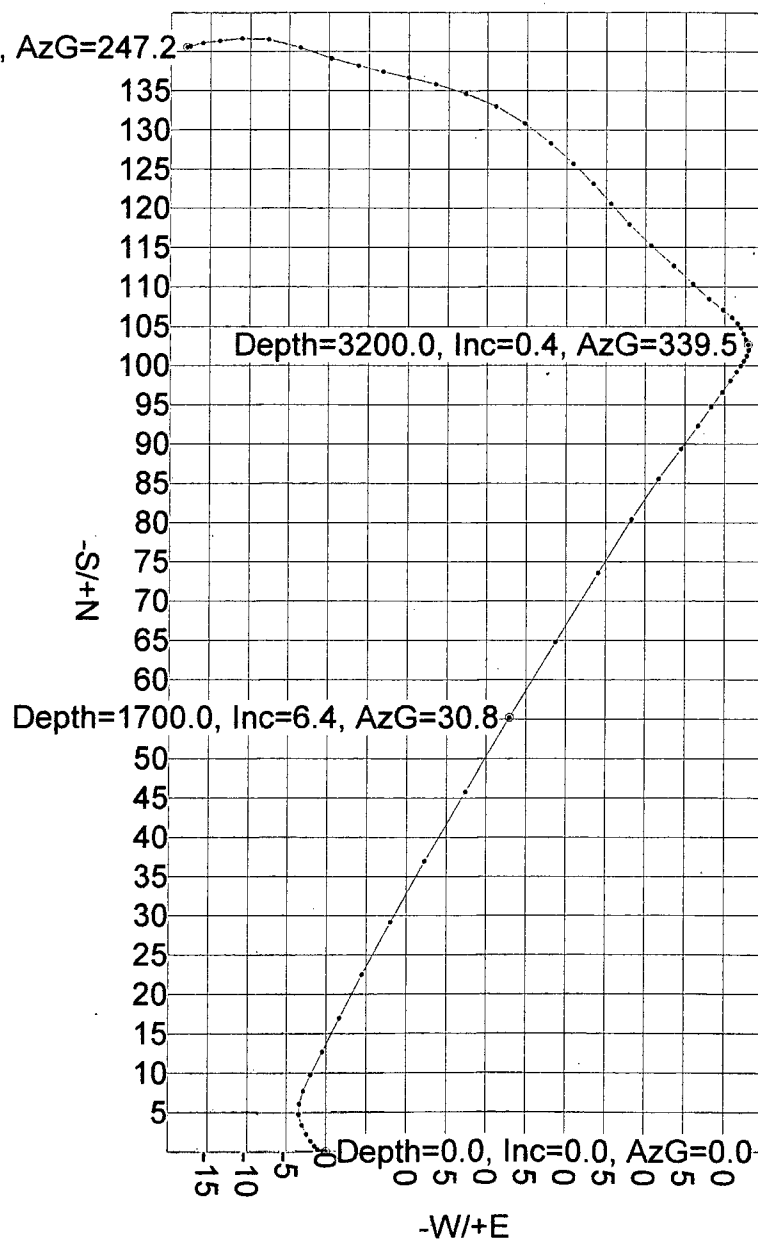
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.52	279.09	100.00	0.07	-0.44	0.07	0.45	279.09	0.52
200.00	0.25	314.24	200.00	0.30	-1.05	0.30	1.09	285.82	0.34
300.00	0.39	319.29	299.99	0.71	-1.43	0.71	1.60	296.46	0.14
400.00	0.53	324.34	399.99	1.35	-1.92	1.35	2.35	305.04	0.15
500.00	0.66	330.27	499.99	2.23	-2.48	2.23	3.34	311.94	0.14
600.00	0.79	336.20	599.98	3.37	-3.05	3.37	4.55	317.84	0.15
700.00	0.80	353.01	699.97	4.70	-3.42	4.70	5.81	323.98	0.23
800.00	0.81	11.82	799.96	6.08	-3.36	6.08	6.95	331.11	0.26
900.00	1.13	19.32	899.94	7.70	-2.89	7.70	8.23	339.46	0.34
1000.00	1.45	26.82	999.92	9.76	-1.99	9.76	9.96	348.46	0.36
1100.00	2.32	26.73	1099.86	12.69	-0.51	12.69	12.70	357.68	0.87
1200.00	3.17	26.45	1199.75	16.97	1.63	16.97	17.05	5.48	0.85
1300.00	3.95	27.68	1299.55	22.50	4.46	22.50	22.93	11.21	0.78
1400.00	4.71	28.10	1399.27	29.16	7.99	29.16	30.24	15.32	0.76
1500.00	5.47	29.62	1498.87	36.93	12.28	36.93	38.91	18.39	0.78
1600.00	6.23	30.14	1598.35	45.77	17.36	45.77	48.95	20.77	0.77
1700.00	6.36	30.82	1697.75	55.22	22.92	55.22	59.79	22.55	0.14
1800.00	6.48	31.50	1797.12	64.79	28.71	64.79	70.86	23.90	0.15

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	5.31	31.30	1896.59	73.56	34.07	73.56	81.06	24.85	1.17
2000.00	3.94	32.10	1996.26	80.42	38.29	80.42	89.07	25.46	1.37
2100.00	3.12	35.30	2096.07	85.55	41.69	85.55	95.17	25.98	0.84
2200.00	2.31	37.50	2195.96	89.37	44.49	89.37	99.83	26.47	0.82
2300.00	1.89	35.17	2295.89	92.31	46.67	92.31	103.44	26.82	0.43
2400.00	1.46	34.85	2395.85	94.71	48.34	94.71	106.33	27.04	0.42
2500.00	1.17	36.19	2495.82	96.58	49.68	96.58	108.61	27.22	0.29
2600.00	0.91	34.54	2595.81	98.06	50.73	98.06	110.41	27.36	0.27
2700.00	0.66	33.71	2695.80	99.19	51.50	99.19	111.76	27.44	0.25
2800.00	0.39	33.88	2795.79	99.95	52.01	99.95	112.68	27.49	0.27
2900.00	0.43	31.01	2895.79	100.56	52.40	100.56	113.39	27.52	0.04
3000.00	0.46	30.13	2995.79	101.22	52.79	101.22	114.16	27.54	0.03
3100.00	0.43	4.82	3095.78	101.94	53.02	101.94	114.90	27.48	0.20
3200.00	0.40	339.52	3195.78	102.64	52.93	102.64	115.49	27.28	0.18
3300.00	0.44	338.37	3295.78	103.33	52.66	103.33	115.98	27.01	0.04
3400.00	0.46	337.23	3395.78	104.06	52.37	104.06	116.49	26.71	0.02
3500.00	0.44	329.24	3495.77	104.76	52.02	104.76	116.96	26.41	0.07
3600.00	0.41	321.25	3595.77	105.37	51.59	105.37	117.32	26.09	0.06
3700.00	0.73	314.36	3695.76	106.09	50.91	106.09	117.68	25.63	0.33
3800.00	1.05	307.48	3795.75	107.10	49.72	107.10	118.08	24.90	0.34
3900.00	1.43	310.61	3895.73	108.47	48.05	108.47	118.64	23.89	0.38
4000.00	1.80	313.75	3995.69	110.37	45.97	110.37	119.56	22.61	0.39
4100.00	2.07	312.91	4095.63	112.68	43.51	112.68	120.79	21.11	0.26
4200.00	2.33	312.06	4195.56	115.27	40.68	115.27	122.24	19.44	0.27
4300.00	2.11	316.57	4295.48	117.97	37.91	117.97	123.91	17.81	0.28
4400.00	1.88	321.08	4395.42	120.58	35.61	120.58	125.73	16.46	0.27
4500.00	2.01	316.62	4495.37	123.14	33.38	123.14	127.58	15.17	0.20
4600.00	2.15	314.16	4595.30	125.72	30.83	125.72	129.44	13.78	0.16
4700.00	2.29	309.91	4695.22	128.31	27.95	128.31	131.31	12.29	0.22
4800.00	2.43	305.67	4795.14	130.82	24.69	130.82	133.13	10.69	0.23
4900.00	2.43	296.31	4895.05	133.00	21.07	133.00	134.66	9.00	0.40
5000.00	2.42	288.95	4994.96	134.62	17.18	134.62	135.72	7.27	0.31
5100.00	2.16	285.62	5094.88	135.82	13.37	135.82	136.47	5.62	0.30
5200.00	1.89	282.29	5194.82	136.67	9.95	136.67	137.03	4.16	0.29
5300.00	1.85	283.84	5294.77	137.41	6.77	137.41	137.58	2.82	0.06
5400.00	1.81	283.39	5394.71	138.16	3.66	138.16	138.21	1.52	0.04
5500.00	2.19	287.16	5494.65	139.09	0.29	139.09	139.09	0.12	0.40
5600.00	2.57	290.93	5594.57	140.46	-3.64	140.46	140.51	358.52	0.41
5700.00	2.18	278.00	5694.48	141.53	-7.62	141.53	141.73	356.92	0.66

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	1.79	265.07	5794.42	141.66	-11.06	141.66	142.09	355.54	0.59
5900.00	1.42	262.44	5894.38	141.36	-13.84	141.36	142.04	354.41	0.38
6000.00	1.06	261.81	5994.36	141.07	-15.97	141.07	141.97	353.54	0.36
6100.00	0.83	250.82	6094.34	140.70	-17.57	140.70	141.79	352.88	0.29
6132.00	0.70	247.20	6126.34	140.55	-17.96	140.55	141.69	352.72	0.44



Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Tim Dillon
Agate PWU 21 No. 005H / API 30-015-40590



VES Survey Date: 01/31/2013



Weatherford

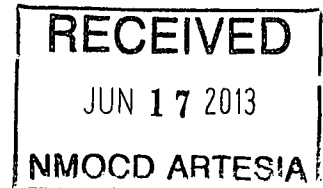
Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

Devon Energy
333 W. Sherridan Ave
Oklahoma City, OK, 73102

Date: March 15, 2013

Attention: Spencer Stuart

Re: Devon Energy
Well: Agate PWU 21 #5H
Eddy County, New Mexico



Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Justin Nguyen MWD Supervisor	5H	6205' MD 11317' MD	2/1/2013 2/8/2013	Measurement While Drilling

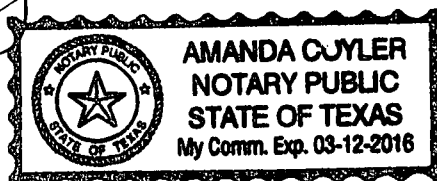
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesse Aguilar
MWD Coordinator

On this, the 18th day of March, 2013, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public





Weatherford

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy Date: 3/15/2013 Time: 13:55:37 Page: 1
Field: Eddy Co., NM (NAD 83) Co-ordinate(NE) Reference: Well: PWU 21 #5H, Grid North
Site: Agate PWU 21 #5H Vertical (TVD) Reference: SITE 3341.0
Well: PWU 21 #5H Section (VS) Reference: Well (0.00N,0.00E,85.71Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: Wft Svy Start Date: 2/14/2013
Company: Weatherford Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard Tied-to: User Defined

Site: Agate PWU 21 #5H

Site Position: Northing: 600344.08 ft Latitude: 32 39 0.537 N
From: Map Easting: 617059.34 ft Longitude: 104 5 14.325 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3322.00 ft Grid Convergence: 0.13 deg

Well: PWU 21 #5H Slot Name:
Well Position: +N/-S 0.00 ft Northing: 600344.08 ft Latitude: 32 39 0.537 N
+E/-W 0.00 ft Easting: 617059.34 ft Longitude: 104 5 14.325 W
Position Uncertainty: 0.00 ft

Wellpath: 1
Current Datum: SITE Height 3341.00 ft
Magnetic Data: 12/15/2012
Field Strength: 48691 nT
Vertical Section: Depth From (TVD) +N/-S
ft ft
0.00 0.00 0.00 85.71

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
6132.00	0.70	247.20	6126.34	140.55	-17.96	0.00	-7.40	600484.63	617041.38	Tie On VES First Wft Svy
6205.00	0.70	256.90	6199.34	140.28	-18.81	0.16	-8.26	600484.36	617040.53	
6237.00	2.48	2.26	6231.33	140.92	-18.97	8.59	-8.37	600485.00	617040.37	
6268.00	6.06	8.01	6262.24	143.22	-18.71	11.62	-7.95	600487.30	617040.63	
6299.00	9.68	6.12	6292.94	147.43	-18.21	11.71	-7.13	600491.51	617041.13	
6331.00	12.46	5.80	6324.34	153.54	-17.57	8.69	-6.04	600497.62	617041.77	
6362.00	15.19	5.43	6354.44	160.91	-16.85	8.81	-4.77	600504.99	617042.49	
6394.00	17.88	6.42	6385.11	169.97	-15.90	8.45	-3.14	600514.05	617043.44	
6425.00	19.97	9.37	6414.44	179.92	-14.51	7.41	-1.01	600524.00	617044.83	
6457.00	20.66	18.30	6444.45	190.67	-11.85	9.92	2.45	600534.75	617047.49	
6488.00	21.66	26.58	6473.37	200.99	-7.57	10.16	7.49	600545.07	617051.77	
6519.00	23.04	31.40	6502.04	211.28	-1.85	7.40	13.96	600555.36	617057.49	
6551.00	24.24	36.62	6531.36	221.90	5.33	7.54	21.92	600565.98	617064.67	
6582.00	25.29	44.31	6559.52	231.75	13.76	10.92	31.06	600575.83	617073.10	
6614.00	26.17	51.30	6588.35	241.05	24.04	9.87	42.01	600585.13	617083.38	
6645.00	27.22	58.39	6616.05	249.05	35.42	10.81	53.95	600593.13	617094.76	
6676.00	27.90	64.66	6643.54	255.87	48.02	9.61	67.02	600599.95	617107.36	
6708.00	28.87	68.98	6671.70	261.84	61.99	7.10	81.41	600605.92	617121.33	
6740.00	31.62	71.25	6699.34	267.31	77.15	9.31	96.93	600611.39	617136.49	
6771.00	34.85	73.14	6725.26	272.50	93.33	10.94	113.45	600616.58	617152.67	
6803.00	37.68	74.40	6751.06	277.78	111.50	9.14	131.97	600621.86	617170.84	
6835.00	41.31	76.37	6775.75	282.90	131.19	12.00	151.99	600626.98	617190.53	
6866.00	44.92	78.49	6798.38	287.50	151.87	12.55	172.95	600631.58	617211.21	
6898.00	48.51	79.96	6820.32	291.84	174.75	11.71	196.09	600635.92	617234.09	
6930.00	52.50	80.75	6840.67	295.97	199.09	12.61	220.67	600640.05	617258.43	
6961.00	57.40	80.38	6858.46	300.13	224.12	15.84	245.94	600644.21	617283.46	
6993.00	61.94	79.49	6874.62	304.97	251.31	14.39	273.41	600649.05	617310.65	
7024.00	66.76	80.47	6888.03	309.82	278.82	15.81	301.21	600653.90	617338.16	
7056.00	70.83	82.33	6899.61	314.27	308.31	13.82	330.95	600658.35	617367.65	
7088.00	75.57	84.12	6908.85	317.88	338.72	15.75	361.55	600661.96	617398.06	



Weatherford

WFT Survey Report X & Y's

**Weatherford**

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Agate PWU 21 #5H
Well: PWU 21 #5H
Wellpath: 1

Date: 3/15/2013 Time: 13:55:37 Page: 2
Co-ordinate(NE) Reference: Well: PWU 21 #5H, Grid North
Vertical (TVD) Reference: SITE 3341.0
Section (VS) Reference: Well (0.00N,0.00E,85.71Azi)
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
7119.00	78.86	85.66	6915.71	320.57	368.82	11.67	391.77	600664.65	617428.16	
7151.00	82.28	88.20	6920.96	322.26	400.34	13.25	423.32	600666.34	617459.68	
7182.00	83.68	90.63	6924.75	322.57	431.10	9.00	454.02	600666.65	617490.44	
7214.00	85.52	93.57	6927.76	321.40	462.93	10.80	485.68	600665.48	617522.27	
7245.00	88.32	93.30	6929.42	319.55	493.83	9.07	516.35	600663.63	617553.17	
7276.00	91.26	92.23	6929.54	318.05	524.79	10.09	547.11	600662.13	617584.13	
7308.00	92.66	91.94	6928.44	316.89	556.75	4.47	578.89	600660.97	617616.09	
7371.00	90.91	93.19	6926.48	314.07	619.65	3.41	641.41	600658.15	617678.99	
7466.00	90.42	92.90	6925.38	309.03	714.51	0.60	735.63	600653.11	617773.85	
7560.00	88.74	93.89	6926.07	303.46	808.34	2.07	828.77	600647.54	617867.68	
7655.00	88.53	94.09	6928.33	296.85	903.08	0.31	922.76	600640.93	617962.42	
7749.00	88.46	94.05	6930.80	290.18	996.81	0.09	1015.73	600634.26	618056.15	
7844.00	89.79	94.53	6932.25	283.08	1091.53	1.49	1109.65	600627.16	618150.87	
7939.00	89.79	94.71	6932.60	275.42	1186.22	0.19	1203.50	600619.50	618245.56	
8033.00	89.65	94.61	6933.06	267.79	1279.91	0.18	1296.36	600611.87	618339.25	
8127.00	89.79	95.03	6933.52	259.89	1373.58	0.47	1389.17	600603.97	618432.92	
8222.00	89.09	94.10	6934.45	252.33	1468.27	1.23	1483.03	600596.41	618527.61	
8317.00	88.11	92.68	6936.77	246.71	1563.07	1.82	1577.15	600590.79	618622.41	
8411.00	88.18	92.87	6939.81	242.16	1656.91	0.22	1670.39	600586.24	618716.25	
8506.00	88.95	93.68	6942.19	236.74	1751.73	1.18	1764.53	600580.82	618811.07	
8601.00	88.11	92.83	6944.63	231.35	1846.54	1.26	1858.67	600575.43	618905.88	
8695.00	89.23	93.52	6946.81	226.14	1940.37	1.40	1951.85	600570.22	618999.71	
8790.00	89.23	93.36	6948.08	220.44	2035.19	0.17	2045.98	600564.52	619094.53	
8884.00	89.30	93.39	6949.29	214.91	2129.02	0.08	2139.13	600558.99	619188.36	
8979.00	89.86	93.22	6949.99	209.43	2223.86	0.62	2233.29	600553.51	619283.20	
9074.00	91.19	93.54	6949.12	203.83	2318.69	1.44	2327.44	600547.91	619378.03	
9168.00	91.19	93.71	6947.16	197.89	2412.48	0.18	2420.52	600541.97	619471.82	
9263.00	91.26	93.74	6945.13	191.72	2507.26	0.08	2514.57	600535.80	619566.60	
9357.00	91.05	93.79	6943.24	185.55	2601.03	0.23	2607.63	600529.63	619660.37	
9452.00	90.91	93.88	6941.61	179.19	2695.81	0.18	2701.66	600523.27	619755.15	
9547.00	89.79	94.04	6941.03	172.63	2790.58	1.19	2795.67	600516.71	619849.92	
9641.00	90.49	94.63	6940.80	165.53	2884.31	0.97	2888.61	600509.61	619943.65	
9736.00	89.79	95.37	6940.57	157.25	2978.94	1.07	2982.36	600501.33	620038.28	
9831.00	88.25	95.09	6942.20	148.59	3073.53	1.65	3076.03	600492.67	620132.87	
9925.00	88.04	94.79	6945.24	140.50	3167.13	0.39	3168.77	600484.58	620226.47	
10020.00	87.90	95.38	6948.60	132.09	3261.70	0.64	3262.44	600476.17	620321.04	
10114.00	87.83	95.84	6952.11	122.90	3355.18	0.49	3354.98	600466.98	620414.52	
10209.00	88.04	95.13	6955.53	113.83	3449.69	0.78	3448.54	600457.91	620509.03	
10303.00	87.34	94.37	6959.32	106.05	3543.29	1.10	3541.29	600450.13	620602.63	
10398.00	86.85	94.40	6964.13	98.80	3637.89	0.52	3635.08	600442.88	620697.23	
10492.00	86.99	93.31	6969.18	92.49	3731.54	1.17	3728.00	600436.57	620790.88	
10587.00	87.55	93.32	6973.71	87.00	3826.27	0.59	3822.06	600431.08	620885.61	
10681.00	88.95	93.68	6976.58	81.26	3920.05	1.54	3915.14	600425.34	620979.39	
10776.00	89.16	94.15	6978.15	74.78	4014.81	0.54	4009.16	600418.86	621074.15	
10870.00	88.88	94.63	6979.75	67.58	4108.52	0.59	4102.07	600411.66	621167.86	
10964.00	88.81	93.93	6981.65	60.57	4202.24	0.75	4195.00	600404.65	621261.58	
11059.00	88.60	93.97	6983.79	54.03	4296.99	0.23	4288.99	600398.11	621356.33	
11154.00	88.60	93.96	6986.12	47.46	4391.74	0.01	4382.98	600391.54	621451.08	
11248.00	88.32	93.97	6988.64	40.96	4485.48	0.30	4475.97	600385.04	621544.82	
11317.00	88.19	94.04	6990.74	36.15	4554.28	0.21	4544.22	600380.23	621613.62	Last Wft Svy
11382.00	88.19	94.04	6992.80	31.57	4619.08	0.00	4608.50	600375.65	621678.42	Proj. To Bit



Weatherford

WFT Survey Report X & Y's



Weatherford

Company: Devon Energy
Field: Eddy Co., NM (NAD 83)
Site: Agate PWU 21 #5H
Well: PWU 21 #5H
Wellpath: 1

Date: 3/15/2013 Time: 13:55:37 Page: 3
Co-ordinate(NE) Reference: Well: PWU 21 #5H, Grid North
Vertical (TVD) Reference: SITE 3341.0
Section (VS) Reference: Well (0.00N,0.00E,85.71Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

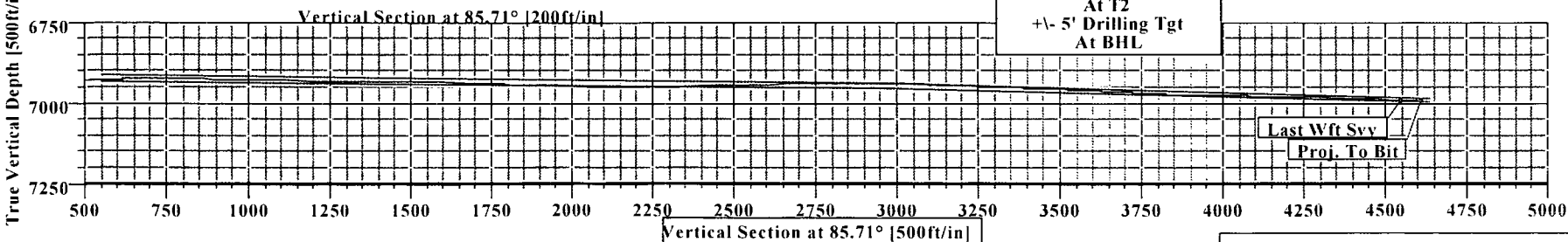
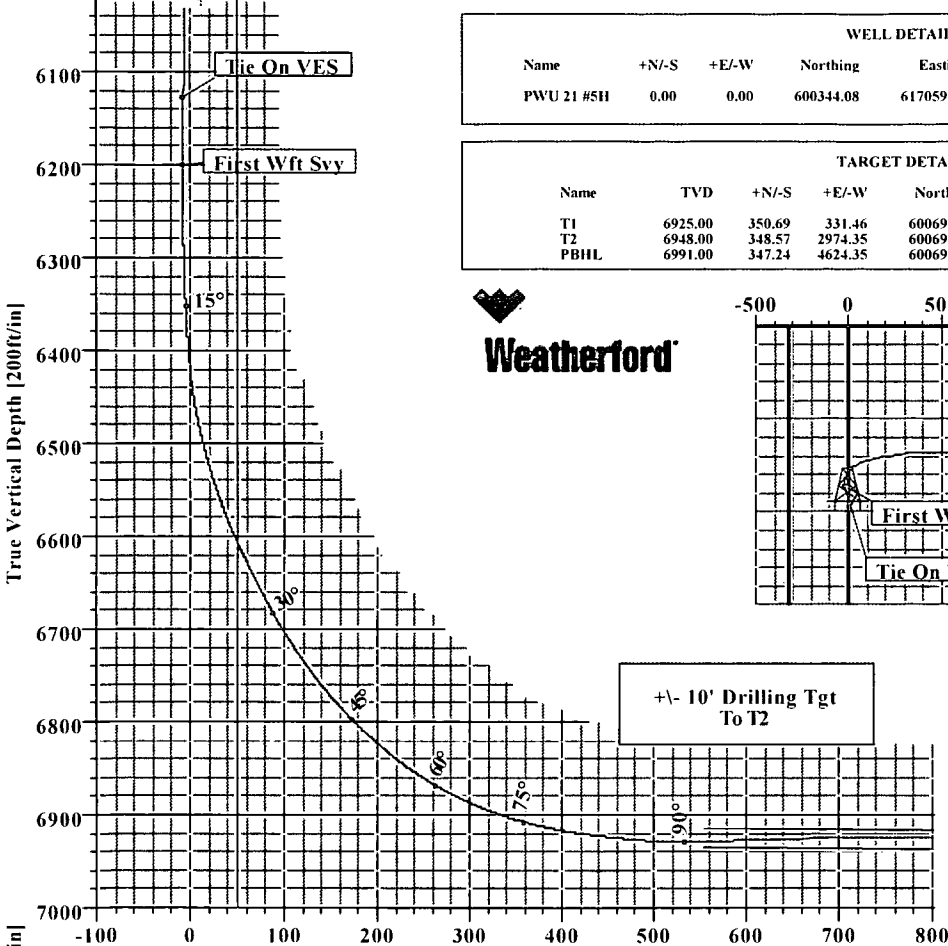
Annotation

MD ft	TVD ft	
6132.00	6126.34	Tie On VES
6205.00	6199.34	First Wft Svy
11317.00	6990.74	Last Wft Svy
11382.00	6992.80	Proj. To Bit



Agate PWU 21 #5H Eddy Co, NM

KB ELEV: 3340
GL ELEV: 3331



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	6132.00	0.70	247.20	6126.34	140.55	-17.96	0.00	0.00	-7.40	
2	6267.46	0.70	247.20	6261.79	139.91	-19.49	0.00	0.00	-8.97	
3	6457.43	20.58	3.24	6447.76	173.16	-18.66	11.00	117.69	-5.65	
4	7261.17	89.50	90.05	6926.46	350.56	498.01	11.00	87.18	522.84	
5	9737.60	89.50	90.05	6948.00	348.57	2974.35	0.00	0.00	2992.09	T2
6	9771.09	88.50	90.05	6948.58	348.54	3007.83	3.00	179.99	3025.48	
7	11388.16	88.50	90.05	6991.00	347.24	4624.35	0.00	0.00	4637.37	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
PWU 21 #5H	0.00	0.00	600344.08	617059.34	32°39'00.537N	104°05'14.325W	N/A

TARGET DETAILS

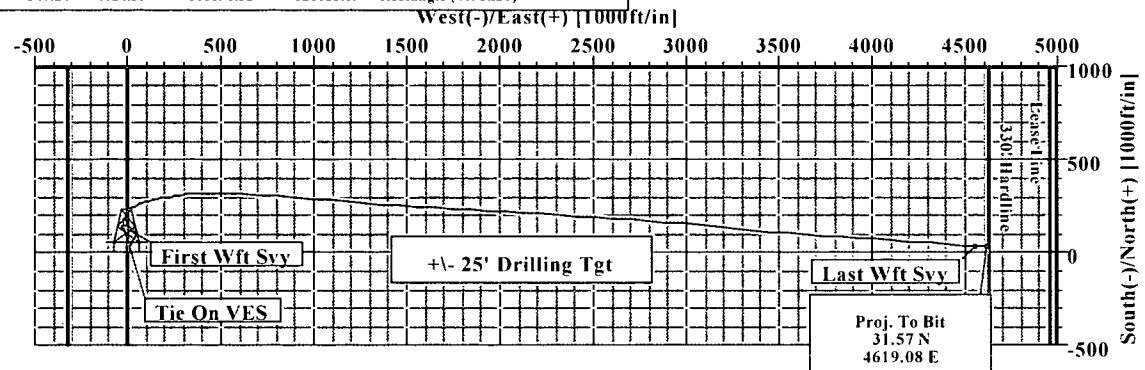
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
T1	6925.00	350.69	331.46	600694.77	617390.80	Point
T2	6948.00	348.57	2974.35	600692.65	620033.69	Point
PBHL	6991.00	347.24	4624.35	600691.32	621683.69	Rectangle (4095x50)

SITE DETAILS

Agate PWU 21 #5H
Site Centre Northing: 600344.08
Easting: 617059.34
Ground Level: 3322.00
Positional Uncertainty: 0.00
Convergence: 0.13



Weatherford



LEGEND

- PWU 21 #5H.I.Gyro
- Agate PWU 21 #1H (1)
- 1 Wft Svy

Survey: Wft Svy (PWU 21 #5H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
81	11382.00	88.19	94.04	6992.80	31.57	4619.08	0.00	0.00	4608.50

+/- 10' Drilling Tgt
At T2
+/- 5' Drilling Tgt
At BHL

Last Wft Svy
Proj. To Bit

Survey: Wft Svy (PWU 21 #5H/1)

Created By: Russell W. Joyner

Date: 3/15/2013

DEVON ENERGY

Scanlon Draw
Eddy County, NM
Agate PWU "21" #5H
VH - Job #320212-KW-186



Survey: Gyro

SDI Standard Survey Report

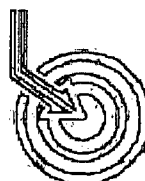
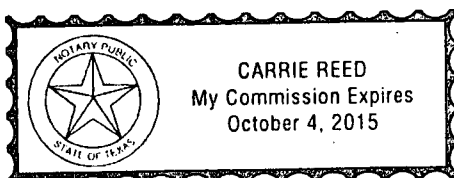
This survey is correct to the best of my knowledge and is supported by actual field data.

Hubert

Notarized this date 18th of February, 2013.

Carrie Reed

Notary Signature
County of Midland
State of Texas



Scientific Drilling

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Agate PWU "21" #5H
Project:	Scanlon Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Agate PWU "21" #5H	North Reference:	Grid
Wellbore:	VH - Job #320212-KW-186	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320212-KW-186	Database:	EDM-Regulatory

Project	Scanlon Draw		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Eddy County, NM			
Site Position:		Northing:	600,985.03 usft	Latitude:	32° 39' 7.200 N
From:	Lat/Long	Easting:	570,584.54 usft	Longitude:	104° 6' 14.400 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.12 °

Well	Agate PWU "21" #5H, Directional (					
Well Position	+N/-S	0.00 usft	Northing:	600,324.13 usft	Latitude:	32° 39' 0.548 N
	+E/-W	0.00 usft	Easting:	575,631.14 usft	Longitude:	104° 5' 15.390 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	0.00 usft

Wellbore	VH - Job #320212-KW-186				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	02/20/13	7.65	60.45	48,673

Design		VH - Job #320212-KW-186		
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	85.71

Survey Program		Date	02/24/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	11,321.40	Gyro (VH - Job #320212-KW-186)	Keeper	Keeper Gyro	

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.56	286.85	100.00	0.14	-0.47	286.85	0.49
200.00	0.39	292.22	199.99	0.41	-1.25	288.24	1.32
300.00	0.52	321.09	299.99	0.89	-1.85	295.78	2.06
400.00	0.52	331.41	399.99	1.65	-2.35	304.97	2.87
500.00	0.57	329.19	499.98	2.47	-2.82	311.18	3.75
600.00	0.64	344.94	599.98	3.44	-3.22	316.83	4.71
700.00	0.84	358.68	699.97	4.71	-3.39	324.28	5.80
800.00	1.00	14.24	799.96	6.29	-3.19	333.11	7.05
900.00	1.13	22.22	899.94	8.05	-2.60	342.09	8.46
1,000.00	1.64	29.37	999.91	10.21	-1.53	351.49	10.32
1,100.00	2.31	33.89	1,099.85	13.13	0.30	1.31	13.13

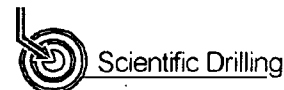
Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Agate PWU "21" #5H
Project:	Scanlon Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Agate PWU "21" #5H	North Reference:	Grid
Wellbore:	VH - Job #320212-KW-186	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320212-KW-186	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,200.00	3.12	30.52	1,199.74	17.14	2.80	9.29	17.37
1,300.00	4.05	30.36	1,299.54	22.54	5.97	14.84	23.31
1,400.00	5.06	30.63	1,399.22	29.38	10.00	18.80	31.03
1,500.00	5.61	31.27	1,498.79	37.35	14.79	21.60	40.17
1,600.00	6.29	32.62	1,598.25	46.14	20.28	23.72	50.40
1,700.00	6.48	33.21	1,697.63	55.48	26.32	25.38	61.40
1,800.00	5.99	34.35	1,797.04	64.51	32.36	26.64	72.17
1,900.00	4.90	37.35	1,896.59	72.21	37.89	27.69	81.55
2,000.00	4.08	37.53	1,996.28	78.43	42.65	28.54	89.27
2,100.00	3.04	39.27	2,096.08	83.30	46.50	29.17	95.40
2,200.00	2.36	42.76	2,195.97	86.86	49.57	29.71	100.01
2,300.00	1.88	40.59	2,295.90	89.62	52.04	30.14	103.63
2,400.00	1.44	37.06	2,395.86	91.87	53.86	30.38	106.49
2,500.00	1.28	35.63	2,495.83	93.78	55.27	30.51	108.86
2,600.00	0.93	40.07	2,595.81	95.31	56.44	30.63	110.77
2,700.00	0.54	45.70	2,695.81	96.26	57.30	30.76	112.02
2,800.00	0.49	29.55	2,795.80	96.96	57.85	30.82	112.91
2,900.00	0.36	43.92	2,895.80	97.56	58.28	30.85	113.64
3,000.00	0.35	352.08	2,995.80	98.09	58.45	30.79	114.18
3,100.00	0.38	340.52	3,095.80	98.70	58.30	30.57	114.64
3,200.00	0.52	345.12	3,195.79	99.45	58.08	30.28	115.17
3,300.00	0.47	334.69	3,295.79	100.26	57.78	29.96	115.72
3,400.00	0.50	325.65	3,395.79	100.99	57.36	29.60	116.15
3,500.00	0.55	330.48	3,495.78	101.77	56.88	29.20	116.59
3,600.00	0.67	320.39	3,595.78	102.64	56.27	28.73	117.05
3,700.00	0.93	304.79	3,695.77	103.55	55.23	28.07	117.36
3,800.00	1.29	307.43	3,795.75	104.70	53.67	27.14	117.66
3,900.00	1.50	311.82	3,895.72	106.26	51.80	25.99	118.21
4,000.00	1.87	308.09	3,995.67	108.14	49.54	24.61	118.95
4,100.00	2.28	315.70	4,095.61	110.57	46.87	22.97	120.09
4,200.00	2.39	312.34	4,195.52	113.40	43.94	21.18	121.61
4,300.00	2.37	313.59	4,295.44	116.23	40.90	19.39	123.21
4,400.00	2.22	318.27	4,395.36	119.10	38.11	17.75	125.05
4,500.00	2.19	313.63	4,495.28	121.86	35.44	16.22	126.91
4,600.00	2.26	313.72	4,595.21	124.54	32.63	14.68	128.75
4,700.00	2.19	309.34	4,695.13	127.12	29.73	13.16	130.55
4,800.00	2.27	306.73	4,795.06	129.51	26.66	11.63	132.23
4,900.00	2.08	299.99	4,894.99	131.60	23.51	10.13	133.68
5,000.00	2.49	291.83	4,994.91	133.32	19.92	8.50	134.80
5,100.00	2.31	287.58	5,094.82	134.73	15.98	6.76	135.68
5,200.00	1.82	287.26	5,194.75	135.81	12.54	5.28	136.39
5,300.00	1.69	287.07	5,294.71	136.72	9.62	4.02	137.06
5,400.00	1.88	289.61	5,394.66	137.70	6.66	2.77	137.86
5,500.00	2.47	294.43	5,494.59	139.14	3.15	1.30	139.18

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Agate PWU "21" #5H
Project:	Scanlon Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Agate PWU "21" #5H	North Reference:	Grid
Wellbore:	VH - Job #320212-KW-186	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320212-KW-186	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
5,600.00	2.50	285.84	5,594.49	140.63	-0.91	359.63	140.63
5,700.00	2.41	268.56	5,694.40	141.17	-5.11	357.93	141.26
5,800.00	1.87	278.86	5,794.33	141.37	-8.82	356.43	141.64
5,900.00	1.13	257.66	5,894.30	141.41	-11.40	355.39	141.87
6,000.00	1.13	251.90	5,994.28	140.89	-13.30	354.61	141.52
6,100.00	0.82	247.79	6,094.26	140.32	-14.90	353.94	141.11
6,200.00	0.57	259.56	6,194.26	139.96	-16.05	353.46	140.87
6,225.00	1.69	358.44	6,219.25	140.30	-16.18	353.42	141.23
6,250.00	4.09	9.26	6,244.22	141.55	-16.05	353.53	142.46
6,275.00	6.81	7.90	6,269.10	143.90	-15.70	353.77	144.75
6,300.00	9.56	6.75	6,293.85	147.43	-15.25	354.09	148.22
6,325.00	11.79	6.47	6,318.41	152.03	-14.72	354.47	152.74
6,350.00	14.05	6.32	6,342.78	157.58	-14.10	354.89	158.21
6,375.00	16.22	5.95	6,366.91	164.07	-13.40	355.33	164.62
6,400.00	18.41	6.39	6,390.78	171.47	-12.60	355.80	171.93
6,425.00	19.93	9.23	6,414.39	179.60	-11.48	356.34	179.97
6,450.00	20.63	15.37	6,437.84	188.05	-9.63	357.07	188.30
6,475.00	21.10	22.81	6,461.21	196.45	-6.71	358.04	196.56
6,500.00	22.05	28.98	6,484.46	204.70	-2.70	359.25	204.72
6,525.00	23.19	32.71	6,507.53	212.95	2.24	0.60	212.96
6,550.00	24.19	35.91	6,530.43	221.24	7.90	2.05	221.38
6,575.00	24.96	41.52	6,553.17	229.34	14.40	3.59	229.79
6,600.00	25.91	48.59	6,575.75	236.91	22.00	5.31	237.93
6,625.00	26.49	53.96	6,598.18	243.80	30.61	7.16	245.71
6,650.00	27.18	58.69	6,620.49	250.05	39.99	9.09	253.23
6,675.00	27.65	63.98	6,642.69	255.56	50.09	11.09	260.42
6,700.00	28.20	68.10	6,664.78	260.31	60.78	13.14	267.31
6,725.00	30.14	70.73	6,686.61	264.59	72.19	15.26	274.26
6,750.00	32.07	71.83	6,708.01	268.73	84.42	17.44	281.67
6,775.00	34.74	73.35	6,728.88	272.84	97.55	19.67	289.75
6,800.00	37.02	74.41	6,749.14	276.90	111.63	21.96	298.56
6,825.00	39.81	75.42	6,768.72	280.94	126.63	24.26	308.16
6,850.00	42.32	77.17	6,787.57	284.82	142.58	26.59	318.52
6,875.00	45.25	78.76	6,805.62	288.42	159.50	28.94	329.59
6,900.00	48.11	80.19	6,822.77	291.74	177.38	31.30	341.43
6,925.00	51.22	80.98	6,838.95	294.86	196.18	33.64	354.15
6,950.00	54.87	80.84	6,853.98	298.01	215.90	35.92	368.00
6,975.00	58.10	79.97	6,867.78	301.49	236.45	38.11	383.15
7,000.00	62.05	79.33	6,880.25	305.38	257.76	40.17	399.62
7,025.00	66.05	80.38	6,891.19	309.34	279.88	42.14	417.16
7,050.00	69.67	81.75	6,900.61	312.93	302.75	44.05	435.41
7,075.00	73.27	83.03	6,908.55	316.07	326.24	45.91	454.24
7,100.00	76.59	84.41	6,915.05	318.70	350.24	47.70	473.54
7,125.00	78.91	85.60	6,920.35	320.83	374.57	49.42	493.19

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Agate PWU "21" #5H
Project:	Scanlon Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Agate PWU "21" #5H	North Reference:	Grid
Wellbore:	VH - Job #320212-KW-186	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320212-KW-186	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
7,150.00	81.97	87.55	6,924.51	322.30	399.18	51.08	513.05
7,175.00	83.58	89.67	6,927.65	322.90	423.97	52.71	532.93
7,200.00	84.69	92.24	6,930.21	322.49	448.83	54.30	552.67
7,225.00	85.97	93.76	6,932.24	321.18	473.71	55.86	572.33
7,250.00	88.59	92.95	6,933.43	319.72	498.64	57.33	592.34
7,275.00	91.34	91.60	6,933.44	318.73	523.62	58.67	612.99
7,300.00	92.85	91.63	6,932.53	318.02	548.59	59.90	634.11
7,325.00	93.36	91.49	6,931.18	317.34	573.54	61.04	655.48
7,350.00	91.87	91.77	6,930.03	316.63	598.51	62.12	677.10
7,375.00	91.02	92.71	6,929.40	315.66	623.48	63.15	698.83
7,400.00	90.85	93.17	6,929.00	314.38	648.44	64.14	720.63
7,425.00	90.54	93.23	6,928.69	312.98	673.40	65.07	742.58
7,450.00	90.51	92.76	6,928.46	311.67	698.37	65.95	764.76
7,475.00	90.48	92.34	6,928.25	310.56	723.34	66.76	787.19
7,500.00	90.75	92.26	6,927.98	309.56	748.32	67.53	809.82
7,525.00	90.31	92.43	6,927.75	308.54	773.30	68.25	832.58
7,550.00	89.48	93.26	6,927.79	307.29	798.27	68.95	855.37
7,575.00	88.88	93.47	6,928.15	305.83	823.22	69.62	878.19
7,600.00	88.73	93.03	6,928.67	304.41	848.17	70.26	901.15
7,625.00	88.91	92.96	6,929.19	303.10	873.14	70.86	924.25
7,650.00	89.48	93.61	6,929.54	301.67	898.09	71.43	947.40
7,675.00	88.86	93.85	6,929.90	300.05	923.04	71.99	970.58
7,700.00	88.72	93.62	6,930.43	298.42	947.98	72.53	993.84
7,725.00	88.81	93.45	6,930.97	296.88	972.92	73.03	1,017.21
7,750.00	88.90	93.62	6,931.47	295.34	997.87	73.51	1,040.66
7,775.00	89.19	93.86	6,931.88	293.70	1,022.81	73.98	1,064.15
7,800.00	89.45	94.17	6,932.18	291.95	1,047.75	74.43	1,087.67
7,825.00	90.21	94.12	6,932.26	290.15	1,072.69	74.86	1,111.23
7,850.00	90.24	94.27	6,932.16	288.32	1,097.62	75.28	1,134.85
7,875.00	90.19	94.29	6,932.06	286.45	1,122.55	75.68	1,158.52
7,900.00	90.27	94.19	6,931.96	284.60	1,147.48	76.07	1,182.25
7,925.00	90.29	94.32	6,931.84	282.75	1,172.41	76.44	1,206.02
7,950.00	90.20	94.09	6,931.73	280.92	1,197.34	76.80	1,229.86
7,975.00	90.05	94.49	6,931.68	279.05	1,222.27	77.14	1,253.72
8,000.00	90.09	94.15	6,931.65	277.16	1,247.20	77.47	1,277.63
8,025.00	90.11	93.95	6,931.61	275.40	1,272.14	77.78	1,301.61
8,050.00	90.15	94.32	6,931.55	273.59	1,297.07	78.09	1,325.62
8,075.00	89.62	94.42	6,931.60	271.69	1,322.00	78.39	1,349.63
8,100.00	89.90	94.58	6,931.70	269.73	1,346.92	78.68	1,373.67
8,125.00	90.17	94.57	6,931.69	267.73	1,371.84	78.96	1,397.73
8,150.00	90.36	94.72	6,931.57	265.71	1,396.76	79.23	1,421.81
8,175.00	89.78	94.99	6,931.54	263.59	1,421.67	79.50	1,445.90
8,200.00	89.63	94.28	6,931.67	261.57	1,446.59	79.75	1,470.05
8,225.00	89.34	93.51	6,931.90	259.88	1,471.53	79.98	1,494.30
8,250.00	89.33	93.56	6,932.19	258.33	1,496.48	80.21	1,518.62

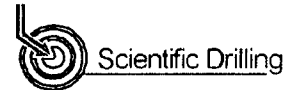
Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Agate PWU "21" #5H
Project:	Scanlon Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Agate PWU "21" #5H	North Reference:	Grid
Wellbore:	VH - Job #320212-KW-186	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320212-KW-186	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
8,275.00	89.33	93.48	6,932.48	256.80	1,521.43	80.42	1,542.95
8,300.00	88.62	92.66	6,932.92	255.46	1,546.39	80.62	1,567.35
8,325.00	88.33	91.82	6,933.59	254.48	1,571.36	80.80	1,591.84
8,350.00	88.09	91.75	6,934.37	253.71	1,596.34	80.97	1,616.37
8,375.00	88.24	92.10	6,935.17	252.87	1,621.31	81.14	1,640.91
8,400.00	88.58	92.29	6,935.87	251.91	1,646.29	81.30	1,665.45
8,425.00	88.31	92.42	6,936.54	250.88	1,671.25	81.46	1,689.98
8,450.00	88.22	92.53	6,937.30	249.80	1,696.22	81.62	1,714.52
8,475.00	88.89	92.88	6,937.93	248.62	1,721.18	81.78	1,739.05
8,500.00	89.75	93.14	6,938.23	247.31	1,746.15	81.94	1,763.57
8,525.00	89.16	92.79	6,938.47	246.02	1,771.11	82.09	1,788.12
8,550.00	87.91	92.30	6,939.10	244.91	1,796.08	82.24	1,812.70
8,575.00	87.75	91.75	6,940.05	244.03	1,821.05	82.37	1,837.32
8,600.00	88.72	92.09	6,940.82	243.19	1,846.02	82.50	1,861.97
8,625.00	88.50	92.30	6,941.43	242.23	1,870.99	82.62	1,886.61
8,650.00	88.55	92.38	6,942.07	241.21	1,895.96	82.75	1,911.25
8,675.00	89.36	92.72	6,942.53	240.10	1,920.94	82.88	1,935.88
8,700.00	89.35	93.23	6,942.81	238.80	1,945.90	83.00	1,960.50
8,725.00	89.35	92.82	6,943.09	237.48	1,970.86	83.13	1,985.12
8,750.00	89.12	92.71	6,943.43	236.28	1,995.83	83.25	2,009.77
8,775.00	89.31	92.51	6,943.77	235.14	2,020.80	83.36	2,034.44
8,800.00	89.26	92.83	6,944.08	233.97	2,045.77	83.48	2,059.11
8,825.00	89.49	92.90	6,944.35	232.72	2,070.74	83.59	2,083.78
8,850.00	89.87	92.66	6,944.49	231.51	2,095.71	83.70	2,108.46
8,875.00	89.58	92.95	6,944.61	230.29	2,120.68	83.80	2,133.15
8,900.00	89.05	93.01	6,944.91	228.99	2,145.65	83.91	2,157.83
8,925.00	89.25	92.95	6,945.28	227.69	2,170.61	84.01	2,182.52
8,950.00	89.57	92.79	6,945.54	226.44	2,195.58	84.11	2,207.22
8,975.00	90.36	92.81	6,945.56	225.22	2,220.55	84.21	2,231.94
9,000.00	90.25	92.59	6,945.42	224.04	2,245.52	84.30	2,256.67
9,025.00	90.48	92.79	6,945.26	222.86	2,270.49	84.39	2,281.40
9,050.00	90.67	93.03	6,945.01	221.60	2,295.46	84.49	2,306.13
9,075.00	91.60	93.12	6,944.52	220.25	2,320.42	84.58	2,330.85
9,100.00	91.73	92.98	6,943.79	218.93	2,345.37	84.67	2,355.57
9,125.00	91.33	92.91	6,943.12	217.64	2,370.33	84.75	2,380.30
9,150.00	91.28	93.11	6,942.55	216.33	2,395.29	84.84	2,405.04
9,175.00	91.51	93.23	6,941.95	214.95	2,420.24	84.92	2,429.77
9,200.00	91.76	93.15	6,941.23	213.56	2,445.19	85.01	2,454.50
9,225.00	91.66	93.25	6,940.49	212.16	2,470.14	85.09	2,479.24
9,250.00	91.54	93.26	6,939.79	210.74	2,495.09	85.17	2,503.98
9,275.00	91.41	93.26	6,939.14	209.32	2,520.04	85.25	2,528.72
9,300.00	91.74	92.96	6,938.46	207.97	2,545.00	85.33	2,553.48
9,325.00	91.38	93.10	6,937.78	206.64	2,569.95	85.40	2,578.25
9,350.00	91.46	93.18	6,937.16	205.28	2,594.91	85.48	2,603.01

Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Agate PWU "21" #5H
Project:	Scanlon Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Agate PWU "21" #5H	North Reference:	Grid
Wellbore:	VH - Job #320212-KW-186	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320212-KW-186	Database:	EDM-Regulatory

Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
9,375.00	91.15	93.12	6,936.59	203.90	2,619.86	85.55	2,627.79
9,400.00	91.15	93.10	6,936.09	202.55	2,644.82	85.62	2,652.57
9,425.00	91.27	93.18	6,935.56	201.18	2,669.78	85.69	2,677.35
9,450.00	91.36	93.28	6,934.98	199.77	2,694.73	85.76	2,702.13
9,475.00	91.27	93.09	6,934.41	198.38	2,719.69	85.83	2,726.91
9,500.00	90.64	93.09	6,933.99	197.03	2,744.65	85.89	2,751.71
9,525.00	90.33	93.40	6,933.78	195.62	2,769.61	85.96	2,776.51
9,550.00	90.19	93.47	6,933.67	194.12	2,794.56	86.03	2,801.29
9,575.00	90.48	93.74	6,933.52	192.55	2,819.51	86.09	2,826.08
9,600.00	90.51	93.97	6,933.31	190.87	2,844.45	86.16	2,850.85
9,625.00	90.45	93.97	6,933.10	189.14	2,869.39	86.23	2,875.62
9,650.00	91.03	94.03	6,932.77	187.39	2,894.33	86.30	2,900.39
9,675.00	91.09	94.15	6,932.31	185.61	2,919.26	86.36	2,925.16
9,700.00	90.88	94.27	6,931.88	183.77	2,944.19	86.43	2,949.92
9,725.00	90.20	94.49	6,931.65	181.87	2,969.12	86.49	2,974.68
9,750.00	89.53	94.76	6,931.71	179.85	2,994.03	86.56	2,999.43
9,775.00	89.44	94.79	6,931.93	177.77	3,018.95	86.63	3,024.18
9,800.00	88.85	94.38	6,932.30	175.77	3,043.86	86.70	3,048.93
9,825.00	88.69	94.35	6,932.84	173.87	3,068.79	86.76	3,073.71
9,850.00	88.57	94.51	6,933.44	171.94	3,093.70	86.82	3,098.48
9,875.00	88.25	94.39	6,934.13	170.00	3,118.62	86.88	3,123.25
9,900.00	88.39	94.49	6,934.86	168.06	3,143.53	86.94	3,148.02
9,925.00	88.54	94.31	6,935.53	166.15	3,168.45	87.00	3,172.80
9,950.00	88.08	94.30	6,936.27	164.27	3,193.37	87.06	3,197.59
9,975.00	88.26	94.52	6,937.07	162.35	3,218.28	87.11	3,222.37
10,000.00	87.72	94.66	6,937.95	160.35	3,243.19	87.17	3,247.15
10,025.00	88.26	94.74	6,938.82	158.30	3,268.09	87.23	3,271.92
10,050.00	88.36	94.95	6,939.56	156.19	3,292.99	87.28	3,296.69
10,075.00	87.72	95.12	6,940.42	154.00	3,317.88	87.34	3,321.45
10,100.00	87.71	95.09	6,941.41	151.78	3,342.76	87.40	3,346.20
10,125.00	88.18	95.16	6,942.31	149.55	3,367.64	87.46	3,370.96
10,150.00	88.24	95.23	6,943.09	147.28	3,392.53	87.51	3,395.72
10,175.00	87.92	95.25	6,943.93	145.00	3,417.41	87.57	3,420.48
10,200.00	88.10	94.82	6,944.80	142.81	3,442.30	87.62	3,445.26
10,225.00	88.39	94.67	6,945.56	140.74	3,467.20	87.68	3,470.05
10,250.00	88.44	94.41	6,946.25	138.76	3,492.11	87.72	3,494.87
10,275.00	87.86	94.40	6,947.06	136.84	3,517.02	87.77	3,519.68
10,300.00	87.68	93.99	6,948.03	135.02	3,541.94	87.82	3,544.51
10,325.00	87.45	93.49	6,949.09	133.39	3,566.86	87.86	3,569.35
10,350.00	87.04	93.47	6,950.30	131.87	3,591.79	87.90	3,594.21
10,375.00	87.40	93.62	6,951.51	130.33	3,616.71	87.94	3,619.06
10,400.00	87.21	93.67	6,952.68	128.74	3,641.63	87.98	3,643.91
10,425.00	87.48	93.54	6,953.84	127.17	3,666.55	88.01	3,668.76
10,450.00	86.89	93.21	6,955.07	125.70	3,691.48	88.05	3,693.62

Scientific Drilling International, Inc.

SDI Standard Survey Report



Company:	DEVON ENERGY	Local Co-ordinate Reference:	Well Agate PWU "21" #5H
Project:	Scanlon Draw	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Agate PWU "21" #5H	North Reference:	Grid
Wellbore:	VH - Job #320212-KW-186	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320212-KW-186	Database:	EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
10,475.00	87.37	92.91	6,956.32	124.37	3,716.41	88.08	3,718.49
10,500.00	87.44	92.67	6,957.45	123.15	3,741.36	88.11	3,743.39
10,525.00	86.83	92.80	6,958.70	121.96	3,766.30	88.15	3,768.27
10,550.00	86.53	92.88	6,960.15	120.72	3,791.23	88.18	3,793.15
10,575.00	87.35	92.76	6,961.49	119.49	3,816.16	88.21	3,818.03
10,600.00	88.19	92.89	6,962.46	118.26	3,841.11	88.24	3,842.93
10,625.00	87.83	93.01	6,963.33	116.98	3,866.06	88.27	3,867.83
10,650.00	87.96	93.13	6,964.24	115.64	3,891.01	88.30	3,892.73
10,675.00	88.39	93.30	6,965.04	114.24	3,915.96	88.33	3,917.62
10,700.00	89.17	93.23	6,965.57	112.81	3,940.91	88.36	3,942.53
10,725.00	89.52	93.25	6,965.86	111.40	3,965.87	88.39	3,967.43
10,750.00	89.85	93.38	6,966.00	109.96	3,990.83	88.42	3,992.34
10,775.00	89.14	93.57	6,966.22	108.44	4,015.78	88.45	4,017.24
10,800.00	89.07	93.50	6,966.61	106.90	4,040.73	88.48	4,042.14
10,825.00	88.87	93.32	6,967.06	105.41	4,065.68	88.51	4,067.05
10,850.00	89.01	93.64	6,967.52	103.90	4,090.63	88.55	4,091.95
10,875.00	89.26	93.92	6,967.90	102.25	4,115.57	88.58	4,116.84
10,900.00	89.37	94.16	6,968.20	100.49	4,140.51	88.61	4,141.73
10,925.00	89.61	94.23	6,968.42	98.66	4,165.44	88.64	4,166.61
10,950.00	89.17	93.63	6,968.68	96.94	4,190.38	88.67	4,191.50
10,975.00	89.32	93.17	6,969.01	95.46	4,215.34	88.70	4,216.42
11,000.00	88.94	92.93	6,969.39	94.13	4,240.30	88.73	4,241.34
11,025.00	88.94	93.06	6,969.86	92.83	4,265.26	88.75	4,266.27
11,050.00	88.66	93.32	6,970.38	91.44	4,290.21	88.78	4,291.19
11,075.00	88.88	93.28	6,970.92	90.00	4,315.17	88.81	4,316.11
11,100.00	89.12	93.01	6,971.35	88.62	4,340.13	88.83	4,341.03
11,125.00	88.55	93.11	6,971.86	87.29	4,365.08	88.85	4,365.96
11,150.00	88.74	93.23	6,972.45	85.91	4,390.04	88.88	4,390.88
11,175.00	88.65	93.23	6,973.02	84.50	4,414.99	88.90	4,415.80
11,200.00	89.23	93.13	6,973.48	83.11	4,439.95	88.93	4,440.73
11,225.00	88.45	93.20	6,973.99	81.73	4,464.91	88.95	4,465.65
11,250.00	88.46	93.32	6,974.66	80.31	4,489.86	88.98	4,490.58
11,275.00	88.19	93.22	6,975.39	78.89	4,514.81	89.00	4,515.50
11,300.00	88.45	93.33	6,976.13	77.46	4,539.75	89.02	4,540.42
11,321.40	88.23	93.50	6,976.75	76.19	4,561.11	89.04	4,561.74

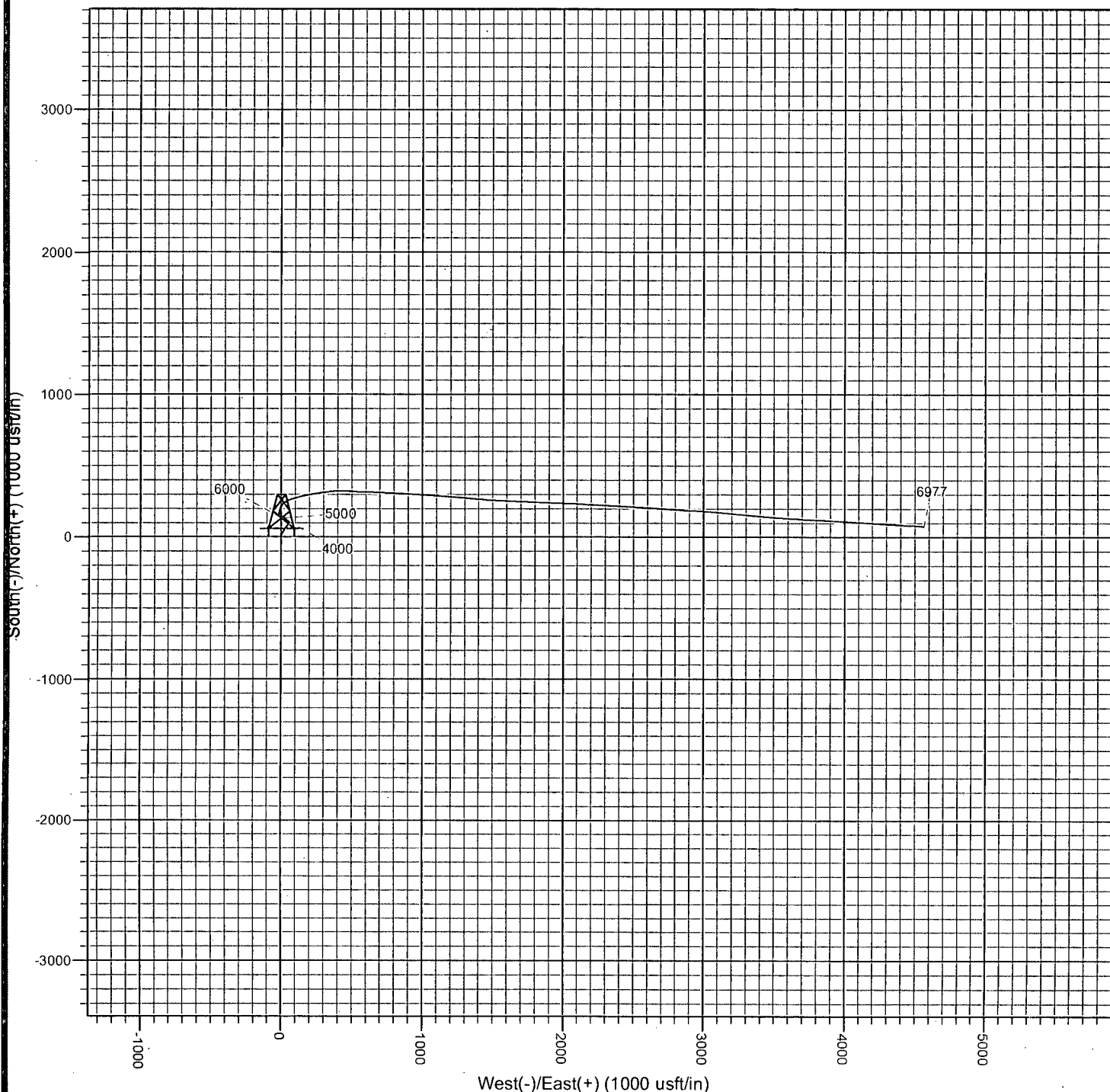


Scientific Drilling

Project: Scanlon Draw
Eddy County, NM
Well: Agate PWU "21" #5H
Wellbore: VH - Job #320212-KW-186
Design: VH - Job #320212-KW-186

WELL DETAILS: Agate PWU "21" #5H
WELL @ 0.00usft (Original Well Elev)
Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	600324.13	575631.14	32° 39' 0.548 N	104° 5' 15.390 W	



PROJECT DETAILS: Scanlon Draw	SITE DETAILS: Eddy County, NM
Geodetic System: US State Plane 1927 (Exact solution)	Site Centre Latitude: 32° 39' 7.200 N
Datum: NAD 1927 (NADCON CONUS)	Longitude: 104° 6' 14.400 W
Ellipsoid: Clarke 1866	Positional Uncertainty: 0.00
Zone: New Mexico East 3001	Convergence: 0.12
System Datum: Mean Sea Level	Local North: Grid