

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

JR
AM

Seused

API 47-033-5778 County HARRISON District TEN MILE
Quad SALEM 7.5' Pad Name A. STONESTREET Field/Pool Name WOLF SUMMIT
Farm name CURRY, KEITH A. & BRENDA S. Well Number 124
Operator (as registered with the OOG) H.G. ENERGY LLC
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,347,811 M Easting 543,894 M
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,347,562 M Easting 543,863 M

Elevation (ft) 1,228' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
N/A

Date permit issued 8/29/13 Date drilling commenced 11/22/13 Date drilling ceased 12/5/13
Date completion activities began 12/11/13 Date completion activities ceased 12/19/13
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft None Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Void(s) encountered (Y/N) depths N
Coal depth(s) ft 460'-467' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

RECEIVED
Office of Oil and Gas
MAR 14 2014
WV Department of
Environmental Protection

Reviewed by:

04/04/2014

API 47- 033 - 5778 Farm name CURRY, KEITH A. & BRENDA S. Well number 124

| CASING STRINGS | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/ N) * Provide details below* |
|---------------------------|-----------|-------------|---------|-------------|-------------|-----------------|---|
| Conductor | 12 1/4" | 11 5/8" | 30' | Used | LS | | Sand In |
| Surface | 8 3/4" | 7" | 580' | New | LS | 64' | Y |
| Coal | | | | | | | |
| Intermediate 1 | | | | | | | |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 6 1/2" | 4 1/2" | 3147.5' | New | J-55 | | Y |
| Tubing | | | | | | | |
| Packer type and depth set | | | | | | | |

Comment Details Circulated Est. 1 bbls to surface on 7" surface cement job. Circulated Est. 15 bbls to surface on 4 1/2" cement job.

| CEMENT DATA | Class/Type of Cement | Number of Sacks | Slurry wt (ppg) | Yield (ft ³ /sks) | Volume (ft ³) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|-----------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor | | | | | | | |
| Surface | Reg Neat | 140 | 15.6 | 1.18 | 165 | Surface | 8 |
| Coal | | | | | | | |
| Intermediate 1 | | | | | | | |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 50:50 Pozmix/ Econo | 200/80 | 14.2/11.8 | 1.27/2.93 | 254/234 | Surface | 8 |
| Tubing | | | | | | | |

Drillers TD (ft) 3200' Loggers TD (ft) 3182'
 Deepest formation penetrated Fifth Sand Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 900'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

15 Centralizers every 64' from bottom on 4 1/2", Centralizer placed mid string on 7"

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47-033-5778 Farm name CURRY, KEITH A. & BRENDA S. Well number 124

| <u>PRODUCING FORMATION(S)</u> | <u>DEPTHS</u> | |
|-------------------------------|---------------|--------------------|
| Fifth Sand | 2785'-2796' | TVD 2965'-2978' MD |
| | | |
| | | |
| | | |

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY
 Estimated Orifice Pilot

| LITHOLOGY/ FORMATION | TOP DEPTH IN FT NAME TVD | BOTTOM DEPTH IN FT TVD | TOP DEPTH IN FT MD | BOTTOM DEPTH IN FT MD | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC) |
|-------------------------|--------------------------------|------------------------------|--------------------------|-----------------------------|--|
| Sand/Shale | 0 | 460 | 0 | 460 | |
| Pittsburgh Coal | 460 | 467 | 460 | 467 | |
| Sand/Shale | 467 | 1824 | 467 | 1846 | |
| Big Lime | 1824 | 1898 | 1846 | 1928 | |
| Big Injun | 1898 | 1964 | 1928 | 2002 | |
| Shale | 1964 | 2374 | 2002 | 2481 | |
| Fifty Foot | 2374 | 2413 | 2481 | 2528 | |
| Shale | 2413 | 2457 | 2528 | 2580 | |
| Sand | 2457 | 2639 | 2580 | 2795 | |
| Shale | 2639 | 2785 | 2795 | 2965 | |
| Fifth Sand | 2785 | 2796 | 2965 | 2978 | Drilled directional S 3 degrees E a distance of 754' |
| Shale | 2796 | 2990 | 2978 | 3200 | |
| TD | 2990 | | 3200 | | |
| | | | | | |

Please insert additional pages as applicable.

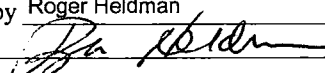
Drilling Contractor Decker Drilling
 Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International
 Address 777 North River Avenue City Weston State WV Zip 26452

Cementing Company Baker Hughes
 Address 2228 Philippi Pike City Clarksburg State WV Zip 26301

Stimulating Company Producers Service Corp.
 Address 109 South Graham Street City Zanesville State OH Zip 43701

Please insert additional pages as applicable.

Completed by Roger Heldman Telephone 304-420-1107
 Signature  Title Operations Manager Date 1/24/14

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

04/04/2014

HG Energy, LLC

Harrison County, West Virginia

A Stonestreet #124

A. Stonestreet #124

Wellbore #1

Survey: MWD

DDC Survey Report

11 December, 2013



04/04/2014



I **Larry Wright**, certify that I am employed by **The Appalachian Directional Drilling Company (ADC)**. That I did on the day(s) of **12/2/13** thru **12/4/13** conduct or supervise the taking of a **MWD Survey** from a depth of **900** feet to a depth of **3200** feet, that the data is true, correct, complete and within the limitations of the tool as set forth by **The Appalachian Directional Drilling Company (ADC)**.; that I am authorized and qualified to make this report; that this survey was conducted at the request of **HG Energy** for the **A. Stonestreet #124** API No. **47-033-05778** in **Harrison, County WV**; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by **The Appalachian Directional Drilling Company (ADC)**.

Larry Wright

Digitally signed by Larry Wright
DN: cn=Larry Wright, o=The
Directional Drilling Company,
ou=GM of Guidance Services,
email=larryw@directionaldrillers.c
om, c=US
Date: 2013.12.17 16:27:34 -06'00'

DDC
Survey Report



| | | | |
|-----------|--------------------------------|------------------------------|-------------------------------|
| Company: | HG Energy, LLC | Local Co-ordinate Reference: | Well A. Stonestreet #124 |
| Project: | Harrison County, West Virginia | TVD Reference: | WELL @ 1236.0usft (Decker #6) |
| Site: | A Stonestreet #124 | MD Reference: | WELL @ 1236.0usft (Decker #6) |
| Well: | A. Stonestreet #124 | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| | | | |
|-------------|--------------------------------|---------------|----------------|
| Project | Harrison County, West Virginia | | |
| Map System: | Universal Transverse Mercator | System Datum: | Mean Sea Level |
| Geo Datum: | NAD83 West Virginia - HARN | | |
| Map Zone: | Zone 17N (84 W to 78 W) | | |

| | | | | | |
|-----------------------|--------------------|--------------------|------------|-------------------|--------|
| Site | A Stonestreet #124 | | | | |
| Site Position: | Northing: | 14,264,406.92 usft | Latitude: | 39° 16' 42.400 N | |
| From: Lat/Long | Easting: | 1,784,373.36 usft | Longitude: | 80° 29' 28.600 W | |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | 0.32 ° |

| | | | | | | |
|----------------------|---------------------|---------------------|-----------|--------------------|--------------|------------------|
| Well | A. Stonestreet #124 | | | | | |
| Well Position | +N/-S | 0.0 usft | Northing: | 14,264,406.92 usft | Latitude: | 39° 16' 42.400 N |
| | +E/-W | 0.0 usft | Easting: | 1,784,373.36 usft | Longitude: | 80° 29' 28.600 W |
| Position Uncertainty | 0.0 usft | Wellhead Elevation: | usft | Ground Level: | 1,228.0 usft | |

| Wellbore | Wellbore #1 | | | | |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 12/11/2013 | -8.65 | 66.81 | 52,317 |

| Design | Wellbore #1 | | | | |
|-------------------|-------------------------|--------------|--------------|---------------|-----|
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 183.02 | |

| Survey Program | Date 12/11/2013 | | | |
|----------------|-----------------|-------------------|-----------|-------------|
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 900.0 | 3,200.0 | MWD (Wellbore #1) | | |

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Tie In @ 900' MD / 900' TVD | | | | | | | | | |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 930.0 | 1.40 | 93.50 | 930.0 | 0.0 | 0.4 | 0.0 | 4.67 | 4.67 | 0.00 |
| 960.0 | 1.70 | 135.00 | 960.0 | -0.4 | 1.0 | 0.3 | 3.78 | 1.00 | 138.33 |
| 990.0 | 2.90 | 164.00 | 990.0 | -1.4 | 1.6 | 1.3 | 5.45 | 4.00 | 96.67 |
| 1,020.0 | 4.40 | 172.80 | 1,019.9 | -3.3 | 1.9 | 3.2 | 5.32 | 5.00 | 29.33 |
| 1,050.0 | 5.70 | 176.60 | 1,049.8 | -5.9 | 2.2 | 5.8 | 4.47 | 4.33 | 12.67 |
| 1,080.0 | 6.80 | 177.90 | 1,079.6 | -9.2 | 2.3 | 9.0 | 3.70 | 3.67 | 4.33 |
| 1,110.0 | 7.50 | 178.20 | 1,109.4 | -12.9 | 2.4 | 12.8 | 2.34 | 2.33 | 1.00 |
| 1,140.0 | 8.20 | 179.40 | 1,139.1 | -17.0 | 2.5 | 16.8 | 2.40 | 2.33 | 4.00 |

DDC
Survey Report



| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------|
| Company: | HG Energy, LLC | Local Co-ordinate Reference: | Well A. Stonestreet #124 |
| Project: | Harrison County, West Virginia | TVD Reference: | WELL @ 1236.0usft (Decker #6) |
| Site: | A Stonestreet #124 | MD Reference: | WELL @ 1236.0usft (Decker #6) |
| Well: | A. Stonestreet #124 | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 1,170.0 | 8.30 | 183.30 | 1,168.8 | -21.3 | 2.4 | 21.1 | 1.89 | 0.33 | 13.00 |
| 1,200.0 | 8.20 | 185.10 | 1,198.5 | -25.6 | 2.1 | 25.4 | 0.92 | -0.33 | 6.00 |
| 1,230.0 | 8.70 | 185.90 | 1,228.1 | -30.0 | 1.7 | 29.8 | 1.71 | 1.67 | 2.67 |
| 1,260.0 | 9.30 | 187.20 | 1,257.8 | -34.6 | 1.1 | 34.5 | 2.11 | 2.00 | 4.33 |
| 1,290.0 | 10.10 | 188.30 | 1,287.3 | -39.6 | 0.5 | 39.6 | 2.74 | 2.67 | 3.67 |
| 1,320.0 | 9.90 | 188.20 | 1,316.9 | -44.8 | -0.3 | 44.8 | 0.67 | -0.67 | -0.33 |
| 1,350.0 | 9.40 | 186.70 | 1,346.5 | -49.8 | -0.9 | 49.8 | 1.87 | -1.67 | -5.00 |
| 1,380.0 | 9.70 | 186.10 | 1,376.1 | -54.7 | -1.5 | 54.7 | 1.05 | 1.00 | -2.00 |
| 1,410.0 | 10.70 | 185.20 | 1,405.6 | -60.0 | -2.0 | 60.0 | 3.38 | 3.33 | -3.00 |
| 1,440.0 | 11.80 | 185.70 | 1,435.0 | -65.8 | -2.6 | 65.9 | 3.68 | 3.67 | 1.67 |
| 1,470.0 | 12.60 | 185.30 | 1,464.3 | -72.2 | -3.2 | 72.2 | 2.68 | 2.67 | -1.33 |
| 1,500.0 | 13.50 | 184.00 | 1,493.5 | -78.9 | -3.7 | 79.0 | 3.16 | 3.00 | -4.33 |
| 1,530.0 | 13.80 | 182.20 | 1,522.7 | -86.0 | -4.1 | 86.1 | 1.73 | 1.00 | -6.00 |
| 1,560.0 | 13.80 | 179.40 | 1,551.8 | -93.1 | -4.2 | 93.2 | 2.23 | 0.00 | -9.33 |
| 1,590.0 | 14.10 | 177.00 | 1,580.9 | -100.4 | -4.0 | 100.4 | 2.17 | 1.00 | -8.00 |
| 1,620.0 | 15.00 | 174.40 | 1,610.0 | -107.9 | -3.4 | 107.9 | 3.71 | 3.00 | -8.67 |
| 1,650.0 | 15.80 | 176.50 | 1,638.9 | -115.8 | -2.8 | 115.8 | 3.25 | 2.67 | 7.00 |
| 1,680.0 | 16.60 | 179.80 | 1,667.7 | -124.2 | -2.5 | 124.1 | 4.06 | 2.67 | 11.00 |
| 1,710.0 | 17.50 | 184.00 | 1,696.4 | -133.0 | -2.8 | 132.9 | 5.08 | 3.00 | 14.00 |
| 1,740.0 | 18.10 | 188.00 | 1,725.0 | -142.1 | -3.8 | 142.1 | 4.54 | 2.00 | 13.33 |
| 1,770.0 | 19.70 | 190.30 | 1,753.3 | -151.7 | -5.3 | 151.7 | 5.88 | 5.33 | 7.67 |
| 1,800.0 | 21.50 | 189.50 | 1,781.4 | -162.1 | -7.1 | 162.2 | 6.07 | 6.00 | -2.67 |
| 1,830.0 | 22.70 | 187.70 | 1,809.2 | -173.2 | -8.8 | 173.4 | 4.59 | 4.00 | -6.00 |
| 1,860.0 | 24.10 | 186.90 | 1,836.8 | -185.0 | -10.3 | 185.3 | 4.79 | 4.67 | -2.67 |
| 1,890.0 | 24.80 | 187.40 | 1,864.1 | -197.4 | -11.9 | 197.7 | 2.43 | 2.33 | 1.67 |
| 1,920.0 | 26.20 | 186.60 | 1,891.1 | -210.2 | -13.5 | 210.6 | 4.81 | 4.67 | -2.67 |
| 1,950.0 | 27.20 | 187.00 | 1,917.9 | -223.6 | -15.1 | 224.0 | 3.39 | 3.33 | 1.33 |
| 1,980.0 | 28.50 | 187.30 | 1,944.5 | -237.5 | -16.8 | 238.0 | 4.36 | 4.33 | 1.00 |
| 2,010.0 | 29.40 | 186.30 | 1,970.7 | -251.9 | -18.5 | 252.5 | 3.41 | 3.00 | -3.33 |
| 2,040.0 | 29.50 | 184.40 | 1,996.8 | -266.6 | -19.9 | 267.2 | 3.13 | 0.33 | -6.33 |
| 2,070.0 | 29.60 | 182.50 | 2,022.9 | -281.3 | -20.8 | 282.0 | 3.14 | 0.33 | -6.33 |
| 2,100.0 | 29.90 | 181.30 | 2,049.0 | -296.2 | -21.3 | 296.9 | 2.22 | 1.00 | -4.00 |
| 2,130.0 | 30.60 | 181.80 | 2,074.9 | -311.3 | -21.7 | 312.0 | 2.48 | 2.33 | 1.67 |
| 2,160.0 | 31.40 | 182.90 | 2,100.6 | -326.8 | -22.3 | 327.5 | 3.27 | 2.67 | 3.67 |
| 2,190.0 | 31.60 | 184.70 | 2,126.2 | -342.4 | -23.4 | 343.2 | 3.20 | 0.67 | 6.00 |
| 2,220.0 | 31.40 | 185.00 | 2,151.8 | -358.0 | -24.7 | 358.8 | 0.85 | -0.67 | 1.00 |
| 2,250.0 | 31.20 | 184.80 | 2,177.4 | -373.5 | -26.0 | 374.4 | 0.75 | -0.67 | -0.67 |
| 2,280.0 | 30.80 | 185.00 | 2,203.1 | -388.9 | -27.3 | 389.8 | 1.38 | -1.33 | 0.67 |
| 2,310.0 | 30.40 | 185.40 | 2,228.9 | -404.1 | -28.7 | 405.1 | 1.50 | -1.33 | 1.33 |
| 2,340.0 | 30.60 | 185.80 | 2,254.8 | -419.3 | -30.2 | 420.3 | 0.95 | 0.67 | 1.33 |
| 2,370.0 | 31.40 | 186.40 | 2,280.5 | -434.7 | -31.8 | 435.7 | 2.86 | 2.67 | 2.00 |
| 2,400.0 | 32.30 | 186.70 | 2,306.0 | -450.4 | -33.7 | 451.5 | 3.05 | 3.00 | 1.00 |
| 2,430.0 | 33.10 | 185.90 | 2,331.2 | -466.5 | -35.4 | 467.7 | 3.03 | 2.67 | -2.67 |
| 2,460.0 | 33.10 | 184.90 | 2,356.4 | -482.8 | -37.0 | 484.1 | 1.82 | 0.00 | -3.33 |

DDC
Survey Report



Company: HG Energy, LLC
 Project: Harrison County, West Virginia
 Site: A Stonestreet #124
 Well: A. Stonestreet #124
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well A. Stonestreet #124
 TVD Reference: WELL @ 1236.0usft (Decker #6)
 MD Reference: WELL @ 1236.0usft (Decker #6)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | |
|---------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| 2,490.0 | 33.00 | 184.40 | 2,381.5 | -499.1 | -38.3 | 500.4 | 0.97 | -0.33 | -1.67 | |
| 2,520.0 | 33.20 | 184.10 | 2,406.6 | -515.5 | -39.5 | 516.8 | 0.86 | 0.67 | -1.00 | |
| 2,550.0 | 32.60 | 182.20 | 2,431.8 | -531.7 | -40.4 | 533.1 | 3.98 | -2.00 | -6.33 | |
| 2,580.0 | 31.80 | 179.90 | 2,457.2 | -547.7 | -40.7 | 549.1 | 4.88 | -2.67 | -7.67 | |
| 2,610.0 | 31.70 | 180.60 | 2,482.7 | -563.5 | -40.8 | 564.9 | 1.27 | -0.33 | 2.33 | |
| 2,640.0 | 32.20 | 182.70 | 2,508.2 | -579.4 | -41.2 | 580.7 | 4.06 | 1.67 | 7.00 | |
| 2,670.0 | 32.70 | 183.70 | 2,533.5 | -595.4 | -42.1 | 596.8 | 2.44 | 1.67 | 3.33 | |
| 2,700.0 | 33.00 | 185.10 | 2,558.7 | -611.7 | -43.4 | 613.1 | 2.72 | 1.00 | 4.67 | |
| 2,730.0 | 33.00 | 184.80 | 2,583.9 | -627.9 | -44.8 | 629.4 | 0.54 | 0.00 | -1.00 | |
| 2,760.0 | 33.00 | 184.00 | 2,609.0 | -644.2 | -46.0 | 645.8 | 1.45 | 0.00 | -2.67 | |
| 2,790.0 | 32.90 | 182.90 | 2,634.2 | -660.5 | -47.0 | 662.1 | 2.02 | -0.33 | -3.67 | |
| 2,820.0 | 32.30 | 181.40 | 2,659.5 | -676.7 | -47.6 | 678.2 | 3.35 | -2.00 | -5.00 | |
| 2,850.0 | 31.60 | 180.40 | 2,684.9 | -692.5 | -47.9 | 694.1 | 2.92 | -2.33 | -3.33 | |
| 2,880.0 | 30.80 | 178.70 | 2,710.6 | -708.1 | -47.8 | 709.6 | 3.97 | -2.67 | -5.67 | |
| 2,910.0 | 29.70 | 176.80 | 2,736.5 | -723.2 | -47.2 | 724.7 | 4.86 | -3.67 | -6.33 | |
| 2,940.0 | 29.30 | 176.90 | 2,762.6 | -737.9 | -46.4 | 739.3 | 1.34 | -1.33 | 0.33 | |
| 2,970.0 | 28.90 | 176.90 | 2,788.8 | -752.5 | -45.6 | 753.8 | 1.33 | -1.33 | 0.00 | |
| 2,980.0 | 28.90 | 177.70 | 2,797.6 | -757.3 | -45.4 | 758.7 | 3.87 | 0.00 | 8.00 | |
| 3,000.0 | 28.60 | 178.50 | 2,815.1 | -766.9 | -45.0 | 768.2 | 2.44 | -1.50 | 4.00 | |
| 3,030.0 | 28.50 | 179.70 | 2,841.5 | -781.3 | -44.8 | 782.5 | 1.94 | -0.33 | 4.00 | |
| 3,060.0 | 28.70 | 180.60 | 2,867.8 | -795.6 | -44.8 | 796.9 | 1.58 | 0.67 | 3.00 | |
| 3,090.0 | 28.90 | 181.00 | 2,894.1 | -810.1 | -45.0 | 811.3 | 0.93 | 0.67 | 1.33 | |
| 3,120.0 | 29.20 | 180.60 | 2,920.3 | -824.6 | -45.2 | 825.9 | 1.19 | 1.00 | -1.33 | |
| 3,150.0 | 29.40 | 180.50 | 2,946.5 | -839.3 | -45.4 | 840.6 | 0.69 | 0.67 | -0.33 | |
| TD @ 3200' MD / 2990' TVD | | | | | | | | | | |
| 3,200.0 | 29.40 | 180.50 | 2,990.1 | -863.9 | -45.6 | 865.1 | 0.00 | 0.00 | 0.00 | |

Survey Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|-----------------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 900.0 | 900.0 | 0.0 | 0.0 | Tie In @ 900' MD / 900' TVD |
| 3,200.0 | 2,990.1 | -863.9 | -45.6 | TD @ 3200' MD / 2990' TVD |

Checked By: _____ Approved By: _____ Date: _____

HG Energy, LLC

Harrison County, West Virginia

A Stonestreet #124

A. Stonestreet #124

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

07 January, 2014



04/04/2014

DDC
Survey Report - Geographic



| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------|
| Company: | HG Energy, LLC | Local Co-ordinate Reference: | Well A. Stonestreet #124 |
| Project: | Harrison County, West Virginia | TVD Reference: | WELL @ 1236.0usft (Decker #6) |
| Site: | A Stonestreet #124 | MD Reference: | WELL @ 1236.0usft (Decker #6) |
| Well: | A. Stonestreet #124 | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| | | | |
|--------------------|--------------------------------|----------------------|----------------|
| Project | Harrison County, West Virginia | | |
| Map System: | Universal Transverse Mercator | System Datum: | Mean Sea Level |
| Geo Datum: | NAD83 West Virginia - HARN | | |
| Map Zone: | Zone 17N (84 W to 78 W) | | |

| | | | | | |
|------------------------------|--------------------|---------------------|--------------------|--------------------------|------------------|
| Site | A Stonestreet #124 | | | | |
| Site Position: | | Northing: | 14,264,406.92 usft | Latitude: | 39° 16' 42.400 N |
| From: | Lat/Long | Easting: | 1,784,373.36 usft | Longitude: | 80° 29' 28.600 W |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | 0.32 ° |

| | | | | | | |
|-----------------------------|---------------------|----------|----------------------------|--------------------|----------------------|------------------|
| Well | A. Stonestreet #124 | | | | | |
| Well Position | +N/-S | 0.0 usft | Northing: | 14,264,406.92 usft | Latitude: | 39° 16' 42.400 N |
| | +E/-W | 0.0 usft | Easting: | 1,784,373.36 usft | Longitude: | 80° 29' 28.600 W |
| Position Uncertainty | 0.0 usft | | Wellhead Elevation: | usft | Ground Level: | 1,228.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 12/11/2013 | -8.65 | 66.81 | 52,317 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|-----|
| Design | Wellbore #1 | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 183.02 | |

| | | | | | |
|-----------------------|------------------|--------------------------|------------------|--------------------|--|
| Survey Program | Date | 12/11/2013 | | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description | |
| 900.0 | 3,200.0 | MWD (Wellbore #1) | | | |

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
|------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 14,264,406.92 | 1,784,373.36 | 39° 16' 42.400 N | 80° 29' 28.600 W |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 14,264,406.92 | 1,784,373.36 | 39° 16' 42.400 N | 80° 29' 28.600 W |
| Tie In @ 900' MD / 900' TVD | | | | | | | | | |
| 930.0 | 1.40 | 93.50 | 930.0 | 0.0 | 0.4 | 14,264,406.90 | 1,784,373.73 | 39° 16' 42.400 N | 80° 29' 28.595 W |
| 960.0 | 1.70 | 135.00 | 960.0 | -0.4 | 1.0 | 14,264,406.56 | 1,784,374.41 | 39° 16' 42.396 N | 80° 29' 28.587 W |
| 990.0 | 2.90 | 164.00 | 990.0 | -1.4 | 1.6 | 14,264,405.52 | 1,784,374.93 | 39° 16' 42.386 N | 80° 29' 28.580 W |
| 1,020.0 | 4.40 | 172.80 | 1,019.9 | -3.3 | 1.9 | 14,264,403.65 | 1,784,375.29 | 39° 16' 42.368 N | 80° 29' 28.576 W |
| 1,050.0 | 5.70 | 176.60 | 1,049.8 | -5.9 | 2.2 | 14,264,401.02 | 1,784,375.52 | 39° 16' 42.342 N | 80° 29' 28.573 W |
| 1,080.0 | 6.80 | 177.90 | 1,079.6 | -9.2 | 2.3 | 14,264,397.76 | 1,784,375.67 | 39° 16' 42.309 N | 80° 29' 28.571 W |
| 1,110.0 | 7.50 | 178.20 | 1,109.4 | -12.9 | 2.4 | 14,264,394.03 | 1,784,375.80 | 39° 16' 42.272 N | 80° 29' 28.570 W |
| 1,140.0 | 8.20 | 179.40 | 1,139.1 | -17.0 | 2.5 | 14,264,389.93 | 1,784,375.88 | 39° 16' 42.232 N | 80° 29' 28.569 W |
| 1,170.0 | 8.30 | 183.30 | 1,168.8 | -21.3 | 2.4 | 14,264,385.63 | 1,784,375.78 | 39° 16' 42.189 N | 80° 29' 28.571 W |

DDC
Survey Report - Geographic



Company: HG Energy, LLC
Project: Harrison County, West Virginia
Site: A Stonestreet #124
Well: A. Stonestreet #124
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well A. Stonestreet #124
TVD Reference: WELL @ 1236.0usft (Decker #6)
MD Reference: WELL @ 1236.0usft (Decker #6)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|------------------|
| 1,200.0 | 8.20 | 185.10 | 1,198.5 | -25.6 | 2.1 | 14,264,381.34 | 1,784,375.47 | 39° 16' 42.147 N | 80° 29' 28.575 W |
| 1,230.0 | 8.70 | 185.90 | 1,228.1 | -30.0 | 1.7 | 14,264,376.95 | 1,784,375.04 | 39° 16' 42.104 N | 80° 29' 28.581 W |
| 1,260.0 | 9.30 | 187.20 | 1,257.8 | -34.6 | 1.1 | 14,264,372.29 | 1,784,374.51 | 39° 16' 42.057 N | 80° 29' 28.588 W |
| 1,290.0 | 10.10 | 188.30 | 1,287.3 | -39.6 | 0.5 | 14,264,367.28 | 1,784,373.82 | 39° 16' 42.008 N | 80° 29' 28.597 W |
| 1,320.0 | 9.90 | 188.20 | 1,316.9 | -44.8 | -0.3 | 14,264,362.12 | 1,784,373.07 | 39° 16' 41.957 N | 80° 29' 28.607 W |
| 1,350.0 | 9.40 | 186.70 | 1,346.5 | -49.8 | -0.9 | 14,264,357.14 | 1,784,372.42 | 39° 16' 41.908 N | 80° 29' 28.616 W |
| 1,380.0 | 9.70 | 186.10 | 1,376.1 | -54.7 | -1.5 | 14,264,352.19 | 1,784,371.87 | 39° 16' 41.859 N | 80° 29' 28.623 W |
| 1,410.0 | 10.70 | 185.20 | 1,405.6 | -60.0 | -2.0 | 14,264,346.90 | 1,784,371.35 | 39° 16' 41.807 N | 80° 29' 28.630 W |
| 1,440.0 | 11.80 | 185.70 | 1,435.0 | -65.8 | -2.6 | 14,264,341.08 | 1,784,370.79 | 39° 16' 41.749 N | 80° 29' 28.637 W |
| 1,470.0 | 12.60 | 185.30 | 1,464.3 | -72.2 | -3.2 | 14,264,334.77 | 1,784,370.18 | 39° 16' 41.687 N | 80° 29' 28.646 W |
| 1,500.0 | 13.50 | 184.00 | 1,493.5 | -78.9 | -3.7 | 14,264,328.02 | 1,784,369.63 | 39° 16' 41.620 N | 80° 29' 28.653 W |
| 1,530.0 | 13.80 | 182.20 | 1,522.7 | -86.0 | -4.1 | 14,264,320.95 | 1,784,369.25 | 39° 16' 41.550 N | 80° 29' 28.658 W |
| 1,560.0 | 13.80 | 179.40 | 1,551.8 | -93.1 | -4.2 | 14,264,313.79 | 1,784,369.15 | 39° 16' 41.479 N | 80° 29' 28.660 W |
| 1,590.0 | 14.10 | 177.00 | 1,580.9 | -100.4 | -4.0 | 14,264,306.57 | 1,784,369.38 | 39° 16' 41.408 N | 80° 29' 28.658 W |
| 1,620.0 | 15.00 | 174.40 | 1,610.0 | -107.9 | -3.4 | 14,264,299.05 | 1,784,369.95 | 39° 16' 41.334 N | 80° 29' 28.651 W |
| 1,650.0 | 15.80 | 176.50 | 1,638.9 | -115.8 | -2.8 | 14,264,291.11 | 1,784,370.58 | 39° 16' 41.255 N | 80° 29' 28.644 W |
| 1,680.0 | 16.60 | 179.80 | 1,667.7 | -124.2 | -2.5 | 14,264,282.75 | 1,784,370.84 | 39° 16' 41.172 N | 80° 29' 28.641 W |
| 1,710.0 | 17.50 | 184.00 | 1,696.4 | -133.0 | -2.8 | 14,264,273.97 | 1,784,370.54 | 39° 16' 41.086 N | 80° 29' 28.645 W |
| 1,740.0 | 18.10 | 188.00 | 1,725.0 | -142.1 | -3.8 | 14,264,264.85 | 1,784,369.58 | 39° 16' 40.996 N | 80° 29' 28.658 W |
| 1,770.0 | 19.70 | 190.30 | 1,753.3 | -151.7 | -5.3 | 14,264,255.26 | 1,784,368.03 | 39° 16' 40.901 N | 80° 29' 28.679 W |
| 1,800.0 | 21.50 | 189.50 | 1,781.4 | -162.1 | -7.1 | 14,264,244.86 | 1,784,366.22 | 39° 16' 40.798 N | 80° 29' 28.702 W |
| 1,830.0 | 22.70 | 187.70 | 1,809.2 | -173.2 | -8.8 | 14,264,233.70 | 1,784,364.53 | 39° 16' 40.688 N | 80° 29' 28.725 W |
| 1,860.0 | 24.10 | 186.90 | 1,836.8 | -185.0 | -10.3 | 14,264,221.89 | 1,784,363.02 | 39° 16' 40.571 N | 80° 29' 28.745 W |
| 1,890.0 | 24.80 | 187.40 | 1,864.1 | -197.4 | -11.9 | 14,264,209.57 | 1,784,361.48 | 39° 16' 40.449 N | 80° 29' 28.765 W |
| 1,920.0 | 26.20 | 186.60 | 1,891.1 | -210.2 | -13.5 | 14,264,196.75 | 1,784,359.90 | 39° 16' 40.323 N | 80° 29' 28.786 W |
| 1,950.0 | 27.20 | 187.00 | 1,917.9 | -223.6 | -15.1 | 14,264,183.36 | 1,784,358.31 | 39° 16' 40.190 N | 80° 29' 28.808 W |
| 1,980.0 | 28.50 | 187.30 | 1,944.5 | -237.5 | -16.8 | 14,264,169.46 | 1,784,356.56 | 39° 16' 40.053 N | 80° 29' 28.831 W |
| 2,010.0 | 29.40 | 186.30 | 1,970.7 | -251.9 | -18.5 | 14,264,155.04 | 1,784,354.85 | 39° 16' 39.911 N | 80° 29' 28.854 W |
| 2,040.0 | 29.50 | 184.40 | 1,996.8 | -266.6 | -19.9 | 14,264,140.35 | 1,784,353.47 | 39° 16' 39.765 N | 80° 29' 28.872 W |
| 2,070.0 | 29.60 | 182.50 | 2,022.9 | -281.3 | -20.8 | 14,264,125.59 | 1,784,352.58 | 39° 16' 39.620 N | 80° 29' 28.884 W |
| 2,100.0 | 29.90 | 181.30 | 2,049.0 | -296.2 | -21.3 | 14,264,110.71 | 1,784,352.09 | 39° 16' 39.472 N | 80° 29' 28.892 W |
| 2,130.0 | 30.60 | 181.80 | 2,074.9 | -311.3 | -21.7 | 14,264,095.60 | 1,784,351.68 | 39° 16' 39.323 N | 80° 29' 28.898 W |
| 2,160.0 | 31.40 | 182.90 | 2,100.6 | -326.8 | -22.3 | 14,264,080.16 | 1,784,351.04 | 39° 16' 39.171 N | 80° 29' 28.907 W |
| 2,190.0 | 31.60 | 184.70 | 2,126.2 | -342.4 | -23.4 | 14,264,064.53 | 1,784,350.00 | 39° 16' 39.016 N | 80° 29' 28.922 W |
| 2,220.0 | 31.40 | 185.00 | 2,151.8 | -358.0 | -24.7 | 14,264,048.91 | 1,784,348.68 | 39° 16' 38.862 N | 80° 29' 28.940 W |
| 2,250.0 | 31.20 | 184.80 | 2,177.4 | -373.5 | -26.0 | 14,264,033.38 | 1,784,347.35 | 39° 16' 38.708 N | 80° 29' 28.958 W |
| 2,280.0 | 30.80 | 185.00 | 2,203.1 | -388.9 | -27.3 | 14,264,017.98 | 1,784,346.03 | 39° 16' 38.556 N | 80° 29' 28.976 W |
| 2,310.0 | 30.40 | 185.40 | 2,228.9 | -404.1 | -28.7 | 14,264,002.78 | 1,784,344.64 | 39° 16' 38.406 N | 80° 29' 28.994 W |
| 2,340.0 | 30.60 | 185.80 | 2,254.8 | -419.3 | -30.2 | 14,263,987.62 | 1,784,343.16 | 39° 16' 38.256 N | 80° 29' 29.014 W |
| 2,370.0 | 31.40 | 186.40 | 2,280.5 | -434.7 | -31.8 | 14,263,972.26 | 1,784,341.52 | 39° 16' 38.104 N | 80° 29' 29.036 W |
| 2,400.0 | 32.30 | 186.70 | 2,306.0 | -450.4 | -33.7 | 14,263,956.53 | 1,784,339.71 | 39° 16' 37.949 N | 80° 29' 29.060 W |
| 2,430.0 | 33.10 | 185.90 | 2,331.2 | -466.5 | -35.4 | 14,263,940.42 | 1,784,337.93 | 39° 16' 37.790 N | 80° 29' 29.084 W |
| 2,460.0 | 33.10 | 184.90 | 2,356.4 | -482.8 | -37.0 | 14,263,924.11 | 1,784,336.39 | 39° 16' 37.628 N | 80° 29' 29.105 W |
| 2,490.0 | 33.00 | 184.40 | 2,381.5 | -499.1 | -38.3 | 14,263,907.81 | 1,784,335.06 | 39° 16' 37.467 N | 80° 29' 29.123 W |
| 2,520.0 | 33.20 | 184.10 | 2,406.6 | -515.5 | -39.5 | 14,263,891.47 | 1,784,333.85 | 39° 16' 37.306 N | 80° 29' 29.140 W |
| 2,550.0 | 32.60 | 182.20 | 2,431.8 | -531.7 | -40.4 | 14,263,875.20 | 1,784,332.95 | 39° 16' 37.145 N | 80° 29' 29.152 W |
| 2,580.0 | 31.80 | 179.90 | 2,457.2 | -547.7 | -40.7 | 14,263,859.22 | 1,784,332.66 | 39° 16' 36.987 N | 80° 29' 29.157 W |
| 2,610.0 | 31.70 | 180.60 | 2,482.7 | -563.5 | -40.8 | 14,263,843.43 | 1,784,332.59 | 39° 16' 36.831 N | 80° 29' 29.159 W |
| 2,640.0 | 32.20 | 182.70 | 2,508.2 | -579.4 | -41.2 | 14,263,827.57 | 1,784,332.13 | 39° 16' 36.674 N | 80° 29' 29.166 W |
| 2,670.0 | 32.70 | 183.70 | 2,533.5 | -595.4 | -42.1 | 14,263,811.49 | 1,784,331.23 | 39° 16' 36.515 N | 80° 29' 29.179 W |
| 2,700.0 | 33.00 | 185.10 | 2,558.7 | -611.7 | -43.4 | 14,263,795.27 | 1,784,329.98 | 39° 16' 36.355 N | 80° 29' 29.196 W |
| 2,730.0 | 33.00 | 184.80 | 2,583.9 | -627.9 | -44.8 | 14,263,778.99 | 1,784,328.57 | 39° 16' 36.194 N | 80° 29' 29.215 W |
| 2,760.0 | 33.00 | 184.00 | 2,609.0 | -644.2 | -46.0 | 14,263,762.70 | 1,784,327.32 | 39° 16' 36.033 N | 80° 29' 29.232 W |
| 2,790.0 | 32.90 | 182.90 | 2,634.2 | -660.5 | -47.0 | 14,263,746.41 | 1,784,326.33 | 39° 16' 35.872 N | 80° 29' 29.245 W |
| 2,820.0 | 32.30 | 181.40 | 2,659.5 | -676.7 | -47.6 | 14,263,730.26 | 1,784,325.73 | 39° 16' 35.712 N | 80° 29' 29.254 W |

DDC
Survey Report - Geographic



| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------|
| Company: | HG Energy, LLC | Local Co-ordinate Reference: | Well A. Stonestreet #124 |
| Project: | Harrison County, West Virginia | TVD Reference: | WELL @ 1236.0usft (Decker #6) |
| Site: | A Stonestreet #124 | MD Reference: | WELL @ 1236.0usft (Decker #6) |
| Well: | A. Stonestreet #124 | North Reference: | Grid |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM 5000.1 Single User Db |

| Survey | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|------------------|------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude | |
| 2,850.0 | 31.60 | 180.40 | 2,684.9 | -692.5 | -47.9 | 14,263,714.39 | 1,784,325.47 | 39° 16' 35.555 N | 80° 29' 29.259 W | |
| 2,880.0 | 30.80 | 178.70 | 2,710.6 | -708.1 | -47.8 | 14,263,698.85 | 1,784,325.59 | 39° 16' 35.402 N | 80° 29' 29.258 W | |
| 2,910.0 | 29.70 | 176.80 | 2,736.5 | -723.2 | -47.2 | 14,263,683.75 | 1,784,326.18 | 39° 16' 35.253 N | 80° 29' 29.252 W | |
| 2,940.0 | 29.30 | 176.90 | 2,762.6 | -737.9 | -46.4 | 14,263,669.00 | 1,784,327.00 | 39° 16' 35.107 N | 80° 29' 29.243 W | |
| 2,970.0 | 28.90 | 176.90 | 2,788.8 | -752.5 | -45.6 | 14,263,654.43 | 1,784,327.78 | 39° 16' 34.963 N | 80° 29' 29.234 W | |
| 2,980.0 | 28.90 | 177.70 | 2,797.6 | -757.3 | -45.4 | 14,263,649.61 | 1,784,328.01 | 39° 16' 34.915 N | 80° 29' 29.231 W | |
| 3,000.0 | 28.60 | 178.50 | 2,815.1 | -766.9 | -45.0 | 14,263,639.99 | 1,784,328.33 | 39° 16' 34.820 N | 80° 29' 29.228 W | |
| 3,030.0 | 28.50 | 179.70 | 2,841.5 | -781.3 | -44.8 | 14,263,625.66 | 1,784,328.56 | 39° 16' 34.678 N | 80° 29' 29.226 W | |
| 3,060.0 | 28.70 | 180.60 | 2,867.8 | -795.6 | -44.8 | 14,263,611.30 | 1,784,328.52 | 39° 16' 34.536 N | 80° 29' 29.227 W | |
| 3,090.0 | 28.90 | 181.00 | 2,894.1 | -810.1 | -45.0 | 14,263,596.84 | 1,784,328.32 | 39° 16' 34.393 N | 80° 29' 29.231 W | |
| 3,120.0 | 29.20 | 180.60 | 2,920.3 | -824.6 | -45.2 | 14,263,582.28 | 1,784,328.11 | 39° 16' 34.249 N | 80° 29' 29.235 W | |
| 3,150.0 | 29.40 | 180.50 | 2,946.5 | -839.3 | -45.4 | 14,263,567.60 | 1,784,327.97 | 39° 16' 34.104 N | 80° 29' 29.237 W | |
| 3,200.0 | 29.40 | 180.50 | 2,990.1 | -863.9 | -45.6 | 14,263,543.05 | 1,784,327.76 | 39° 16' 33.861 N | 80° 29' 29.242 W | |

TD @ 3200' MD / 2990' TVD

| Design Annotations | | | | | |
|-----------------------|-----------------------|-------------------|--------------|-----------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment | |
| | | +N/-S (usft) | +E/-W (usft) | | |
| 900.0 | 900.0 | 0.0 | 0.0 | Tie In @ 900' MD / 900' TVD | |
| 3,200.0 | 2,990.1 | -863.9 | -45.6 | TD @ 3200' MD / 2990' TVD | |

Checked By: _____ Approved By: _____ Date: _____

A. Stonestreet #124
 Harrison County, West Virginia
 Q130983 & AM-13923
 Design #1

Company Name: HG Energy, LLC
 A. Stonestreet #124
 Harrison County, West Virginia
 Rig: Decker #6
 Created By: James Dawson
 Date: 12/11/2013

PROJECT DETAILS: Harrison County, West Virginia

Geodetic System: Universal Transverse Mercator
 Datum: NAD83 West Virginia - HARN
 Ellipsoid: GRS 1980
 Zone: Zone 17N (84 W to 78 W)
 System Datum: Mean Sea Level



Azimuths to Grid North
 True North: -0.32°
 Magnetic North: -8.98°

Magnetic Field
 Strength: 52316.5nT
 Dip Angle: 66.81°
 Date: 12/11/2013
 Model: IGRF2010

HG Energy

ANNOTATIONS

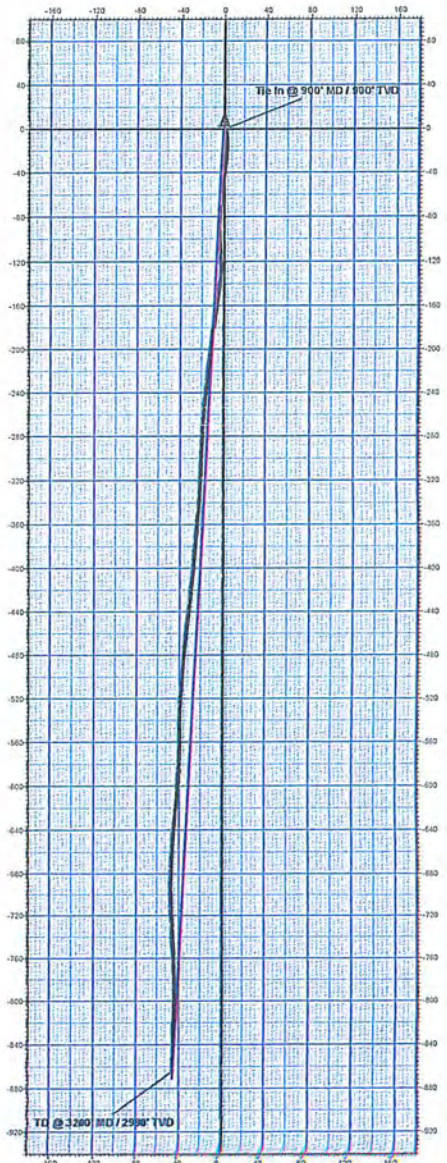
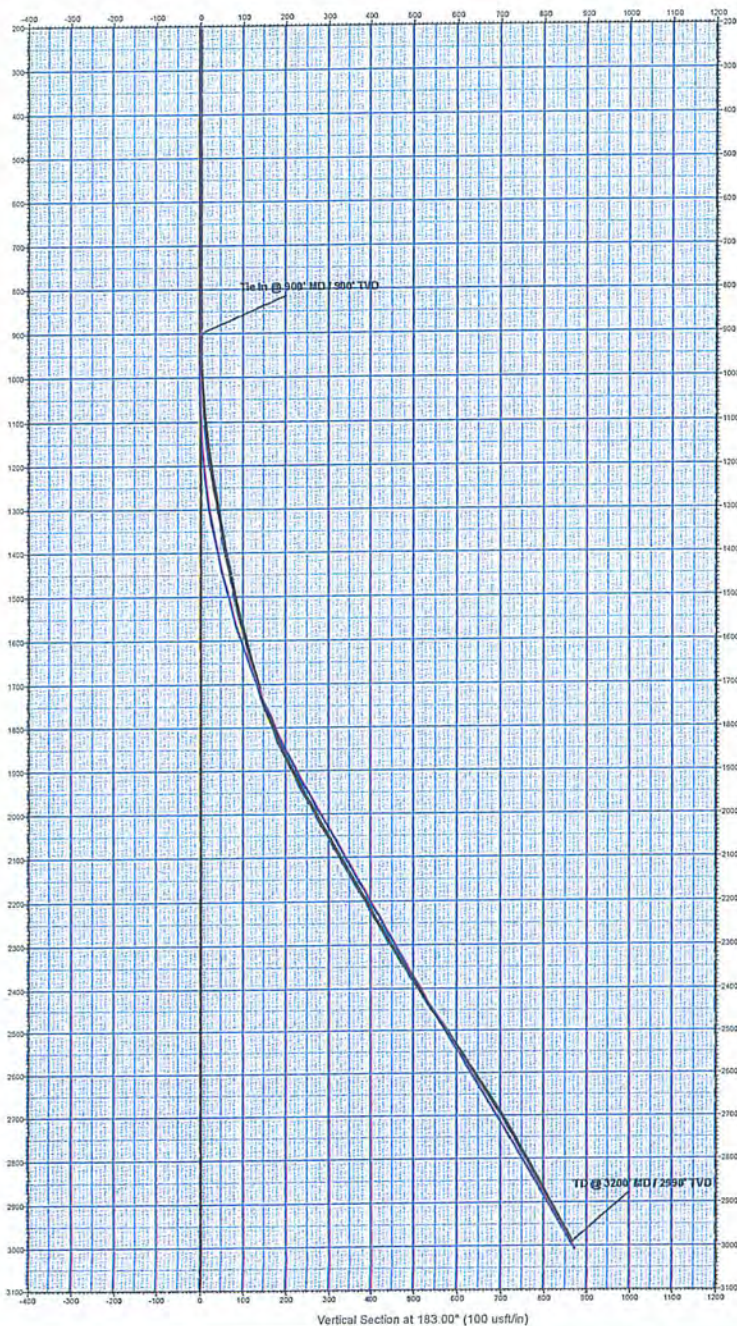
| MD | Inc | Azi | TVD | +N-S | +E-W | VSect | Departure | Annotation |
|--------|-------|--------|--------|-------|-------|-------|-----------|-----------------------------|
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.0 | Tie In @ 900' MD / 900' TVD |
| 3200.0 | 29.40 | 100.60 | 2990.1 | -83.9 | -45.5 | 865.1 | 867.7 | TD @ 3200' MD / 2990' TVD |

WELL DETAILS: A. Stonestreet #124

| +N-S | +E-W | Ground Level | Northing | Easting | Latitude | Longitude |
|------|------|--------------|-------------|------------|------------------|------------------|
| 0.0 | 0.0 | 1228.0 | 14264405.92 | 1784373.36 | 39° 16' 42.400 N | 80° 29' 28.600 W |

DESIGN TARGET DETAILS

| Name | TVD | +N-S | +E-W | Northing | Easting | Latitude | Longitude |
|--|--------|--------|-------|-------------|------------|------------------|------------------|
| Target A. Stonestreet - plan hits target center | 2788.0 | -749.0 | -39.3 | 14262657.52 | 1784334.06 | 39° 16' 34.997 N | 80° 29' 25.153 W |



04/04/2014

