

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

|   |                  |                    |  |  |  |   |                            |                               |              |               |
|---|------------------|--------------------|--|--|--|---|----------------------------|-------------------------------|--------------|---------------|
| <b>APPLICATION FOR PERMIT TO DRILL</b>  |                  |                    |  |  |  | <b>1. WELL NAME and NUMBER</b><br>GDU 63-6-23   |                            |                               |              |               |
| <b>2. TYPE OF WORK</b><br>DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/> |                  |                    |  |  |  | <b>3. FIELD OR WILDCAT</b><br>UNDESIGNATED  |                            |                               |              |               |
| <b>4. TYPE OF WELL</b><br>Gas Well Coalbed Methane Well: NO   |                  |                    |  |  |  | <b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b><br>GILSONITE DRAW  |                            |                               |              |               |
| <b>6. NAME OF OPERATOR</b><br>VANTAGE ENERGY UINTA LLC  |                  |                    |  |  |  | <b>7. OPERATOR PHONE</b><br>303 386-8600  |                            |                               |              |               |
| <b>8. ADDRESS OF OPERATOR</b><br>116 Inverness Drive East, Ste 107, Englewood , CO, 80112   |                  |                    |  |  |  | <b>9. OPERATOR E-MAIL</b><br>john.moran@vantageenergy.com   |                            |                               |              |               |
| <b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b><br>UTU78235   |                  |                    | <b>11. MINERAL OWNERSHIP</b><br>FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>    |  |  | <b>12. SURFACE OWNERSHIP</b><br>FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> |                            |                               |              |               |
| <b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>  |                  |                    |  |  |  | <b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>  |                            |                               |              |               |
| <b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>   |                  |                    |  |  |  | <b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>   |                            |                               |              |               |
| <b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>   |                  |                    | <b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b><br>YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/> |  |  | <b>19. SLANT</b><br>VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>                               |                            |                               |              |               |
| <b>20. LOCATION OF WELL</b>   |                  | <b>FOOTAGES</b>    |  | <b>QTR-QTR</b>   | <b>SECTION</b>   | <b>TOWNSHIP</b>   | <b>RANGE</b>               | <b>MERIDIAN</b>               |              |               |
| LOCATION AT SURFACE   |                  | 2418 FNL 2480 FEL  |  | SWNE   | 6  | 6.0 S   | 3.0 W                      | U                             |              |               |
| Top of Uppermost Producing Zone   |                  | 1980 FNL 1980 FEL  |  | SWNE   | 6  | 6.0 S   | 3.0 W                      | U                             |              |               |
| At Total Depth  |                  | 1980 FNL 1980 FEL  |  | SWNE   | 6  | 6.0 S   | 3.0 W                      | U                             |              |               |
| <b>21. COUNTY</b><br>DUCHESNE   |                  |                    | <b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b><br>1980   |  |  | <b>23. NUMBER OF ACRES IN DRILLING UNIT</b><br>2250   |                            |                               |              |               |
| <b>27. ELEVATION - GROUND LEVEL</b><br>6965   |                  |                    | <b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b><br>4335   |  |  | <b>26. PROPOSED DEPTH</b><br>MD: 6263 TVD: 6200   |                            |                               |              |               |
|   |                  |                    | <b>28. BOND NUMBER</b><br>LPM8907971   |  |  | <b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b><br>commercial trucking   |                            |                               |              |               |
| <b>Hole, Casing, and Cement Information</b>   |                  |                    |  |  |  |   |                            |                               |              |               |
| <b>String</b>   | <b>Hole Size</b> | <b>Casing Size</b> | <b>Length</b>  | <b>Weight</b>  | <b>Grade &amp; Thread</b>  | <b>Max Mud Wt.</b>  | <b>Cement</b>              | <b>Sacks</b>                  | <b>Yield</b> | <b>Weight</b> |
| Surf  | 12.25            | 8.625              | 0 - 300  | 24.0   | J-55 ST&C  | 0.0   | Class G                    | 225                           | 1.17         | 15.8          |
| Prod  | 7.875            | 5.5                | 0 - 6263   | 15.5   | K-55 LT&C  | 8.9   | Premium Lite High Strength | 129                           | 3.5          | 11.0          |
|   |                  |                    |  |  |  |   | 50/50 Poz                  | 413                           | 1.25         | 14.4          |
| <b>ATTACHMENTS</b>  |                  |                    |  |  |  |   |                            |                               |              |               |
| <b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>   |                  |                    |  |  |  |   |                            |                               |              |               |
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER  |                  |                    |  |  | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN                 |   |                            |                               |              |               |
| <input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)  |                  |                    |  |  | <input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER |   |                            |                               |              |               |
| <input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)  |                  |                    |  |  | <input checked="" type="checkbox"/> TOPOGRAPHICAL MAP                      |   |                            |                               |              |               |
| <b>NAME</b> David F. Banko  |                  |                    |  | <b>TITLE</b> Permit Agent  |  |   |                            | <b>PHONE</b> 303 820-4480     |              |               |
| <b>SIGNATURE</b>  |                  |                    |  | <b>DATE</b> 07/29/2011   |  |   |                            | <b>EMAIL</b> david@banko1.com |              |               |
| <b>API NUMBER ASSIGNED</b><br>43013509050000  |                  |                    |  | <b>APPROVAL</b><br><br><br>Permit Manager |  |   |                            |                               |              |               |

**Vantage Energy Uinta LLC  
GDU 63-6-23**

SHL: 2,418' FNL, 2,480' FEL (SW/4 NE/4)  
BHL: ±1,980' FNL, 1,980' FEL (SW/4 NE/4)  
Sec. 6, T6S R3W  
Duchesne County, Utah  
Federal Mineral Lease UTU-78235

**NINE POINT DRILLING PROGRAM**

(All drilling procedures will comply with BLM *Onshore Oil and Gas Orders 1 and 2*)

**Operator respectfully requests that all information regarding this well be kept confidential.**

**a) GEOLOGIC MARKERS**

Anticipated tops of geologic markers are indicated in **Table 1**

**Table 1 Estimated Tops of Geologic Markers**

| Formation     | Vertical Depth | Measured Depth | Subsea Depth | Description                |
|---------------|----------------|----------------|--------------|----------------------------|
| Green River   | Surface        | Surface        | 6,975'       | Sandstone/siltstone/shale  |
| Garden Gulch  | 3,529'         | 3,582'         | 3,450'       | Sandstone/siltstone/shale  |
| Douglas Creek | 4,469'         | 4,532'         | 2,510'       | Sandstone/siltstone/shale  |
| Castle Peak   | 5,379'         | 5,442'         | 1,600'       | Sandstone/siltstone/shale  |
| Uteland Butte | 5,829'         | 5,892'         | 1,150'       | Carbonate/shale/sandstone  |
| Wasatch       | 6,059'         | 6,122'         | 920'         | Shale/sandstone            |
| Total Depth   | 6,200'         | 6,263'         | 779'         | TD ± 150' TVD into Wasatch |

Surface Elevation: 6,964' (Ground) 6,979' (Est. KB). Proposed Total Depth: 6,263' / 6,200' (MD/TVD)

**b) DEPTHS OF WATER AND MINERAL-BEARING ZONES**

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicate no permitted water wells within a one mile radius of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

**Table 2: Principal Anticipated Water and Mineral-bearing Zones**

| Formation     | Measured Depth | Subsea | Potential Contents       |
|---------------|----------------|--------|--------------------------|
| Green River   | Surface        | 6,975' | Surface – Possible Water |
| Garden Gulch  | 3,582'         | 3,450' | Possible Water           |
| Douglas Creek | 4,532'         | 2,510' | Oil / Gas                |
| Castle Peak   | 5,442'         | 1,600' | Oil / Gas                |
| Uteland Butte | 5,892'         | 1,150' | Oil / Gas                |
| Wasatch       | 6,122'         | 920'   | Oil / Gas                |

**c) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT**

The maximum anticipated surface pressure for this well is calculated to be **1,364 psi**. Therefore, rules for a 2,000 psi rated BOP and choke manifold system are applicable. However, the typical rig inventory will consist of a 3,000 psi rated BOP and choke manifold. As such, the rig's BOP and choke manifold equipment will be tested to the standards for a 2,000 psi BOP system. A diagram of the proposed 2,000 psi rated BOP stack configuration is shown in **Fig. 1**.

BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.**

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. **Please see variance request at end of program for this section.**

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2* for 2,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOP equipment and retain 200 psi above precharge pressure. The proposed pressure control equipment will meet or exceed standards specified in the Order.

**d) CASING PROGRAM**

Casing of quality equal to or better than that indicated in **Tables 3 and 4** will be used for this well. Actual casing used will be dependent on availability.

**Table 3 Proposed Casing Program**

| Depth (MD) | Hole Diameter | Casing Diameter | Casing Weight and Grade               |
|------------|---------------|-----------------|---------------------------------------|
| 0 – ± 40'  | 20"           | 14"             | Optional Conductor – Only if Required |
| 0 – 300'   | 12 1/4"       | 8 5/8"          | 24# J55 ST&C, API New Pipe            |
| 0 – 6,263' | 7 7/8"        | 5 1/2"          | 15.5# K55 LT&C, API New Pipe          |

**Table 4: Proposed Casing Specifications and Design Safety Factors**

| Size                | Collapse (psi)   | Burst (psi) | Body Strength (1,000 lbs.) | Joint Strength (1,000 lbs.) | Thread | *Safety Factors    |                       |                      |
|---------------------|--|-------------|----------------------------|-----------------------------|--------|--------------------|-----------------------|----------------------|
|                     |  |             |                            |                             |        | Burst Design (1.2) | Collapse Design (1.0) | Tension Design (1.4) |
| 14"                 | NA – 0.219" wall structural and to seal shallow gravels to allow air drilling surface hole |             |                            |                             | Weld   | NA                 | NA                    | NA                   |
| 8 5/8"<br>24# J55   | 1,370  | 2,950       | 381                        | 244                         | ST&C   | 1.96               | 5.55                  | 4.26                 |
| 5 1/2"<br>15.5# J55 | 4,040  | 4,810       | 248                        | 217                         | LT&C   | 1.25               | 1.48                  | 1.62                 |

**\*Safety Factor Calculation Assumptions:****Surface Casing:**

**Burst Load:** Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

## MASP

$$\begin{aligned} \text{Load} &= (\text{Formation Gradient} - 0.22 \text{ psi/ft}) * \text{Total Depth, TVD} \\ &= (0.44 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 6,200 \text{ ft.} \\ &= 1,364 \text{ psi} \end{aligned}$$

**TEST PRESSURE**

Load = Greater of 1,500 psig *or*  $0.22 \text{ psi/ft} * 300 \text{ ft} = 66 \text{ psig}$

Load = Greater of 1,500 psig *or* 1,364 psig *or* 66 psig

**SF Burst = 2,950 psi / 1,500 psi = 1.96**

**Collapse Load:** Assumes worse case loading of evacuated casing during cementing process.

Cement density = 15.8 ppg

Load =  $15.8 \text{ ppg} * 0.052 * 300 \text{ ft}$   
= 246.5 psi

**SF Collapse = 1370 psi / 246.5 psi = 5.55**

**Tension Load:** Assumes air weight at total depth + 50,000 lbs overpull design factor.

Load =  $(24 \text{ lbs/ft} * 300 \text{ ft}) + 50,000 \text{ lbs overpull}$   
= 57,200 lbs

**SF Tension = 244,000 lbs / 57,200 lbs = 4.26**

**Test Pressure =**

**Production Casing**

**Burst Load:** Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

Load =  $4810 \text{ psi} * 0.80$   
= 3848 psi

**SF Burst = 4810 psi / 3848 psi = 1.25**

**Collapse Load:** Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

Load =  $0.44 \text{ psi/ft} * 6200 \text{ ft}$   
= 2728 psi

**SF Collapse = 4040 psi / 2728 psi = 1.48**

**Tension Load:** Assumes buoyed weight of casing at total depth + 50,000 lbs overpull design factor.

Load =  $[15.5 \text{ lbs/ft} * 6263 \text{ ft} * ((65.5 - 9.0) / 65.5)] + 50,000 \text{ lbs}$   
= 83,738 lbs + 50,000 lbs  
= 133,738 lbs

**SF Tension = 217,000 lbs / 133,738 lbs = 1.62**

## e) CEMENT PROGRAM

Table 5: Proposed Cement Program (Reference attached BJ Services Program)

| Depth       | Hole Diameter | Casing Diameter | Cement   |
|-------------|---------------|-----------------|--|
| 0' – ± 40'  | 20"           | 14"             | Optional structural conductor if required: Grout with approximately 3.5 cubic yards of redi-mix back to surface (includes 100% excess)<br><br><b>TOC: Surface (Top-off per visual observation)</b>   |
| 0' – 300'   | 12 1/4"       | 8 5/8"          | <b><u>Single Slurry System (300' – Surface) + 40' Shoe Joint</u></b><br><br>225 sks Class G + 2% CaCl <sub>2</sub> + ¼ lb/sk celloflake.<br><br>Density: 15.8 ppg<br>Yield: 1.17 cuft/sk<br>Water: 5.0 gal/sk<br>Excess = 100% in open hole<br><br><b>TOC: Surface (Top-off per visual observation)</b>  |
| 0' - 6,263' | 7 7/8"        | 5 1/2"          | <b><u>Lead System (4,000' – 2,000')</u></b><br>129 sks Premium Lite II + 10% Gel + 10 lbs/sk gilsonite + 3% KCL + 0.5% Sodium Metasillicate + 5 lbs/sk CSE-2 + ¼ lb/sk celloflake + 3 lbs/sk Kol Seal + 0.5 lbs/sk Static Free + 0.002 gps FP-6L<br><br>Density: 11.0 ppg<br>Yield: 3.50 cuft/sk<br>Water: 21.4 gal/sk<br>*Excess: 30%<br><br><b><u>Tail System (6,263' – 4,000') + 40' Shoe Joint</u></b><br>413 sks 50:50 (Class G:Poz) + 2% gel + 3% KCL + 0.5% EC-1 + 0.15% R-3 + 0.3% Sodium Metasillicate + ¼ lb/sk celloflake + 0.05 lbs/sk Static Free + 0.002 gps FP-6L<br><br>Density: 14.4 ppg<br>Yield: 1.25 cuft/sk<br>Water: 5.48 gal/sk<br>*Excess: 30% |

\*Note: The production hole cement volume excess factor will be adjusted on location by the caliper log, and will be re-calculated using caliper volume + 10% excess factor.

## f) MUD PROGRAM

The mud program for the proposed well is indicated in **Table 6**.

**Table 6 Proposed Mud Program (See attached Advantage mud program)**

| Interval (feet)                                | Mud Weight (lbs/gallon) | Viscosity (secs/qt) | Fluid Loss (ccs/30 min) | Mud Type      |
|--|-------------------------|---------------------|-------------------------|---------------|
| 0 – ± 40'                                      | NA                      | NA                  | NA                      | NA            |
| Set optional 14" conductor with bucket rig     |                         |                     |                         |               |
| 40' - 300'±                                    | NA                      | NA                  | N/C                     | Air/Mist      |
| Run/cement 8 5/8" surface casing               |                         |                     |                         |               |
| 300'± - 3,500'                                 | 8.3 – 8.9               | 28 – 48             | 10 - 18                 | FW / PHPA     |
| 3,500' - TD                                    | 8.4 – 8.9               | 34 – 58             | 8 - 10                  | 3% KCL / PHPA |
| Run Logs – Run/cement 5 1/2" production casing |                         |                     |                         |               |

Surface Hole Comments: Spud with “spudder rig” and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. **Please see variance requests for this section.**

Production Hole Comments: Drill out surface casing with fresh water using pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,500' “mud up” and “close in” the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and control lost circulation zones that may be encountered. Monitoring equipment will be installed on site to detect changes in mud volume.

#### g) LOGGING, CORING, AND TESTING PROGRAM

The proposed logging program is indicated in **Table 7**.

**Table 7 Proposed Logging Program**

| Log Suites            | Depth Range          | Remarks  |
|-----------------------|----------------------|--|
| DIL-SP-LD-CN          | Surface Casing to TD | Standard "triple combo" equivalent with resistivity-spontaneous potential, litho-density, compensated neutron, gamma ray, and caliper<br>Will pull GR to surface |
| Dipole Sonic          | ± 4,000' to TD       | Optional – Operator's discretion<br>Rock property data   |
| Rotary Sidewall Cores | ± 4,000' to TD       | Optional – Operator's discretion<br>PP/Lithology data (perm-porosity)  |

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

#### **h) ANTICIPATED PRESSURES AND HAZARDS**

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft.

|  |   |
|--|---|
| Estimated BHP Douglas Creek (4,469')   | 1,966 psi   |
| Estimated BHP Wasatch (6,059')         | 2,666 psi   |
| Estimated BHP Total Depth (6,200')     | 2,728 psi   |
| Hydrostatic head of gas/mud column     | 0.22 psi/ft.  |
| <b>Maximum design surface pressure</b> | $0.44 - 0.22 \text{ psi/ft} \times 6,200 \text{ ft} = \mathbf{1,364 \text{ psi}}$ |

No H<sub>2</sub>S zones are anticipated. Lost circulation can be encountered. A variety of sized lost circulation materials will be maintained on location in the event lost circulation is experienced. No abnormal lost circulation zones are anticipated. The proposed well is a southern extension test of producing wells in T5S-R3W. Abnormal pressures will not be experienced to the proposed depth in this area.

#### **i) DIRECTIONAL PROGRAM (See attached directional plan by Weatherford)**

The GDU 63-6-23 will be drilled as a directional well, with a bottom hole located in the center of SW $\frac{1}{4}$  NE $\frac{1}{4}$  Section 6, T6S-R3W on a 40-acre spacing pattern. The vertical section distance between the surface and the bottom hole is 665'. The bottom hole will be landed within a 200' radius target tolerance. The directional plan will consist of a build-and-drop "S" profile, with a planned KOP of 500', and a build/drop rate of 1.5°/100'.

The purpose of the directional well is to establish an "ideal" 40-acre drainage pattern for future development considerations.

#### **j) OTHER INFORMATION**

##### Contact Information and Personnel

##### Mailing Address

Vantage Energy Uinta LLC  
 116 Inverness Drive, Suite 107  
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## START DATE AND DURATION OF ACTIVITIES

### Anticipated start date

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about September 15, 2011, with a target spud date of October 1, 2011. It is anticipated the drilling phase will require 7 days.

### Completion

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 days.

The total project duration is therefore estimated to be **52 days**, and therefore anticipated to be concluded on or about November 10, 2011.

A string of 2 7/8 inch 6.5 lb/ft. J-55 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

## VARIANCE REQUESTS

1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item B, No. 1h*, regulations requiring the surface casing be tested to the greater of 1500 psig, or 70% of the minimum internal yield.
  - a. The MASP for this well is calculated to be 1,364 psig, while the 70% yield rating is 2,065 psig.
  - b. Operator therefore requests approval to test the surface casing to the lesser value of 1,500 psig which is greater than the MASP value.
2. Operator requests a variance to *Onshore Oil and Gas Order 2, Item A*, regulations which outline test pressures for 3M pressure control systems.
  - a. The drilling contractor's standard inventory will consist of 3M pressure control systems; however, as cited above, the MASP for this well is calculated to be 1,364 psig. As such, 2M pressure control equipment is sufficient for the drilling of this well.
  - b. Operator therefore requests approval to test contractor's 3M BOPE to 2M pressure system standards. The double ram preventer will be tested to 2,000 psig, and the annular preventer will be tested to 1,500 psig. Safety valves and choke/kill valves and lines will all be tested to 2,000 psig.
3. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill only the surface hole to a depth of 350', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the

following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore”.

- a. Operator requests approval to use a diverter bowl rather than a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 300'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
- b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
- c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.
- d. Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

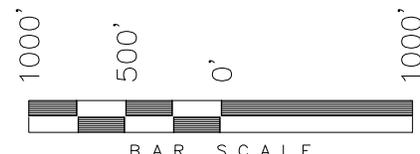
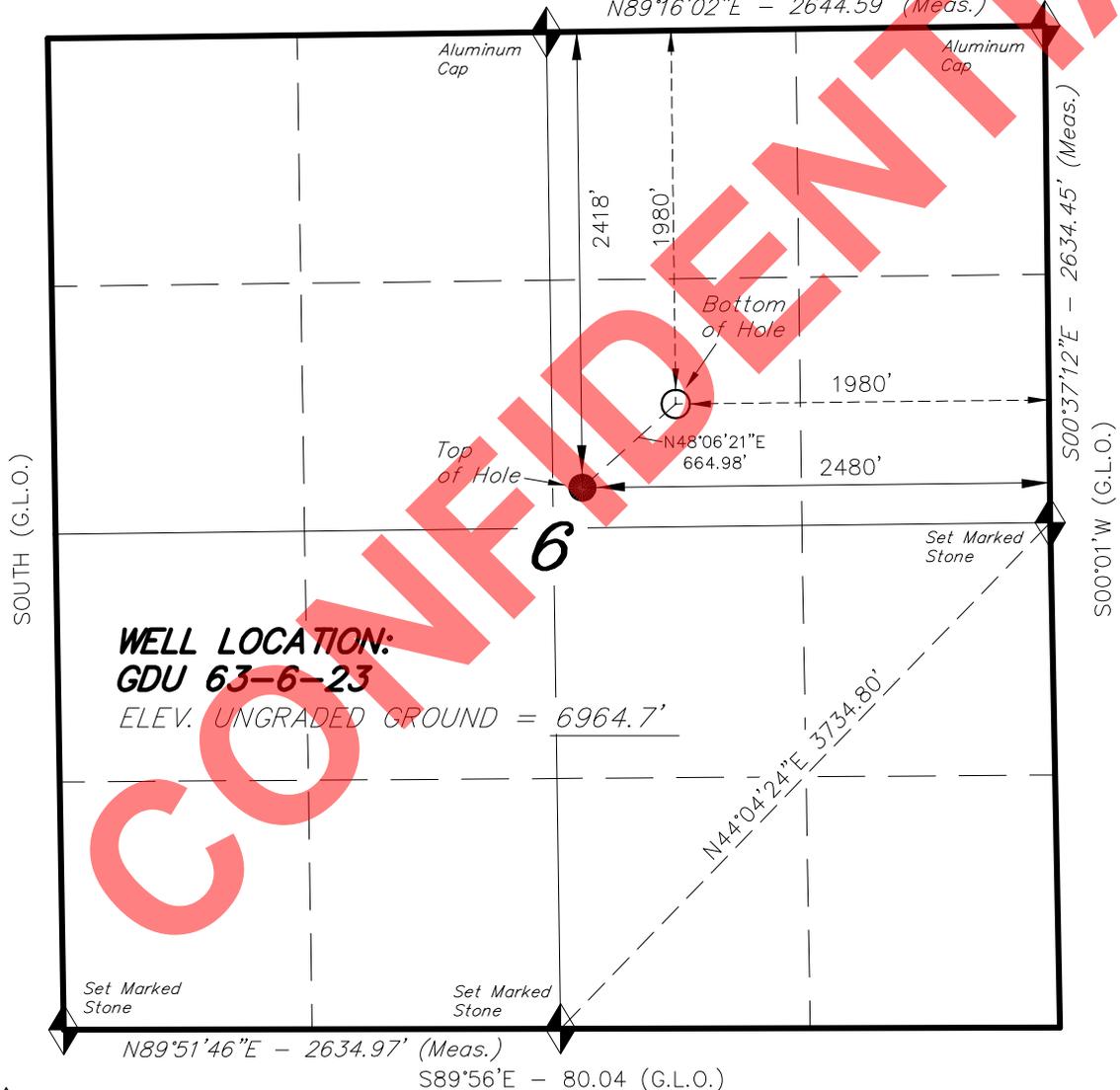


**T6S, R3W, U.S.B.&M.**

**VANTAGE ENERGY, LLC**

EAST - 80.00 (G.L.O.)  
 $N89^{\circ}16'02''E - 2644.59'$  (Meas.)

WELL LOCATION, GDU 63-6-23, LOCATED AS SHOWN IN THE SW 1/4 NE 1/4 OF SECTION 6, T6S, R3W, U.S.B.&M. DUCHESNE COUNTY, UTAH.



- NOTES:**
1. Well footages are measured at right angles to the Section Lines.
  2. Bearings are based on Global Positioning Satellite observations.



**WELL LOCATION:**  
**GDU 63-6-23**  
 ELEV. UNGRADED GROUND = 6964.7'

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
 No. 189377  
 STACY W. STEWART  
 REGISTERED LAND SURVEYOR  
 REGISTRATION No. 03-04-13  
 STATE OF UTAH

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are base on an N.G.S. OPUS Correction. LOCATION: LAT.  $39^{\circ}58'55.06''$  LONG.  $110^{\circ}22'05.00''$  (Tristate Aluminum Cap) Elev. 7307.99'

**GDU 63-6-23**  
 (Surface Location) NAD 83  
 LATITUDE =  $39^{\circ} 59' 21.38''$   
 LONGITUDE =  $110^{\circ} 15' 54.27''$

**TRI STATE LAND SURVEYING & CONSULTING**  
 180 NORTH VERNAL AVE. - VERNAL, UTAH 84078  
 (435) 781-2501

|                               |                   |
|-------------------------------|-------------------|
| DATE SURVEYED:<br>11-09-10    | SURVEYED BY: S.H. |
| DATE DRAWN:<br>11-24-10       | DRAWN BY: M.W.    |
| REVISED:<br>03-04-11 - R.V.C. | SCALE: 1" = 1000' |

Map to Accompany  
APPLICATION FOR PERMIT TO DRILL  
Access Road

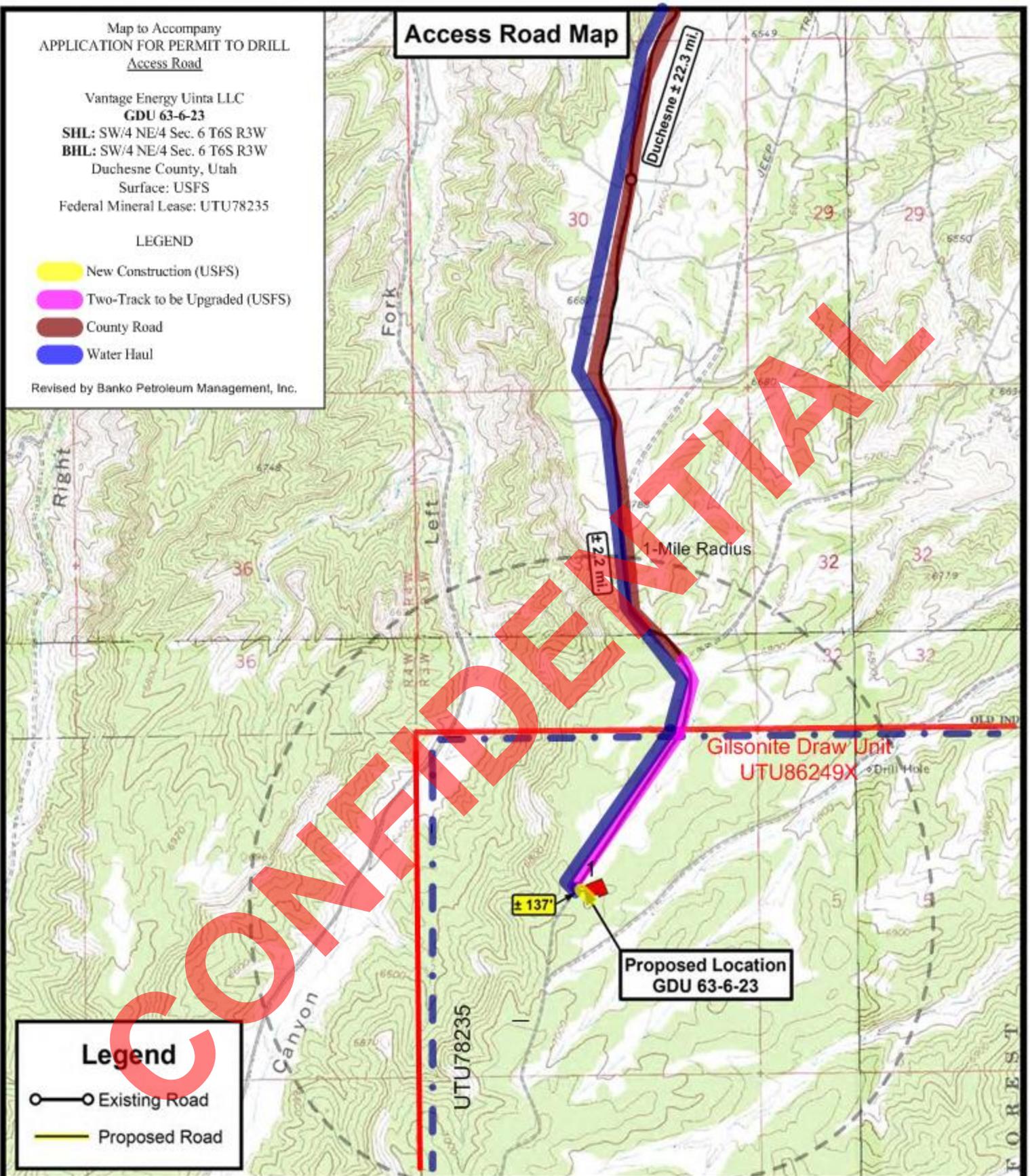
Vantage Energy Uinta LLC  
**GDU 63-6-23**  
**SHL:** SW/4 NE/4 Sec. 6 T6S R3W  
**BHL:** SW/4 NE/4 Sec. 6 T6S R3W  
 Duchesne County, Utah  
 Surface: USFS  
 Federal Mineral Lease: UTU78235

LEGEND

- New Construction (USFS)
- Two-Track to be Upgraded (USFS)
- County Road
- Water Haul

Revised by Banko Petroleum Management, Inc.

**Access Road Map**



**Legend**

- Existing Road
- Proposed Road

**Tri State**  
**Land Surveying, Inc.**  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
 F: (435) 781-2518



**VANTAGE ENERGY, LLC**

GDU 63-6-23  
 SEC. 6, T6S, R3W, U.S.B.&M.  
 Duchesne County, UT.

|           |             |          |            |
|-----------|-------------|----------|------------|
| DRAWN BY: | C.H.M.      | REVISED: | 03-04-2011 |
| DATE:     | 12-01-2010  |          |            |
| SCALE:    | 1" = 2,000' |          |            |

**TOPOGRAPHIC MAP**

SHEET  
**B**

**Access Road Map**

Map to Accompany  
APPLICATION FOR PERMIT TO DRILL  
Area Map

Vantage Energy Uinta LLC  
**GDU 63-6-23**

**SHL:** SW/4 NE/4 Sec. 6 T6S R3W  
**BHL:** SW/4 NE/4 Sec. 6 T6S R3W  
Duchesne County, Utah  
Surface: USFS  
Federal Mineral Lease: UTU78235

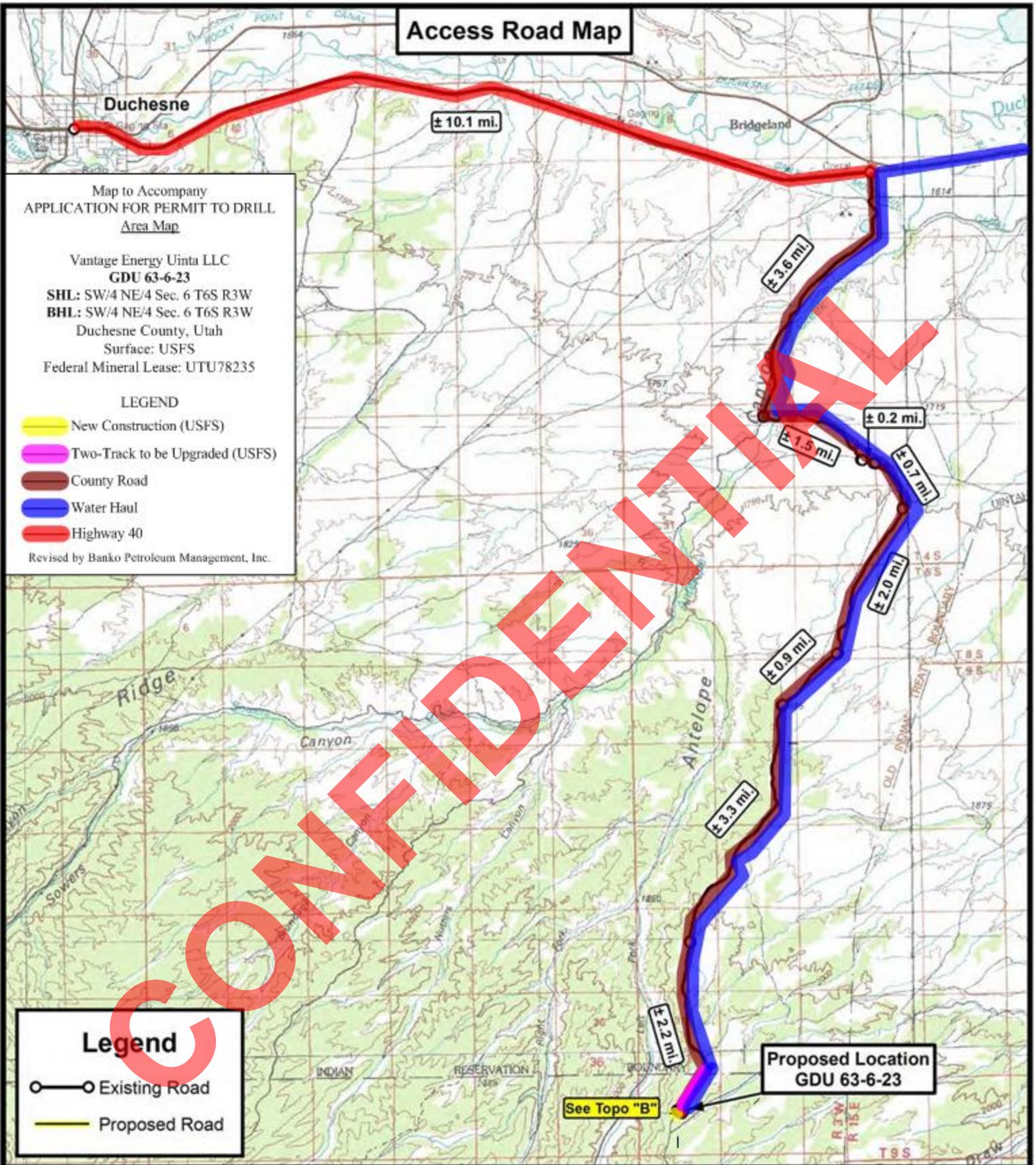
**LEGEND**

-  New Construction (USFS)
-  Two-Track to be Upgraded (USFS)
-  County Road
-  Water Haul
-  Highway 40

Revised by Banko Petroleum Management, Inc.

**Legend**

-  Existing Road
-  Proposed Road



180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
F: (435) 781-2518



**VANTAGE ENERGY, LLC**

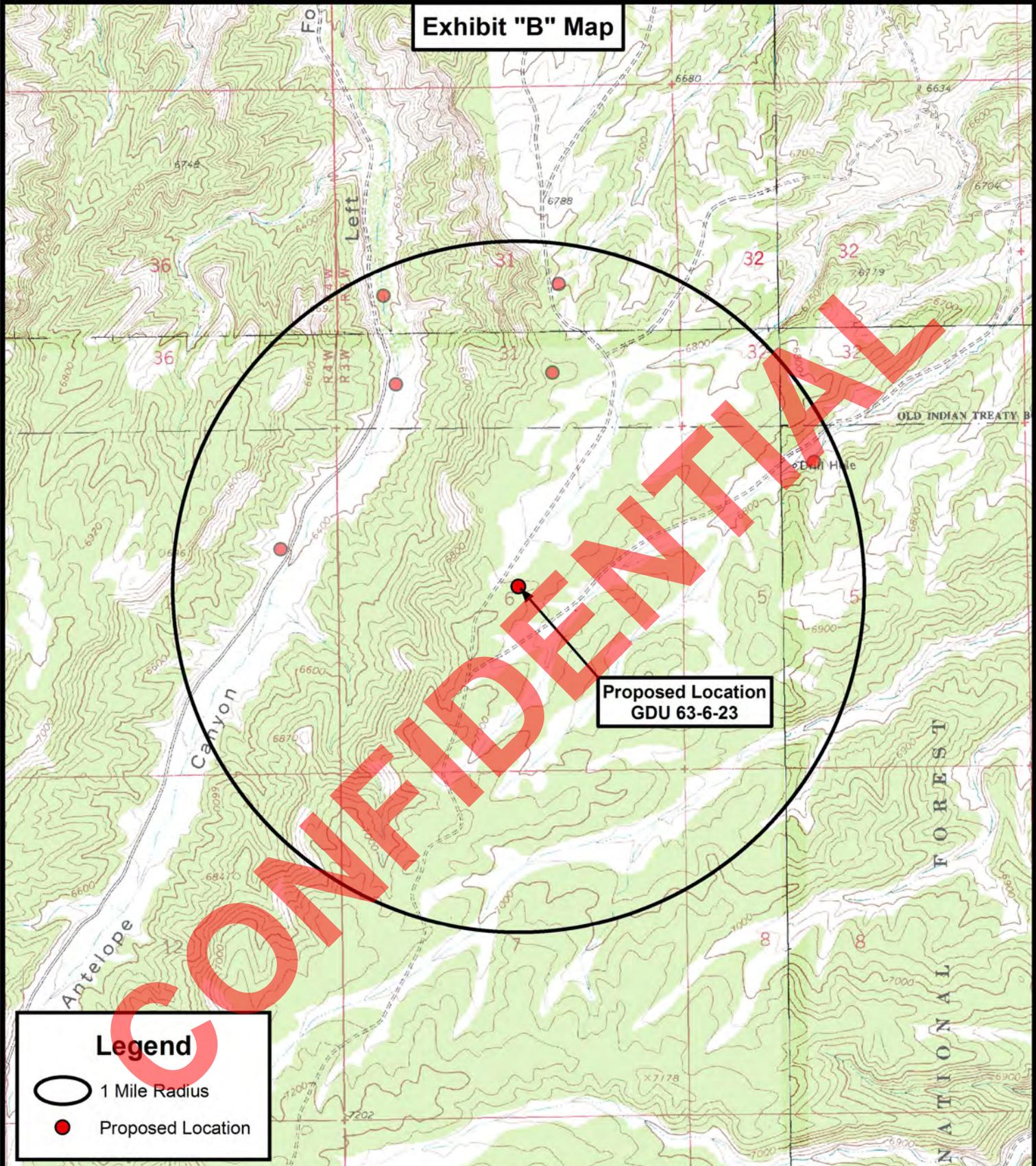
**GDU 63-6-23**  
**SEC. 6, T6S, R3W, U.S.B.&M.**  
**Duchesne County, UT.**

|           |            |          |            |
|-----------|------------|----------|------------|
| DRAWN BY: | C.H.M.     | REVISED: | 03-04-2011 |
| DATE:     | 12-01-2010 |          |            |
| SCALE:    | 1:100,000  |          |            |

**TOPOGRAPHIC MAP**

SHEET  
**A**

Exhibit "B" Map



**Legend**

- 1 Mile Radius
- Proposed Location

**Tri State**  
**Land Surveying, Inc.**  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501  
 F: (435) 781-2518



**VANTAGE ENERGY, LLC**

**GDU 63-6-23**  
**SEC. 6, T6S, R3W, U.S.B.&M.**  
**Duchesne County, UT.**

|           |             |          |            |
|-----------|-------------|----------|------------|
| DRAWN BY: | C.H.M.      | REVISED: | 03-04-2011 |
| DATE:     | 12-01-2010  |          |            |
| SCALE:    | 1" = 2,000' |          |            |

**TOPOGRAPHIC MAP**

SHEET  
**D**



**Weatherford<sup>®</sup>**

**Drilling Services**

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**Proposal**

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**VANTAGE ENERGY**

GDU 63-6-23  
FILE: PLAN 1  
MARCH 1, 2011

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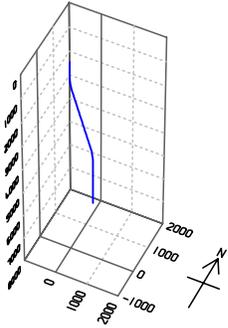
**Weatherford International Ltd.**  
410 17th Street  
Denver, Colorado 80202  
+1.303.825.6558 Main  
+1.303.825.2927 Fax  
[www.weatherford.com](http://www.weatherford.com)



Project: DUCHESNE COUNTY, UT  
 Site: GDU 63-6-23  
 Well: GDU 63-6-23  
 Wellbore: GDU 63-6-23  
 Design: Design #1  
 Latitude: 39° 59' 21.380 N  
 Longitude: 110° 15' 54.270 W  
 GL: 6964.00  
 KB: WELL @ 6979.00ft (Original Well Elev)  
 RIG: Original Well Elev



**Weatherford**



| WELL DETAILS: GDU 63-6-23 |       |            |                          |                     |                   |      |  |
|---------------------------|-------|------------|--------------------------|---------------------|-------------------|------|--|
| +N/-S                     | +E/-W | Northing   | Ground Level:<br>Easting | 6964.00<br>Latitude | Longitude         | Slot |  |
| 0.00                      | 0.00  | 7167204.60 | 1986406.36               | 39° 59' 21.380 N    | 110° 15' 54.270 W |      |  |

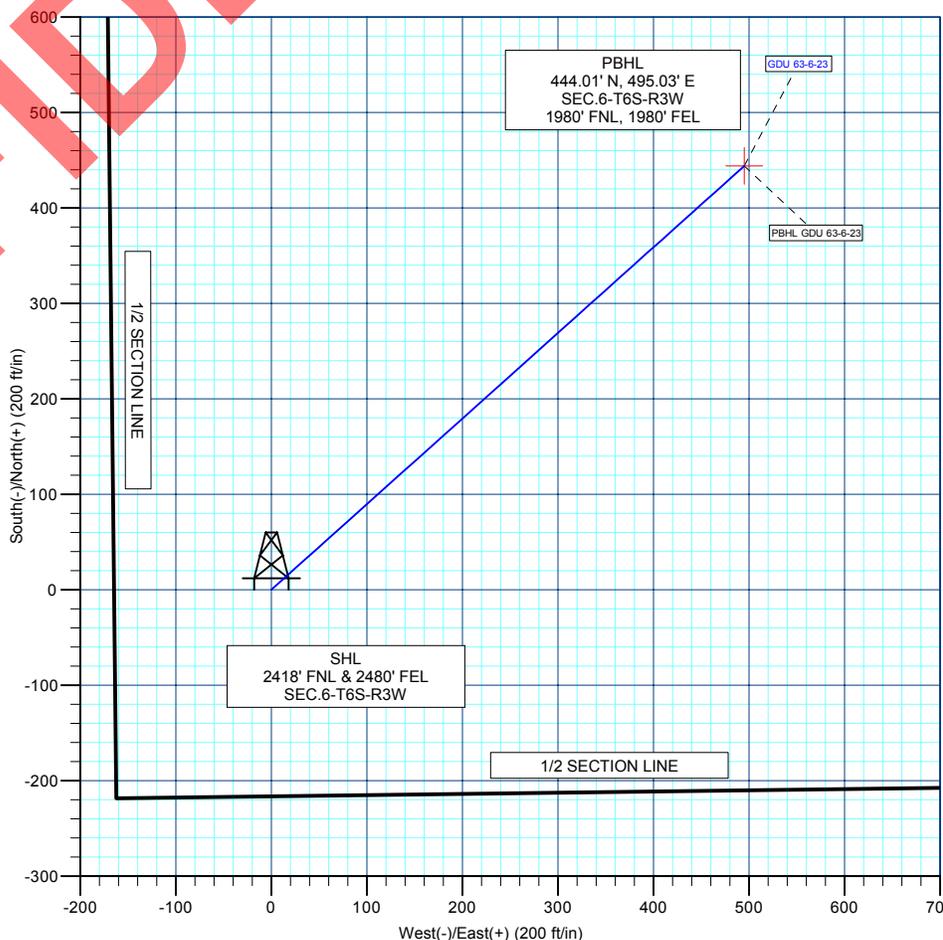
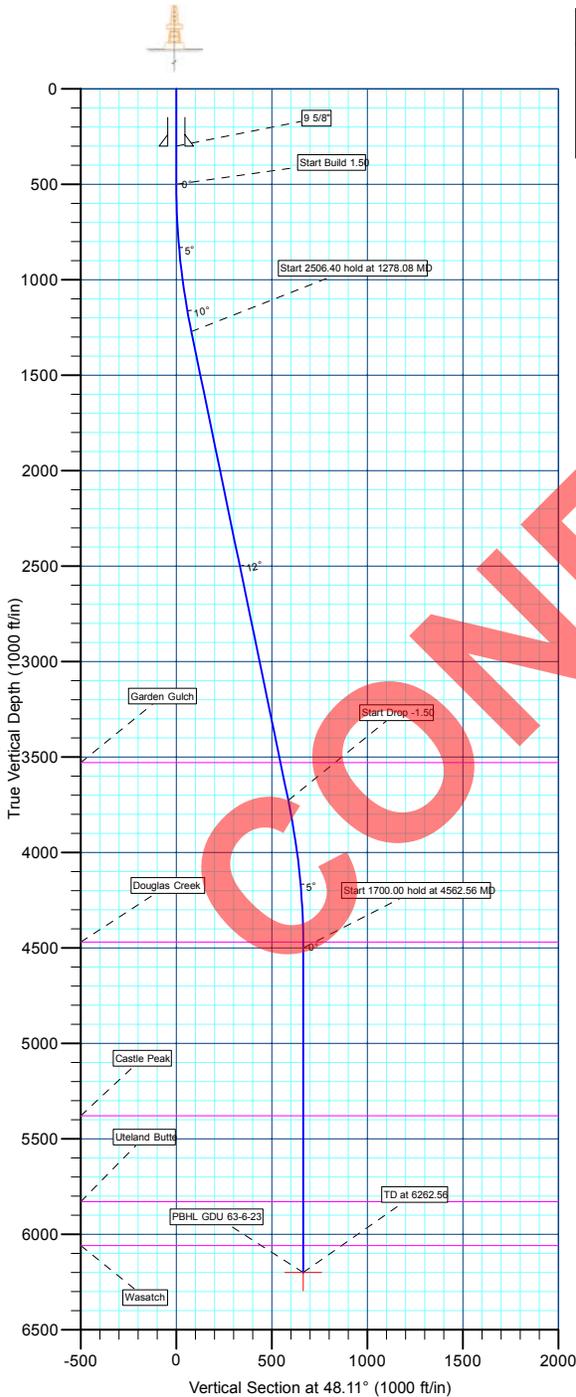
| WELLBORE TARGET DETAILS (LAT/LONG) |         |        |        |                  |                   |             |  |
|------------------------------------|---------|--------|--------|------------------|-------------------|-------------|--|
| Name                               | TVD     | +N/-S  | +E/-W  | Latitude         | Longitude         | Shape Point |  |
| PBHL GDU 63-6-23                   | 6200.00 | 444.01 | 495.03 | 39° 59' 25.768 N | 110° 15' 47.909 W |             |  |

| SECTION DETAILS |       |       |         |        |        |      |        |        |                                  |
|-----------------|-------|-------|---------|--------|--------|------|--------|--------|----------------------------------|
| MD              | Inc   | Azi   | TVD     | +N/-S  | +E/-W  | DLeg | TFace  | VSec   | Annotation                       |
| 0.00            | 0.00  | 0.00  | 0.00    | 0.00   | 0.00   | 0.00 | 0.00   | 0.00   |                                  |
| 500.00          | 0.00  | 0.00  | 500.00  | 0.00   | 0.00   | 0.00 | 0.00   | 0.00   | Start Build 1.50                 |
| 1278.08         | 11.67 | 48.11 | 1272.71 | 52.73  | 58.79  | 1.50 | 48.11  | 78.97  | Start 2506.40 hold at 1278.08 MD |
| 3784.48         | 11.67 | 48.11 | 3727.29 | 391.28 | 436.24 | 0.00 | 0.00   | 586.01 | Start Drop -1.50                 |
| 4562.56         | 0.00  | 0.00  | 4500.00 | 444.01 | 495.03 | 1.50 | 180.00 | 664.98 | Start 1700.00 hold at 4562.56 MD |
| 6262.56         | 0.00  | 0.00  | 6200.00 | 444.01 | 495.03 | 0.00 | 0.00   | 664.98 | TD at 6262.56                    |

| FORMATION TOP DETAILS |         |               |
|-----------------------|---------|---------------|
| TVDPath               | MDPath  | Formation     |
| 3529.00               | 3582.00 | Garden Gulch  |
| 4469.00               | 4531.56 | Douglas Creek |
| 5379.00               | 5441.56 | Castle Peak   |
| 5829.00               | 5891.56 | Uteland Butte |
| 6059.00               | 6121.56 | Wasatch       |

| CASING DETAILS |        |        |       |
|----------------|--------|--------|-------|
| TVD            | MD     | Name   | Size  |
| 300.00         | 300.00 | 9 5/8" | 9-5/8 |

Azimuths to True North  
 Magnetic North: 11.46°  
 Magnetic Field  
 Strength: 52201.1snT  
 Dip Angle: 65.74°  
 Date: 3/1/2011  
 Model: BGGM2010





# **VANTAGE ENERGY**

**DUCHESNE COUNTY, UT**

**GDU 63-6-23**

**GDU 63-6-23**

**GDU 63-6-23**

**Plan: Design #1**

## **Standard Planning Report**

**01 March, 2011**

**CONFIDENTIAL**



**Weatherford®**



|                  |                            |                                     |                                       |
|------------------|----------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db | <b>Local Co-ordinate Reference:</b> | Well GDU 63-6-23                      |
| <b>Company:</b>  | VANTAGE ENERGY             | <b>TVD Reference:</b>               | WELL @ 6979.00ft (Original Well Elev) |
| <b>Project:</b>  | DUCHESNE COUNTY, UT        | <b>MD Reference:</b>                | WELL @ 6979.00ft (Original Well Elev) |
| <b>Site:</b>     | GDU 63-6-23                | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | GDU 63-6-23                | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | GDU 63-6-23                |                                     |                                       |
| <b>Design:</b>   | Design #1                  |                                     |                                       |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | DUCHESNE COUNTY, UT       |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Utah Central Zone         |                      |                |

|                              |             |                     |                 |                          |                   |
|------------------------------|-------------|---------------------|-----------------|--------------------------|-------------------|
| <b>Site</b>                  | GDU 63-6-23 |                     |                 |                          |                   |
| <b>Site Position:</b>        |             | <b>Northing:</b>    | 7,167,204.60 ft | <b>Latitude:</b>         | 39° 59' 21.380 N  |
| <b>From:</b>                 | Lat/Long    | <b>Easting:</b>     | 1,986,406.36 ft | <b>Longitude:</b>        | 110° 15' 54.270 W |
| <b>Position Uncertainty:</b> | 0.00 ft     | <b>Slot Radius:</b> | "               | <b>Grid Convergence:</b> | 0.79 °            |

|                             |              |         |                            |                 |                      |                   |
|-----------------------------|--------------|---------|----------------------------|-----------------|----------------------|-------------------|
| <b>Well</b>                 | GDU 63-6-23  |         |                            |                 |                      |                   |
| <b>Well Position</b>        | <b>+N/-S</b> | 0.00 ft | <b>Northing:</b>           | 7,167,204.60 ft | <b>Latitude:</b>     | 39° 59' 21.380 N  |
|                             | <b>+E/-W</b> | 0.00 ft | <b>Easting:</b>            | 1,986,406.36 ft | <b>Longitude:</b>    | 110° 15' 54.270 W |
| <b>Position Uncertainty</b> |              | 0.00 ft | <b>Wellhead Elevation:</b> | ft              | <b>Ground Level:</b> | 6,964.00 ft       |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | GDU 63-6-23       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | BGGM2010          | 3/1/2011           | 11.46                  | 65.74                | 52,201                     |

|                          |                              |                   |                      |                      |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| <b>Design</b>            | Design #1                    |                   |                      |                      |
| <b>Audit Notes:</b>      |                              |                   |                      |                      |
| <b>Version:</b>          | <b>Phase:</b>                | PLAN              | <b>Tie On Depth:</b> | 0.00                 |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b>    | <b>Direction (°)</b> |
|                          | 0.00                         | 0.00              | 0.00                 | 48.11                |

| <b>Plan Sections</b> |                 |             |                     |            |            |                       |                      |                     |         |                  |
|----------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|----------------------|---------------------|---------|------------------|
| Measured Depth (ft)  | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target           |
| 0.00                 | 0.00            | 0.00        | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                  |
| 500.00               | 0.00            | 0.00        | 500.00              | 0.00       | 0.00       | 0.00                  | 0.00                 | 0.00                | 0.00    |                  |
| 1,278.08             | 11.67           | 48.11       | 1,272.71            | 52.73      | 58.79      | 1.50                  | 1.50                 | 0.00                | 48.11   |                  |
| 3,784.48             | 11.67           | 48.11       | 3,727.29            | 391.28     | 436.24     | 0.00                  | 0.00                 | 0.00                | 0.00    |                  |
| 4,562.56             | 0.00            | 0.00        | 4,500.00            | 444.01     | 495.03     | 1.50                  | -1.50                | 0.00                | 180.00  |                  |
| 6,262.56             | 0.00            | 0.00        | 6,200.00            | 444.01     | 495.03     | 0.00                  | 0.00                 | 0.00                | 0.00    | PBHL GDU 63-6-23 |



|                  |                            |                                     |                                       |
|------------------|----------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db | <b>Local Co-ordinate Reference:</b> | Well GDU 63-6-23                      |
| <b>Company:</b>  | VANTAGE ENERGY             | <b>TVD Reference:</b>               | WELL @ 6979.00ft (Original Well Elev) |
| <b>Project:</b>  | DUCHESNE COUNTY, UT        | <b>MD Reference:</b>                | WELL @ 6979.00ft (Original Well Elev) |
| <b>Site:</b>     | GDU 63-6-23                | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | GDU 63-6-23                | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | GDU 63-6-23                |                                     |                                       |
| <b>Design:</b>   | Design #1                  |                                     |                                       |

**Planned Survey**

| Measured Depth (ft)                     | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 0.00                                    | 0.00            | 0.00        | 0.00                | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 100.00                                  | 0.00            | 0.00        | 100.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 200.00                                  | 0.00            | 0.00        | 200.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| <b>9 5/8"</b>                           |                 |             |                     |            |            |                       |                       |                      |                     |
| 300.00                                  | 0.00            | 0.00        | 300.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 400.00                                  | 0.00            | 0.00        | 400.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| <b>Start Build 1.50</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 500.00                                  | 0.00            | 0.00        | 500.00              | 0.00       | 0.00       | 0.00                  | 0.00                  | 0.00                 | 0.00                |
| 600.00                                  | 1.50            | 48.11       | 599.99              | 0.87       | 0.97       | 1.31                  | 1.50                  | 1.50                 | 0.00                |
| 700.00                                  | 3.00            | 48.11       | 699.91              | 3.50       | 3.90       | 5.23                  | 1.50                  | 1.50                 | 0.00                |
| 800.00                                  | 4.50            | 48.11       | 799.69              | 7.86       | 8.77       | 11.77                 | 1.50                  | 1.50                 | 0.00                |
| 900.00                                  | 6.00            | 48.11       | 899.27              | 13.97      | 15.58      | 20.92                 | 1.50                  | 1.50                 | 0.00                |
| 1,000.00                                | 7.50            | 48.11       | 998.57              | 21.82      | 24.33      | 32.68                 | 1.50                  | 1.50                 | 0.00                |
| 1,100.00                                | 9.00            | 48.11       | 1,097.54            | 31.40      | 35.01      | 47.03                 | 1.50                  | 1.50                 | 0.00                |
| 1,200.00                                | 10.50           | 48.11       | 1,196.09            | 42.71      | 47.61      | 63.96                 | 1.50                  | 1.50                 | 0.00                |
| <b>Start 2506.40 hold at 1278.08 MD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 1,278.08                                | 11.67           | 48.11       | 1,272.71            | 52.73      | 58.79      | 78.97                 | 1.50                  | 1.50                 | 0.00                |
| 1,300.00                                | 11.67           | 48.11       | 1,294.18            | 55.69      | 62.09      | 83.41                 | 0.00                  | 0.00                 | 0.00                |
| 1,400.00                                | 11.67           | 48.11       | 1,392.11            | 69.20      | 77.15      | 103.64                | 0.00                  | 0.00                 | 0.00                |
| 1,500.00                                | 11.67           | 48.11       | 1,490.04            | 82.71      | 92.21      | 123.87                | 0.00                  | 0.00                 | 0.00                |
| 1,600.00                                | 11.67           | 48.11       | 1,587.97            | 96.21      | 107.27     | 144.10                | 0.00                  | 0.00                 | 0.00                |
| 1,700.00                                | 11.67           | 48.11       | 1,685.91            | 109.72     | 122.33     | 164.33                | 0.00                  | 0.00                 | 0.00                |
| 1,800.00                                | 11.67           | 48.11       | 1,783.84            | 123.23     | 137.39     | 184.56                | 0.00                  | 0.00                 | 0.00                |
| 1,900.00                                | 11.67           | 48.11       | 1,881.77            | 136.74     | 152.45     | 204.79                | 0.00                  | 0.00                 | 0.00                |
| 2,000.00                                | 11.67           | 48.11       | 1,979.70            | 150.24     | 167.51     | 225.01                | 0.00                  | 0.00                 | 0.00                |
| 2,100.00                                | 11.67           | 48.11       | 2,077.64            | 163.75     | 182.57     | 245.24                | 0.00                  | 0.00                 | 0.00                |
| 2,200.00                                | 11.67           | 48.11       | 2,175.57            | 177.26     | 197.63     | 265.47                | 0.00                  | 0.00                 | 0.00                |
| 2,300.00                                | 11.67           | 48.11       | 2,273.50            | 190.76     | 212.69     | 285.70                | 0.00                  | 0.00                 | 0.00                |
| 2,400.00                                | 11.67           | 48.11       | 2,371.43            | 204.27     | 227.74     | 305.93                | 0.00                  | 0.00                 | 0.00                |
| 2,500.00                                | 11.67           | 48.11       | 2,469.37            | 217.78     | 242.80     | 326.16                | 0.00                  | 0.00                 | 0.00                |
| 2,600.00                                | 11.67           | 48.11       | 2,567.30            | 231.29     | 257.86     | 346.39                | 0.00                  | 0.00                 | 0.00                |
| 2,700.00                                | 11.67           | 48.11       | 2,665.23            | 244.79     | 272.92     | 366.62                | 0.00                  | 0.00                 | 0.00                |
| 2,800.00                                | 11.67           | 48.11       | 2,763.16            | 258.30     | 287.98     | 386.85                | 0.00                  | 0.00                 | 0.00                |
| 2,900.00                                | 11.67           | 48.11       | 2,861.10            | 271.81     | 303.04     | 407.08                | 0.00                  | 0.00                 | 0.00                |
| 3,000.00                                | 11.67           | 48.11       | 2,959.03            | 285.32     | 318.10     | 427.31                | 0.00                  | 0.00                 | 0.00                |
| 3,100.00                                | 11.67           | 48.11       | 3,056.96            | 298.82     | 333.16     | 447.54                | 0.00                  | 0.00                 | 0.00                |
| 3,200.00                                | 11.67           | 48.11       | 3,154.89            | 312.33     | 348.22     | 467.77                | 0.00                  | 0.00                 | 0.00                |
| 3,300.00                                | 11.67           | 48.11       | 3,252.83            | 325.84     | 363.28     | 488.00                | 0.00                  | 0.00                 | 0.00                |
| 3,400.00                                | 11.67           | 48.11       | 3,350.76            | 339.34     | 378.34     | 508.23                | 0.00                  | 0.00                 | 0.00                |
| 3,500.00                                | 11.67           | 48.11       | 3,448.69            | 352.85     | 393.40     | 528.46                | 0.00                  | 0.00                 | 0.00                |
| <b>Garden Gulch</b>                     |                 |             |                     |            |            |                       |                       |                      |                     |
| 3,582.00                                | 11.67           | 48.11       | 3,529.00            | 363.93     | 405.75     | 545.05                | 0.00                  | 0.00                 | 0.00                |
| 3,600.00                                | 11.67           | 48.11       | 3,546.62            | 366.36     | 408.46     | 548.69                | 0.00                  | 0.00                 | 0.00                |
| 3,700.00                                | 11.67           | 48.11       | 3,644.56            | 379.87     | 423.52     | 568.92                | 0.00                  | 0.00                 | 0.00                |
| <b>Start Drop -1.50</b>                 |                 |             |                     |            |            |                       |                       |                      |                     |
| 3,784.48                                | 11.67           | 48.11       | 3,727.29            | 391.28     | 436.24     | 586.01                | 0.00                  | 0.00                 | 0.00                |
| 3,800.00                                | 11.44           | 48.11       | 3,742.49            | 393.35     | 438.55     | 589.11                | 1.50                  | -1.50                | 0.00                |
| 3,900.00                                | 9.94            | 48.11       | 3,840.76            | 405.74     | 452.36     | 607.66                | 1.50                  | -1.50                | 0.00                |
| 4,000.00                                | 8.44            | 48.11       | 3,939.47            | 416.40     | 464.25     | 623.63                | 1.50                  | -1.50                | 0.00                |
| 4,100.00                                | 6.94            | 48.11       | 4,038.57            | 425.33     | 474.21     | 637.01                | 1.50                  | -1.50                | 0.00                |
| 4,200.00                                | 5.44            | 48.11       | 4,137.98            | 432.53     | 482.23     | 647.79                | 1.50                  | -1.50                | 0.00                |
| 4,300.00                                | 3.94            | 48.11       | 4,237.65            | 437.99     | 488.31     | 655.96                | 1.50                  | -1.50                | 0.00                |
| 4,400.00                                | 2.44            | 48.11       | 4,337.49            | 441.70     | 492.46     | 661.52                | 1.50                  | -1.50                | 0.00                |
| 4,500.00                                | 0.94            | 48.11       | 4,437.44            | 443.67     | 494.65     | 664.47                | 1.50                  | -1.50                | 0.00                |



|                  |                            |                                     |                                       |
|------------------|----------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db | <b>Local Co-ordinate Reference:</b> | Well GDU 63-6-23                      |
| <b>Company:</b>  | VANTAGE ENERGY             | <b>TVD Reference:</b>               | WELL @ 6979.00ft (Original Well Elev) |
| <b>Project:</b>  | DUCHESNE COUNTY, UT        | <b>MD Reference:</b>                | WELL @ 6979.00ft (Original Well Elev) |
| <b>Site:</b>     | GDU 63-6-23                | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | GDU 63-6-23                | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | GDU 63-6-23                |                                     |                                       |
| <b>Design:</b>   | Design #1                  |                                     |                                       |

**Planned Survey**

| Measured Depth (ft)                     | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| <b>Douglas Creek</b>                    |                 |             |                     |            |            |                       |                       |                      |                     |
| 4,531.56                                | 0.47            | 48.11       | 4,469.00            | 443.92     | 494.94     | 664.85                | 1.50                  | -1.50                | 0.00                |
| <b>Start 1700.00 hold at 4562.56 MD</b> |                 |             |                     |            |            |                       |                       |                      |                     |
| 4,562.56                                | 0.00            | 0.00        | 4,500.00            | 444.01     | 495.03     | 664.98                | 1.50                  | -1.50                | 0.00                |
| 4,600.00                                | 0.00            | 0.00        | 4,537.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 4,700.00                                | 0.00            | 0.00        | 4,637.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 4,800.00                                | 0.00            | 0.00        | 4,737.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 4,900.00                                | 0.00            | 0.00        | 4,837.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,000.00                                | 0.00            | 0.00        | 4,937.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,100.00                                | 0.00            | 0.00        | 5,037.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,200.00                                | 0.00            | 0.00        | 5,137.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,300.00                                | 0.00            | 0.00        | 5,237.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,400.00                                | 0.00            | 0.00        | 5,337.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| <b>Castle Peak</b>                      |                 |             |                     |            |            |                       |                       |                      |                     |
| 5,441.56                                | 0.00            | 0.00        | 5,379.00            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,500.00                                | 0.00            | 0.00        | 5,437.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,600.00                                | 0.00            | 0.00        | 5,537.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,700.00                                | 0.00            | 0.00        | 5,637.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,800.00                                | 0.00            | 0.00        | 5,737.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| <b>Uteland Butte</b>                    |                 |             |                     |            |            |                       |                       |                      |                     |
| 5,891.56                                | 0.00            | 0.00        | 5,829.00            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 5,900.00                                | 0.00            | 0.00        | 5,837.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 6,000.00                                | 0.00            | 0.00        | 5,937.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 6,100.00                                | 0.00            | 0.00        | 6,037.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| <b>Wasatch</b>                          |                 |             |                     |            |            |                       |                       |                      |                     |
| 6,121.56                                | 0.00            | 0.00        | 6,059.00            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 6,200.00                                | 0.00            | 0.00        | 6,137.44            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |
| 6,262.56                                | 0.00            | 0.00        | 6,200.00            | 444.01     | 495.03     | 664.98                | 0.00                  | 0.00                 | 0.00                |

**Design Targets**

| Target Name   | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude         | Longitude         |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|------------------|-------------------|
| PBHL GDU 63-6-23<br>- hit/miss target<br>- Shape<br>- Point | 0.00          | 0.00         | 6,200.00 | 444.01     | 495.03     | 7,167,655.40  | 1,986,895.21 | 39° 59' 25.768 N | 110° 15' 47.909 W |

**Casing Points**

| Measured Depth (ft) | Vertical Depth (ft) | Name   | Casing Diameter (") | Hole Diameter (") |
|---------------------|---------------------|--------|---------------------|-------------------|
| 300.00              | 300.00              | 9 5/8" | 9-5/8               | 12-1/4            |



|                  |                            |                                     |                                       |
|------------------|----------------------------|-------------------------------------|---------------------------------------|
| <b>Database:</b> | EDM 2003.21 Single User Db | <b>Local Co-ordinate Reference:</b> | Well GDU 63-6-23                      |
| <b>Company:</b>  | VANTAGE ENERGY             | <b>TVD Reference:</b>               | WELL @ 6979.00ft (Original Well Elev) |
| <b>Project:</b>  | DUCHESNE COUNTY, UT        | <b>MD Reference:</b>                | WELL @ 6979.00ft (Original Well Elev) |
| <b>Site:</b>     | GDU 63-6-23                | <b>North Reference:</b>             | True                                  |
| <b>Well:</b>     | GDU 63-6-23                | <b>Survey Calculation Method:</b>   | Minimum Curvature                     |
| <b>Wellbore:</b> | GDU 63-6-23                |                                     |                                       |
| <b>Design:</b>   | Design #1                  |                                     |                                       |

**Formations**

| Measured Depth (ft) | Vertical Depth (ft) | Name          | Lithology | Dip (°) | Dip Direction (°) |
|---------------------|---------------------|---------------|-----------|---------|-------------------|
| 3,582.00            | 3,529.00            | Garden Gulch  |           | 0.00    |                   |
| 4,531.56            | 4,469.00            | Douglas Creek |           | 0.00    |                   |
| 5,441.56            | 5,379.00            | Castle Peak   |           | 0.00    |                   |
| 5,891.56            | 5,829.00            | Uteland Butte |           | 0.00    |                   |
| 6,121.56            | 6,059.00            | Wasatch       |           | 0.00    |                   |

**Plan Annotations**

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            | Comment                          |
|---------------------|---------------------|-------------------|------------|----------------------------------|
|                     |                     | +N/-S (ft)        | +E/-W (ft) |                                  |
| 500.00              | 500.00              | 0.00              | 0.00       | Start Build 1.50                 |
| 1,278.08            | 1,272.71            | 52.73             | 58.79      | Start 2506.40 hold at 1278.08 MD |
| 3,784.48            | 3,727.29            | 391.28            | 436.24     | Start Drop -1.50                 |
| 4,562.56            | 4,500.00            | 444.01            | 495.03     | Start 1700.00 hold at 4562.56 MD |
| 6,262.56            | 6,200.00            | 444.01            | 495.03     | TD at 6262.56                    |

CONFIDENTIAL



Ms. Diana Mason  
State of Utah  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84114

July 6, 2011

Re: Directional Drilling R649-3-11  
Vantage Energy Uinta, LLC  
**GDU 63-6-23**  
SHL: 2,418' FNL 2,480' FEL (SW/4 NE/4)  
BHL: ±1,980' FNL ±1,980' FEL (SW/4 NE/4)  
Sec. 6 T6S R3E  
Duchesne County, Utah  
Surface: Federal  
Mineral: Federal Mineral Lease UTU78235

Dear Ms. Mason:

With regards to the filing of Vantage Energy Uinta LLC's (Vantage) Application for Permit to Drill regarding the above referenced well, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11, pertaining to the Exception of Location and Sitting of Wells.

- GDU 63-6-23 is an exploratory well located within the Gilsonite Draw Federal Unit No. UTU86249X.
- Vantage is permitting this well as stipulated by the United States Forest Service as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Vantage will be able to utilize any proposed roads and or pipelines in the area.
- Vantage is the unit operator of the Gilsonite Draw Federal Unit. As it pertains to all depths from the surface to the base of the Wasatch Formation, Vantage certifies it is the sole working interest owner within 460 feet of the entire directional well bore and within Section 6 (federal oil and gas lease UTU 78235). As to all depths deeper than the Base of the Wasatch Formation, the sole working interest owner is Exxon Mobil Corporation (XOM). Vantage and XOM have entered into a mutually executed Exploration Agreement that provides for the possible development of those deeper depths.

Utah Division Oil, Gas & Mining

July 6, 2011

Page 2 of 2

Based on the above stated information, Vantage requests the permit be granted pursuant to the terms and conditions of Rule R649-3-11.

Sincerely,

**VANTAGE ENERGY UINTA, LLC**



Michael Holland  
Senior Landman

Cc: mth, jm, rs, tt, kh, su, David Banko, Kim Rodell (Banko Petroleum Management)

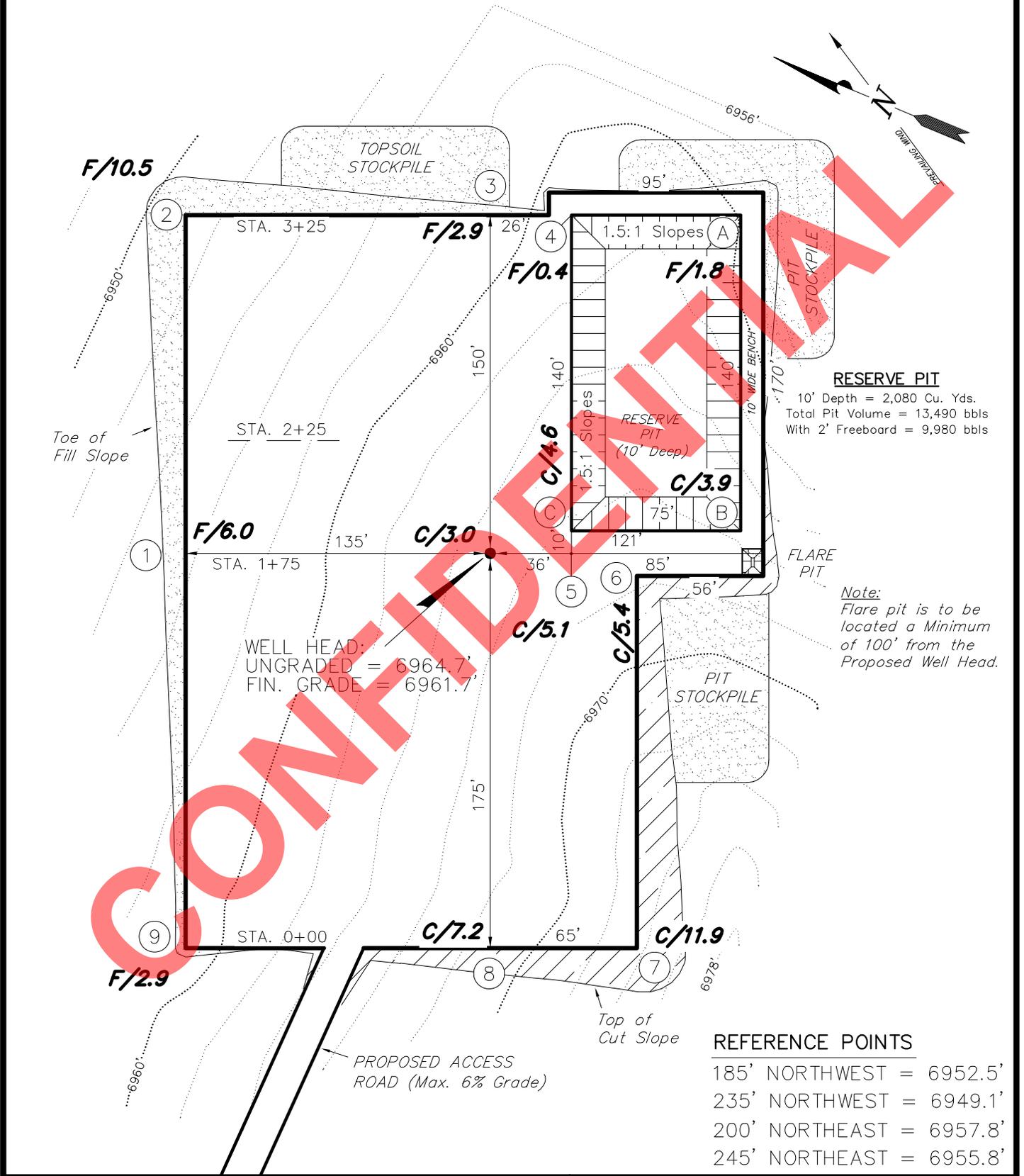
**CONFIDENTIAL**

# VANTAGE ENERGY, LLC

LOCATION LAYOUT

GDU 63-6-23

Pad Location: SWNE Section 6, T6S R3W, U.S.B.&M.



**RESERVE PIT**  
 10' Depth = 2,080 Cu. Yds.  
 Total Pit Volume = 13,490 bbls  
 With 2' Freeboard = 9,980 bbls

*Note:*  
 Flare pit is to be located a Minimum of 100' from the Proposed Well Head.

WELL HEAD:  
 UNGRADED = 6964.7'  
 FIN. GRADE = 6961.7'

**REFERENCE POINTS**

- 185' NORTHWEST = 6952.5'
- 235' NORTHWEST = 6949.1'
- 200' NORTHEAST = 6957.8'
- 245' NORTHEAST = 6955.8'

|                   |                          |
|-------------------|--------------------------|
| SURVEYED BY: S.H. | DATE SURVEYED: 11-09-10  |
| DRAWN BY: F.T.M.  | DATE DRAWN: 11-29-10     |
| SCALE: 1" = 60'   | REVISED: 03-04-11 R.V.C. |

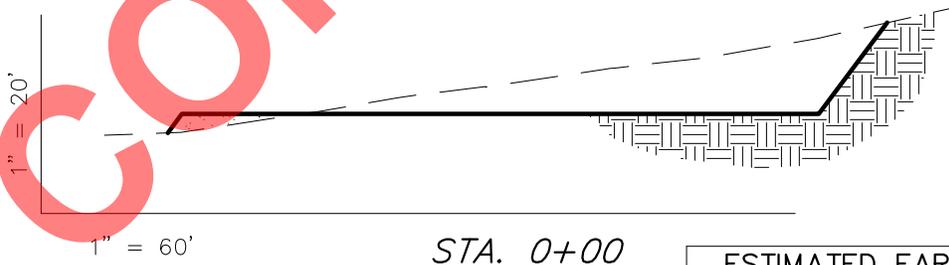
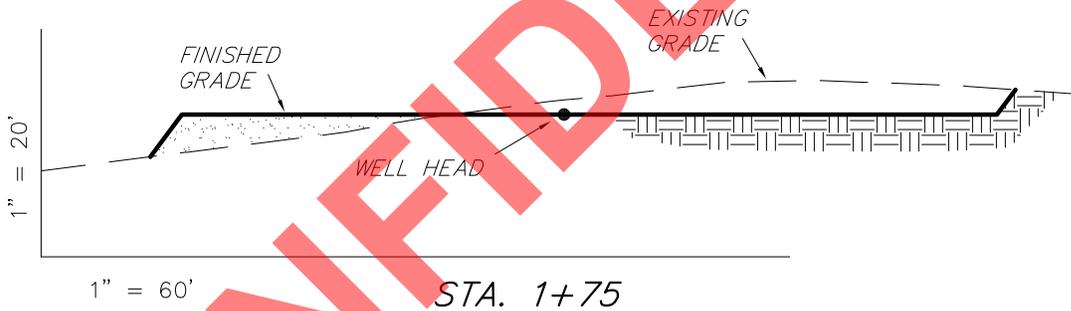
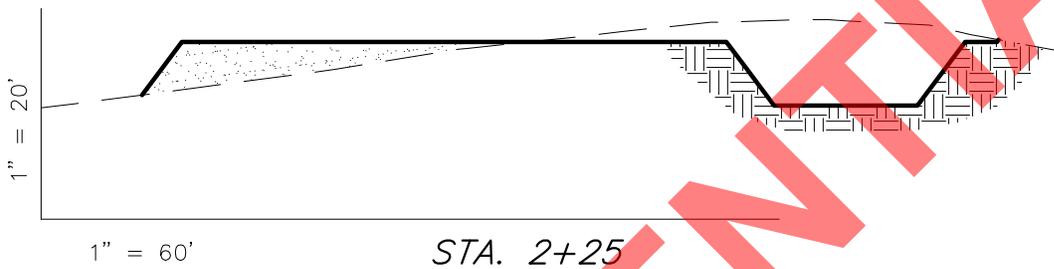
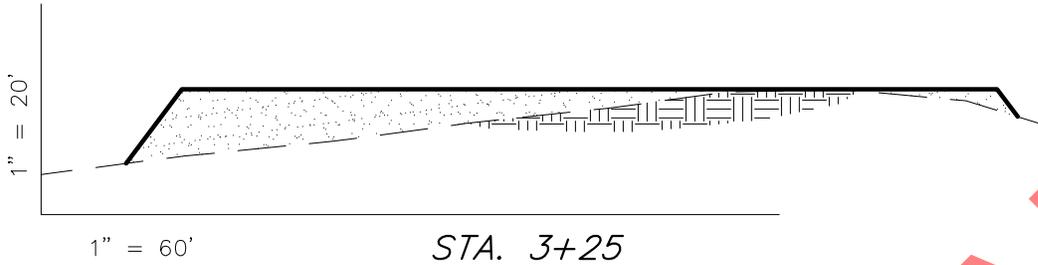
**Tri State** (435) 781-2501  
 Land Surveying, Inc.  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# VANTAGE ENERGY, LLC

## CROSS SECTIONS

CDU 63-6-23

Pad Location: SWNE Section 6, T6S R3W, U.S.B.&M.



**ESTIMATED EARTHWORK QUANTITIES**  
(No Shrink or swell adjustments have been used)  
(Expressed in Cubic Yards)

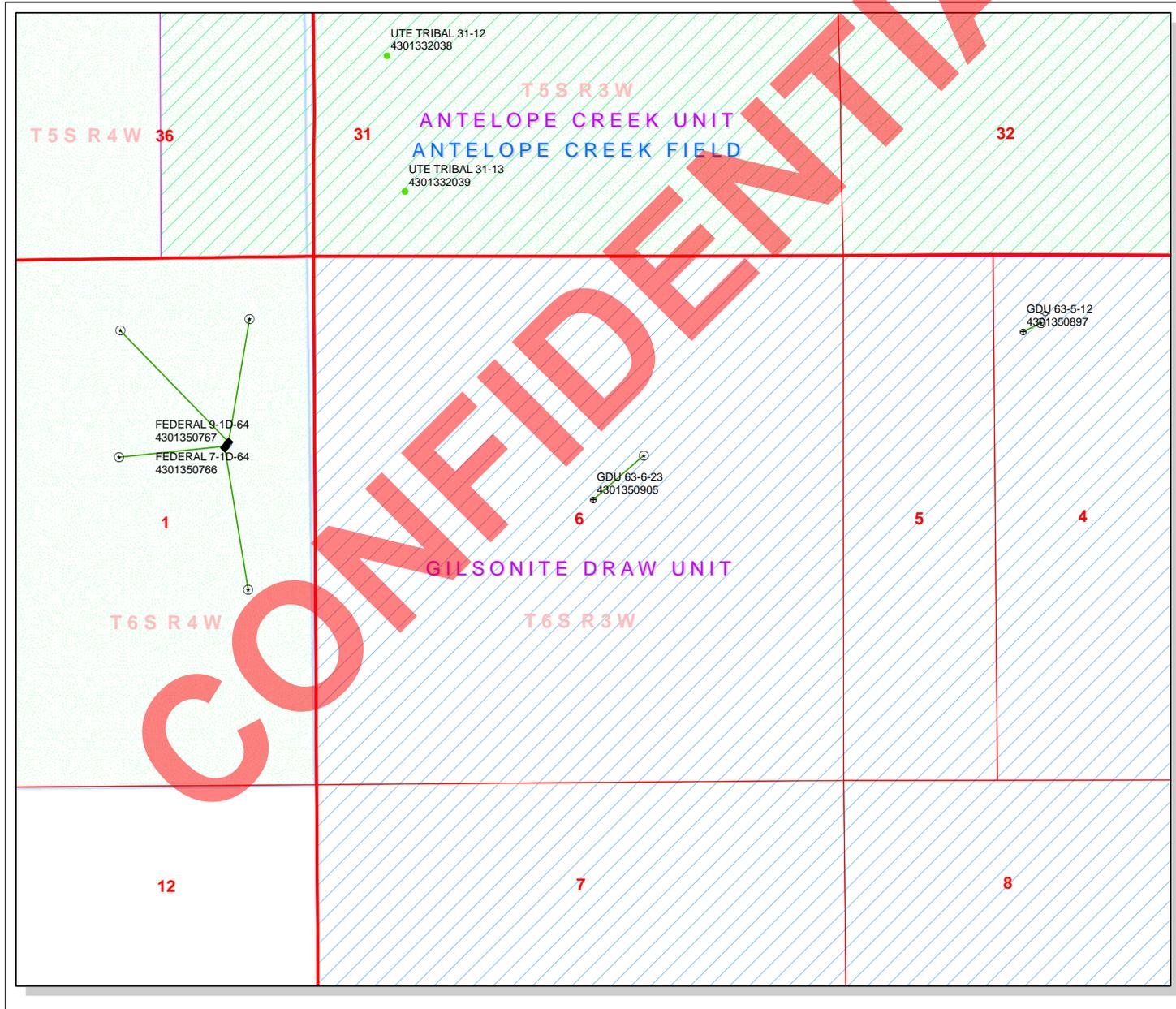
| ITEM          | CUT          | FILL         | 6" TOPSOIL                         | EXCESS       |
|---------------|--------------|--------------|------------------------------------|--------------|
| PAD           | 5,650        | 5,650        | Topsoil is not included in Pad Cut | 0            |
| PIT           | 2,810        | 0            |                                    | 2,810        |
| <b>TOTALS</b> | <b>8,460</b> | <b>5,650</b> | <b>1,590</b>                       | <b>2,810</b> |

NOTE:  
UNLESS OTHERWISE  
NOTED ALL CUT/FILL  
SLOPES ARE AT 1.5:1

|                   |                          |
|-------------------|--------------------------|
| SURVEYED BY: S.H. | DATE SURVEYED: 11-09-10  |
| DRAWN BY: F.T.M.  | DATE DRAWN: 11-29-10     |
| SCALE: 1" = 60'   | REVISED: 03-04-11 R.V.C. |

**Tri State** (435) 781-2501  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

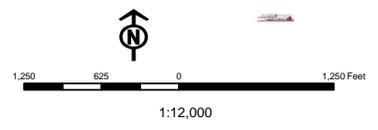




**API Number: 4301350905**  
**Well Name: GDU 63-6-23**  
 Township T0.6 . Range R0.3 . Section 06  
**Meridian: UBM**  
 Operator: VANTAGE ENERGY UINTA LLC

Map Prepared:  
 Map Produced by Diana Mason

- |               |                                    |
|---------------|------------------------------------|
| <b>Units</b>  | <b>Wells Query</b>                 |
| <b>STATUS</b> | <b>Status</b>                      |
| ACTIVE        | APD - Approved Permit              |
| EXPLORATORY   | DRL - Spudded (Drilling Commenced) |
| GAS STORAGE   | GIW - Gas Injection                |
| NF PP OIL     | GS - Gas Storage                   |
| NF SECONDARY  | LA - Location Abandoned            |
| PI OIL        | LOC - New Location                 |
| PP GAS        | OPS - Operation Suspended          |
| PP GEOTHERML  | PA - Plugged Abandoned             |
| PP OIL        | PGW - Producing Gas Well           |
| SECONDARY     | POW - Producing Oil Well           |
| TERMINATED    | RET - Returned APD                 |
| <b>Fields</b> | SGW - Shut-in Gas Well             |
| Unknown       | SOW - Shut-in Oil Well             |
| ABANDONED     | TA - Temp. Abandoned               |
| ACTIVE        | TW - Test Well                     |
| COMBINED      | WDW - Water Disposal               |
| INACTIVE      | WIW - Water Injection Well         |
| STORAGE       | WSW - Water Supply Well            |
| TERMINATED    |                                    |
| Sections      |                                    |
| Township      |                                    |



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

August 3, 2011

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2011 Plan of Development Gilsonite Draw Unit,  
Duchesne County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2011 within the Gilsonite Draw Unit, Duchesne County, Utah.

| API#                      | WELL NAME   | LOCATION   |
|---------------------------|-------------|--|
| (Proposed PZ Green River) |             |  |
| 43-013-50905              | GDU 63-6-23 | Sec 06 T06S R03W 2418 FNL 2480 FEL<br>BHL Sec 06 T06S R03W 1980 FNL 1980 FEL |

This office has no objection to permitting the well at this time.

Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,  
ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov, c=US  
Date: 2011.08.03 13:02:14 -06'00'

bcc: File - Gilsonite Draw Unit  
Division of Oil Gas and Mining  
Central Files  
Agr. Sec. Chron  
Fluid Chron

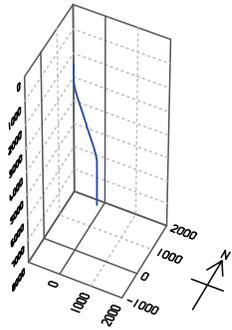
MCoulthard:mc:8-3-11



Project: DUCHESNE COUNTY, UT  
 Site: GDU 63-6-23  
 Well: GDU 63-6-23  
 Wellbore: GDU 63-6-23  
 Design: Design #1  
 Latitude: 39° 59' 21.380 N  
 Longitude: 110° 15' 54.270 W  
 GL: 6964.00  
 KB: WELL @ 6979.00ft (Original Well Elev)  
 RIG: Original Well Elev



**Weatherford**



| WELL DETAILS: GDU 63-6-23 |       |            |                          |                     |                   |      |  |
|---------------------------|-------|------------|--------------------------|---------------------|-------------------|------|--|
| +N/-S                     | +E/-W | Northing   | Ground Level:<br>Easting | 6964.00<br>Latitude | Longitude         | Slot |  |
| 0.00                      | 0.00  | 7167204.60 | 1986406.36               | 39° 59' 21.380 N    | 110° 15' 54.270 W |      |  |

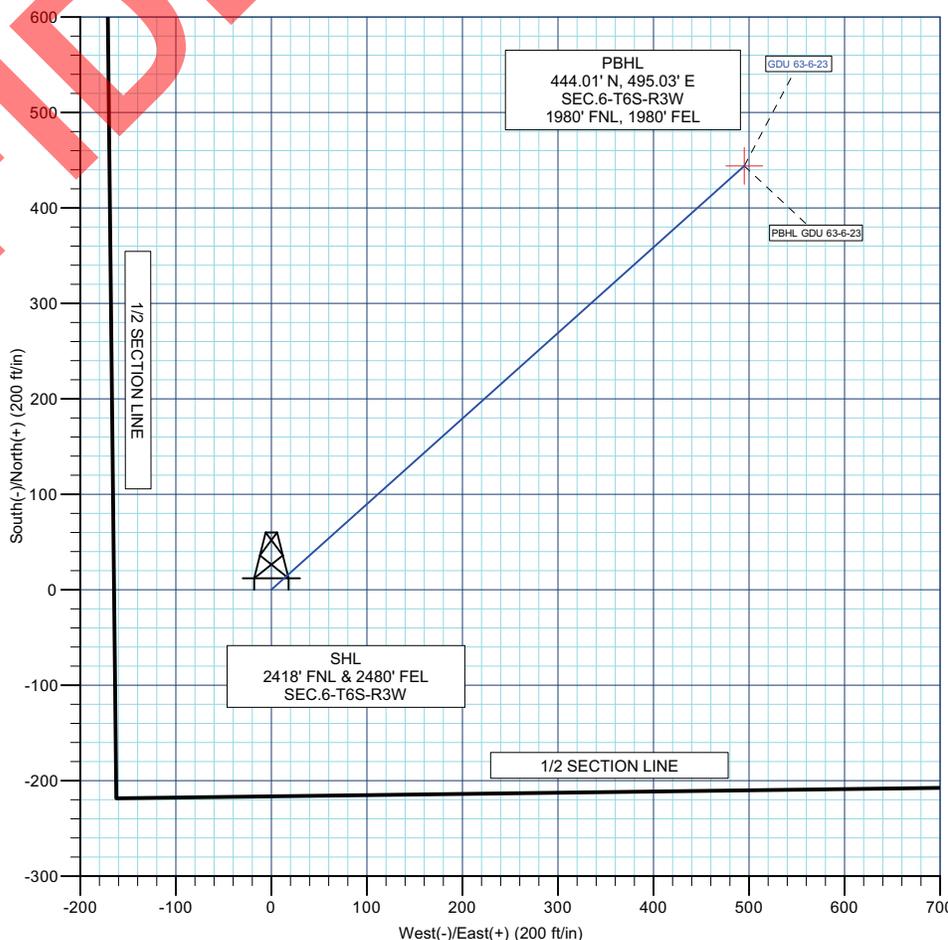
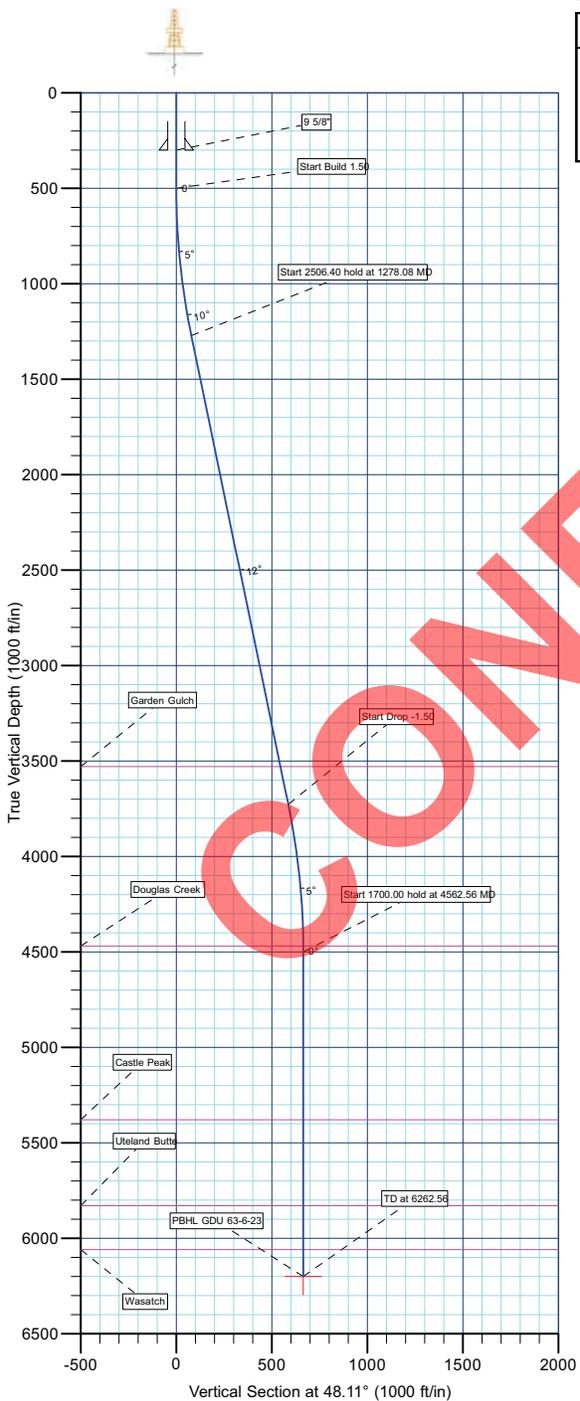
| WELLBORE TARGET DETAILS (LAT/LONG) |         |        |        |                  |                   |             |  |
|------------------------------------|---------|--------|--------|------------------|-------------------|-------------|--|
| Name                               | TVD     | +N/-S  | +E/-W  | Latitude         | Longitude         | Shape Point |  |
| PBHL GDU 63-6-23                   | 6200.00 | 444.01 | 495.03 | 39° 59' 25.768 N | 110° 15' 47.909 W |             |  |

| SECTION DETAILS |       |       |         |        |        |      |        |        |                                  |
|-----------------|-------|-------|---------|--------|--------|------|--------|--------|----------------------------------|
| MD              | Inc   | Azi   | TVD     | +N/-S  | +E/-W  | DLeg | TFace  | VSec   | Annotation                       |
| 0.00            | 0.00  | 0.00  | 0.00    | 0.00   | 0.00   | 0.00 | 0.00   | 0.00   |                                  |
| 500.00          | 0.00  | 0.00  | 500.00  | 0.00   | 0.00   | 0.00 | 0.00   | 0.00   | Start Build 1.50                 |
| 1278.08         | 11.67 | 48.11 | 1272.71 | 52.73  | 58.79  | 1.50 | 48.11  | 78.97  | Start 2506.40 hold at 1278.08 MD |
| 3784.48         | 11.67 | 48.11 | 3727.29 | 391.28 | 436.24 | 0.00 | 0.00   | 586.01 | Start Drop -1.50                 |
| 4562.56         | 0.00  | 0.00  | 4500.00 | 444.01 | 495.03 | 1.50 | 180.00 | 664.98 | Start 1700.00 hold at 4562.56 MD |
| 6262.56         | 0.00  | 0.00  | 6200.00 | 444.01 | 495.03 | 0.00 | 0.00   | 664.98 | TD at 6262.56                    |

| FORMATION TOP DETAILS |         |               |
|-----------------------|---------|---------------|
| TVDPath               | MDPath  | Formation     |
| 3529.00               | 3582.00 | Garden Gulch  |
| 4469.00               | 4531.56 | Douglas Creek |
| 5379.00               | 5441.56 | Castle Peak   |
| 5829.00               | 5891.56 | Uteland Butte |
| 6059.00               | 6121.56 | Wasatch       |

| CASING DETAILS |        |        |       |
|----------------|--------|--------|-------|
| TVD            | MD     | Name   | Size  |
| 300.00         | 300.00 | 9 5/8" | 9-5/8 |

Azimuths to True North  
 Magnetic North: 11.46°  
 Magnetic Field  
 Strength: 52201.1snT  
 Dip Angle: 65.74°  
 Date: 3/1/2011  
 Model: BGGM2010



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 7/29/2011

**API NO. ASSIGNED:** 43013509050000

**WELL NAME:** GDU 63-6-23

**OPERATOR:** VANTAGE ENERGY UINTA LLC (N3295)

**PHONE NUMBER:** 303 820-4480

**CONTACT:** David F. Banko

**PROPOSED LOCATION:** SWNE 06 060S 030W

**Permit Tech Review:**

**SURFACE:** 2418 FNL 2480 FEL

**Engineering Review:**

**BOTTOM:** 1980 FNL 1980 FEL

**Geology Review:**

**COUNTY:** DUCHESNE

**LATITUDE:** 39.98938

**LONGITUDE:** -110.26428

**UTM SURF EASTINGS:** 562812.00

**NORTHINGS:** 4426627.00

**FIELD NAME:** UNDESIGNATED

**LEASE TYPE:** 1 - Federal

**LEASE NUMBER:** UTU78235

**PROPOSED PRODUCING FORMATION(S):** WASATCH

**SURFACE OWNER:** 1 - Federal

**COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

- PLAT
  - Bond: FEDERAL - LPM8907971
  - Potash
  - Oil Shale 190-5
  - Oil Shale 190-3
  - Oil Shale 190-13
  - Water Permit: commercial trucking
  - RDCC Review:
  - Fee Surface Agreement
  - Intent to Commingle
- Commingling Approved**

**LOCATION AND SITING:**

- R649-2-3.
- Unit:** GILSONITE DRAW
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No:** R649-3-11
- Effective Date:**
- Siting:**
- R649-3-11. Directional Drill

**Comments:** Presite Completed

**Stipulations:** 4 - Federal Approval - dmason  
15 - Directional - dmason  
23 - Spacing - dmason



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** GDU 63-6-23  
**API Well Number:** 43013509050000  
**Lease Number:** UTU78235  
**Surface Owner:** FEDERAL  
**Approval Date:** 8/3/2011

**Issued to:**

VANTAGE ENERGY UINTA LLC, 116 Inverness Drive East, Ste 107, Englewood , CO 80112

**Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", with a stylized flourish at the end.

For John Rogers  
Associate Director, Oil & Gas

|  |  |
|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9<br><br>5. LEASE DESIGNATION AND SERIAL NUMBER:<br>UTU78235                              |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br><br>7. UNIT or CA AGREEMENT NAME:<br>GILSONITE DRAW   |
| 1. TYPE OF WELL<br>Gas Well  | 8. WELL NAME and NUMBER:<br>GDU 63-6-23  |
| 2. NAME OF OPERATOR:<br>VANTAGE ENERGY UINTA LLC   | 9. API NUMBER:<br>43013509050000   |
| 3. ADDRESS OF OPERATOR:<br>116 Inverness Drive East, Ste 107, Englewood, CO, 80112   | PHONE NUMBER:<br>303 386-8600 Ext  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2418 FNL 2480 FEL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U   | 9. FIELD and POOL or WILDCAT:<br>UNDESIGNATED<br><br>COUNTY:<br>DUCHESNE<br><br>STATE:<br>UTAH |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION  |  |   |
|--|---|--|---|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>8/1/2012<br><br><input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:<br><br><input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br><br><input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date: | <input type="checkbox"/> ACIDIZE<br><br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><br><input type="checkbox"/> CHANGE WELL STATUS<br><br><input type="checkbox"/> DEEPEN<br><br><input type="checkbox"/> OPERATOR CHANGE<br><br><input type="checkbox"/> PRODUCTION START OR RESUME<br><br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><br><input type="checkbox"/> TUBING REPAIR<br><br><input type="checkbox"/> WATER SHUTOFF<br><br><input type="checkbox"/> WILDCAT WELL DETERMINATION | <input checked="" type="checkbox"/> ALTER CASING<br><br><input type="checkbox"/> CHANGE TUBING<br><br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><br><input type="checkbox"/> FRACTURE TREAT<br><br><input type="checkbox"/> PLUG AND ABANDON<br><br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><br><input type="checkbox"/> VENT OR FLARE<br><br><input type="checkbox"/> SI TA STATUS EXTENSION<br><br><input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR<br><br><input type="checkbox"/> CHANGE WELL NAME<br><br><input type="checkbox"/> CONVERT WELL TYPE<br><br><input type="checkbox"/> NEW CONSTRUCTION<br><br><input type="checkbox"/> PLUG BACK<br><br><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION<br><br><input type="checkbox"/> TEMPORARY ABANDON<br><br><input type="checkbox"/> WATER DISPOSAL<br><br><input type="checkbox"/> APD EXTENSION<br><br>OTHER: <input style="width: 100px;" type="text"/> |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being filed to notify the Utah Division of Oil, Mining and Gas that Vantage Energy Uinta LLC is altering the surface casing for the above referenced well from 300' to 500'. Thank you.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

Date: June 12, 2012

By: David F. Banko

|                                       |                              |                       |
|---------------------------------------|------------------------------|-----------------------|
| NAME (PLEASE PRINT)<br>David F. Banko | PHONE NUMBER<br>303 820-4480 | TITLE<br>Permit Agent |
| SIGNATURE<br>N/A                      | DATE<br>6/8/2012             |                       |

**Vantage Energy Uinta LLC**  
**GDU 63-6-23**  
 2418' FNL, 2480' FEL  
 Sec. 6, T6S R3W  
 Duchesne County, Utah  
 Federal Lease UTU-78235

**NINE POINT DRILLING PROGRAM**

(All drilling procedures will comply with BLM *Onshore Oil and Gas Orders 1 and 2*)

**Operator respectfully requests that all information regarding this well be kept confidential.**

**a) GEOLOGIC MARKERS**

Anticipated tops of geologic markers are indicated in **Table 1**

**Table 1 Estimated Tops of Geologic Markers**

| Formation     | Vertical Depth | Measured Depth | Subsea Depth | Description                |
|---------------|----------------|----------------|--------------|----------------------------|
| Green River   | Surface        | Surface        | 6,975'       | Sandstone/siltstone/shale  |
| Garden Gulch  | 3,529'         | 3,582'         | 3,450'       | Sandstone/siltstone/shale  |
| Douglas Creek | 4,469'         | 4,532'         | 2,510'       | Sandstone/siltstone/shale  |
| Castle Peak   | 5,379'         | 5,442'         | 1,600'       | Sandstone/siltstone/shale  |
| Uteland Butte | 5,829'         | 5,892'         | 1,150'       | Carbonate/shale/sandstone  |
| Wasatch       | 6,059'         | 6,122'         | 920'         | Shale/sandstone            |
| Total Depth   | 6,200'         | 6,263'         | 779'         | TD ± 150' TVD into Wasatch |

Surface Elevation: 6,964' (Ground) 6,979' (Est. KB). Proposed Total Depth: 6,263' / 6,200' (MD/TVD)

**b) DEPTHS OF WATER AND MINERAL-BEARING ZONES**

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicate no permitted water wells within a one mile radius of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

**Table 2: Principal Anticipated Water and Mineral-bearing Zones**

| Formation    | Measured Depth | Subsea | Potential Contents       |
|--------------|----------------|--------|--------------------------|
| Green River  | Surface        | 6,975' | Surface – Possible Water |
| Garden Gulch | 3,582'         | 3,450' | Possible Water           |

|               |        |        |           |
|---------------|--------|--------|-----------|
| Douglas Creek | 4,532' | 2,510' | Oil / Gas |
| Castle Peak   | 5,442' | 1,600' | Oil / Gas |
| Uteland Butte | 5,892' | 1,150' | Oil / Gas |
| Wasatch       | 6,122' | 920'   | Oil / Gas |

### c) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **1,364 psi**. Therefore, rules for a 2,000 psi rated BOP and choke manifold system are applicable. However, the typical rig inventory will consist of a 3,000 psi rated BOP and choke manifold. As such, the rig's BOP and choke manifold equipment will be tested to the standards for a 2,000 psi BOP system. A diagram of the proposed 2,000 psi rated BOP stack configuration is shown in **Fig. 1**.

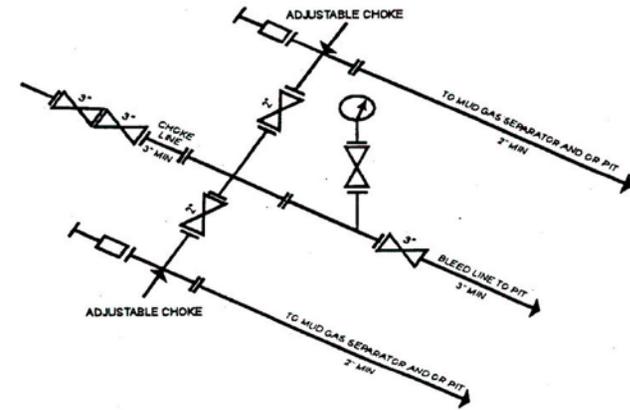
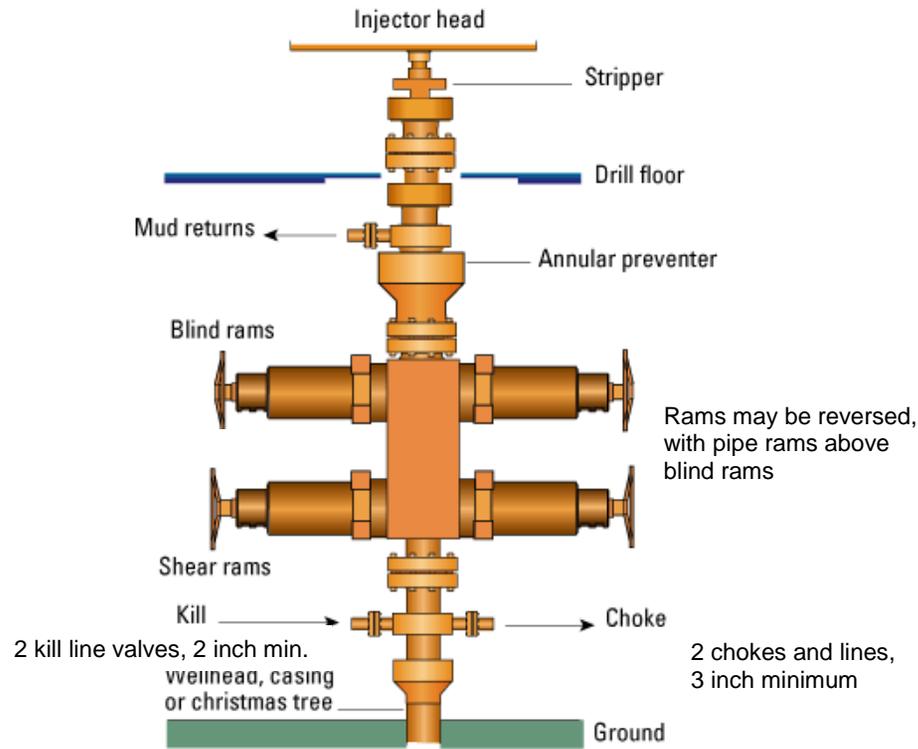
BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.**

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. **Please see variance request at end of program for this section.**

**Figure 1: Pressure Control Schematic  
Operator and Well Name  
Location  
County and State**

**Generalized Setup for 2,000 psi Working Pressure System  
Actual BOP Stack Used May Vary in Some Details**



3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY  
[54 FR 39528, Sept. 27, 1989]

**Installed BOP Stack Will Meet All Requirements of BLM Onshore Oil and Gas Order 2**

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2* for 2,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOP equipment and retain 200 psi above precharge pressure. The proposed pressure control equipment will meet or exceed standards specified in the Order.

**d) CASING PROGRAM**

Casing of quality equal to or better than that indicated in **Tables 3 and 4** will be used for this well. Actual casing used will be dependent on availability.

**Table 3 Proposed Casing Program**

| Depth (MD) | Hole Diameter | Casing Diameter | Casing Weight and Grade               |
|------------|---------------|-----------------|---------------------------------------|
| 0 – ± 40'  | 20"           | 14"             | Optional Conductor – Only if Required |
| 0 – 500'   | 12 1/4"       | 8 5/8"          | 24# J55 ST&C, API New Pipe            |
| 0 – 6,263' | 7 7/8"        | 5 1/2"          | 15.5# K55 LT&C, API New Pipe          |

**Table 4: Proposed Casing Specifications and Design Safety Factors**

| Size                | Collapse (psi)   | Burst (psi) | Body Strength (1,000 lbs.) | Joint Strength (1,000 lbs.) | Thread | *Safety Factors    |                       |                      |
|---------------------|--|-------------|----------------------------|-----------------------------|--------|--------------------|-----------------------|----------------------|
|                     |  |             |                            |                             |        | Burst Design (1.2) | Collapse Design (1.0) | Tension Design (1.4) |
| 14"                 | NA – 0.219" wall structural and to seal shallow gravels to allow air drilling surface hole |             |                            |                             | Weld   | NA                 | NA                    | NA                   |
| 8 5/8"<br>24# J55   | 1,370  | 2,950       | 381                        | 244                         | ST&C   | 1.96               | 5.55                  | 4.26                 |
| 5 1/2"<br>15.5# J55 | 4,040  | 4,810       | 248                        | 217                         | LT&C   | 1.25               | 1.48                  | 1.62                 |

**\*Safety Factor Calculation Assumptions:****Surface Casing:**

**Burst Load:** Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

## MASP

$$\begin{aligned} \text{Load} &= (\text{Formation Gradient} - 0.22 \text{ psi/ft}) * \text{Total Depth, TVD} \\ &= (0.44 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 6,200 \text{ ft.} \\ &= 1,364 \text{ psi} \end{aligned}$$

**TEST PRESSURE**

Load = Greater of 1,500 psig *or*  $0.22 \text{ psi/ft} * 300 \text{ ft} = 66 \text{ psig}$

Load = Greater of 1,500 psig *or* 1,364 psig *or* 66 psig

**SF Burst = 2,950 psi / 1,500 psi = 1.96**

**Collapse Load:** Assumes worse case loading of evacuated casing during cementing process.

Cement density = 15.8 ppg

Load =  $15.8 \text{ ppg} * 0.052 * 300 \text{ ft}$   
= 246.5 psi

**SF Collapse = 1370 psi / 246.5 psi = 5.55**

**Tension Load:** Assumes air weight at total depth + 50,000 lbs overpull design factor.

Load =  $(24 \text{ lbs/ft} * 300 \text{ ft}) + 50,000 \text{ lbs overpull}$   
= 57,200 lbs

**SF Tension = 244,000 lbs / 57,200 lbs = 4.26**

**Test Pressure =**

**Production Casing**

**Burst Load:** Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

Load =  $4810 \text{ psi} * 0.80$   
= 3848 psi

**SF Burst = 4810 psi / 3848 psi = 1.25**

**Collapse Load:** Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

Load =  $0.44 \text{ psi/ft} * 6200 \text{ ft}$   
= 2728 psi

**SF Collapse = 4040 psi / 2728 psi = 1.48**

**Tension Load:** Assumes buoyed weight of casing at total depth + 50,000 lbs overpull design factor.

Load =  $[15.5 \text{ lbs/ft} * 6263 \text{ ft} * ((65.5 - 9.0) / 65.5)] + 50,000 \text{ lbs}$   
= 83,738 lbs + 50,000 lbs  
= 133,738 lbs

**SF Tension = 217,000 lbs / 133,738 lbs = 1.62**

**e) CEMENT PROGRAM****Table 5: Proposed Cement Program (Reference attached BJ Services Program)**

| Depth       | Hole Diameter | Casing Diameter | Cement   |
|-------------|---------------|-----------------|--|
| 0' – ± 40'  | 20"           | 14"             | Optional structural conductor if required: Grout with approximately 3.5 cubic yards of redi-mix back to surface (includes 100% excess)<br><br><b>TOC: Surface (Top-off per visual observation)</b>   |
| 0' – 500'   | 12 1/4"       | 8 5/8"          | <b><u>Single Slurry System (300' – Surface) + 40' Shoe Joint</u></b><br><br>225 sks Class G + 2% CaCl <sub>2</sub> + ¼ lb/sk celloflake.<br><br>Density: 15.8 ppg<br>Yield: 1.17 cuft/sk<br>Water: 5.0 gal/sk<br>Excess = 100% in open hole<br><br><b>TOC: Surface (Top-off per visual observation)</b>  |
| 0' - 6,263' | 7 7/8"        | 5 1/2"          | <b><u>Lead System (4,000' – 2,000')</u></b><br>129 sks Premium Lite II + 10% Gel + 10 lbs/sk gilsonite + 3% KCL + 0.5% Sodium Metasillicate + 5 lbs/sk CSE-2 + ¼ lb/sk celloflake + 3 lbs/sk Kol Seal + 0.5 lbs/sk Static Free + 0.002 gps FP-6L<br><br>Density: 11.0 ppg<br>Yield: 3.50 cuft/sk<br>Water: 21.4 gal/sk<br>*Excess: 30%<br><br><b><u>Tail System (6,263' – 4,000') + 40' Shoe Joint</u></b><br>413 sks 50:50 (Class G:Poz) + 2% gel + 3% KCL + 0.5% EC-1 + 0.15% R-3 + 0.3% Sodium Metasillicate + ¼ lb/sk celloflake + 0.05 lbs/sk Static Free + 0.002 gps FP-6L<br><br>Density: 14.4 ppg<br>Yield: 1.25 cuft/sk<br>Water: 5.48 gal/sk<br>*Excess: 30% |

\*Note: The production hole cement volume excess factor will be adjusted on location by the caliper log, and will be re-calculated using caliper volume + 10% excess factor.

**f) MUD PROGRAM**

The mud program for the proposed well is indicated in **Table 6**.

**Table 6 Proposed Mud Program (See attached Advantage mud program)**

| Interval (feet)                                | Mud Weight (lbs/gallon) | Viscosity (secs/qt) | Fluid Loss (ccs/30 min) | Mud Type      |
|--|-------------------------|---------------------|-------------------------|---------------|
| 0 – ± 40'                                      | NA                      | NA                  | NA                      | NA            |
| Set optional 14" conductor with bucket rig     |                         |                     |                         |               |
| 40' - 500'±                                    | NA                      | NA                  | N/C                     | Air/Mist      |
| Run/cement 8 5/8" surface casing               |                         |                     |                         |               |
| 500'± - 3,500'                                 | 8.3 – 8.9               | 28 – 48             | 10 - 18                 | FW / PHPA     |
| 3,500' - TD                                    | 8.4 – 8.9               | 34 – 58             | 8 - 10                  | 3% KCL / PHPA |
| Run Logs – Run/cement 5 1/2" production casing |                         |                     |                         |               |

Surface Hole Comments: Spud with “spudder rig” and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. **Please see variance requests for this section.**

Production Hole Comments: Drill out surface casing with fresh water using pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,500' “mud up” and “close in” the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and control lost circulation zones that may be encountered. Monitoring equipment will be installed on site to detect changes in mud volume.

### **g) LOGGING, CORING, AND TESTING PROGRAM**

The proposed logging program is indicated in **Table 7**.

**Table 7 Proposed Logging Program**

| Log Suites            | Depth Range          | Remarks  |
|-----------------------|----------------------|--|
| DIL-SP-LD-CN          | Surface Casing to TD | Standard "triple combo" equivalent with resistivity-spontaneous potential, litho-density, compensated neutron, gamma ray, and caliper<br>Will pull GR to surface |
| Dipole Sonic          | ± 4,000' to TD       | Optional – Operator's discretion<br>Rock property data   |
| Rotary Sidewall Cores | ± 4,000' to TD       | Optional – Operator's discretion<br>PP/Lithology data (perm-porosity)  |

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

Vantage Energy Uinta LLC

GDU 63-6-23, Drilling Program

Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

#### **h) ANTICIPATED PRESSURES AND HAZARDS**

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft.

|  |  |
|--|--|
| Estimated BHP Douglas Creek (4,469')   | 1,966 psi  |
| Estimated BHP Wasatch (6,059')         | 2,666 psi  |
| Estimated BHP Total Depth (6,200')     | 2,728 psi  |
| Hydrostatic head of gas/mud column     | 0.22 psi/ft.                                     |
| <b>Maximum design surface pressure</b> | <b>0.44 – 0.22 psi/ft x 6,200 ft = 1,364 psi</b> |

No H<sub>2</sub>S zones are anticipated. Lost circulation can be encountered. A variety of sized lost circulation materials will be maintained on location in the event lost circulation is experienced. No abnormal lost circulation zones are anticipated. The proposed well is a southern extension test of producing wells in T5S-R3W. Abnormal pressures will not be experienced to the proposed depth in this area.

#### **i) DIRECTIONAL PROGRAM (See attached directional plan by Weatherford)**

The GDU 63-6-23 will be drilled as a directional well, with a bottom hole located in the center of SW¼ NE¼ Section 6, T6S-R3W on a 40-acre spacing pattern. The vertical section distance between the surface and the bottom hole is 665'. The bottom hole will be landed within a 200' radius target tolerance. The directional plan will consist of a build-and-drop “S” profile, with a planned KOP of 500', and a build/drop rate of 1.5°/100'.

The purpose of the directional well is to establish an “ideal” 40-acre drainage pattern for future development considerations.

#### **j) OTHER INFORMATION**

##### Contact Information and Personnel

##### Mailing Address

Vantage Energy Uinta LLC  
116 Inverness Drive, Suite 107  
Englewood, CO 80112  
Main Number: 303-386-8600  
Fax Number: 303-386-8700

Primary Contact: Seth Urruty

Office Direct: 303-386-8623

*Vantage Energy Uinta LLC*

*GDU 63-6-23, Drilling Program*

Fax Direct: 303-386-8723  
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Completion/Production Operations: Eric Burkhalter  
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Landman: Michael Holland  
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E-Mail: [Michael.Holland@VantageEnergy.com](mailto:Michael.Holland@VantageEnergy.com)

**START DATE AND DURATION OF ACTIVITIES****Anticipated start date**

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about June 15, 2011, with a target spud date of July 1, 2011. It is anticipated the drilling phase will require 7 days.

**Completion**

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 days.

The total project duration is therefore estimated to be **52 days**, and therefore anticipated to be concluded on or about August 21, 2011.

A string of 2 7/8 inch 6.5 lb/ft. J-55 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

**VARIANCE REQUESTS**

1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item B, No. 1h*, regulations requiring the surface casing be tested to the greater of 1500 psig, or 70% of the minimum internal yield.
  - a. The MASP for this well is calculated to be 1,364 psig, while the 70% yield rating is 2,065 psig.
  - b. Operator therefore requests approval to test the surface casing to the lesser value of 1,500 psig which is greater than the MASP value.
2. Operator requests a variance to *Onshore Oil and Gas Order 2, Item A*, regulations which outline test pressures for 3M pressure control systems.
  - a. The drilling contractor's standard inventory will consist of 3M pressure control systems; however, as cited above, the MASP for this well is calculated to be 1,364 psig. As such, 2M pressure control equipment is sufficient for the drilling of this well.
  - b. Operator therefore requests approval to test contractor's 3M BOPE to 2M pressure system standards. The double ram preventer will be tested to 2,000 psig, and the annular preventer will be tested to 1,500 psig. Safety valves and choke/kill valves and lines will all be tested to 2,000 psig.
3. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill only the surface hole to a depth of 350', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the

following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore”.

- a. Operator requests approval to use a diverter bowl rather than a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 300'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
- b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
- c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.
- d. Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

|  |  |
|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9<br><br>5. LEASE DESIGNATION AND SERIAL NUMBER:<br>UTU78235                              |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br><br>7. UNIT or CA AGREEMENT NAME:<br>GILSONITE DRAW   |
| 1. TYPE OF WELL<br>Gas Well  | 8. WELL NAME and NUMBER:<br>GDU 63-6-23  |
| 2. NAME OF OPERATOR:<br>VANTAGE ENERGY UINTA LLC   | 9. API NUMBER:<br>43013509050000   |
| 3. ADDRESS OF OPERATOR:<br>116 Inverness Drive East, Ste 107, Englewood, CO, 80112   | PHONE NUMBER:<br>303 386-8600 Ext  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2418 FNL 2480 FEL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U   | 9. FIELD and POOL or WILDCAT:<br>UNDESIGNATED<br><br>COUNTY:<br>DUCHESNE<br><br>STATE:<br>UTAH |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION  | TYPE OF ACTION  |  |   |
|---|---|--|---|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>6/18/2012<br><br><input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:<br><br><input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br><br><input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date: | <input type="checkbox"/> ACIDIZE<br><br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><br><input type="checkbox"/> CHANGE WELL STATUS<br><br><input type="checkbox"/> DEEPEN<br><br><input type="checkbox"/> OPERATOR CHANGE<br><br><input type="checkbox"/> PRODUCTION START OR RESUME<br><br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><br><input type="checkbox"/> TUBING REPAIR<br><br><input type="checkbox"/> WATER SHUTOFF<br><br><input type="checkbox"/> WILDCAT WELL DETERMINATION | <input checked="" type="checkbox"/> ALTER CASING<br><br><input type="checkbox"/> CHANGE TUBING<br><br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><br><input type="checkbox"/> FRACTURE TREAT<br><br><input type="checkbox"/> PLUG AND ABANDON<br><br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><br><input type="checkbox"/> VENT OR FLARE<br><br><input type="checkbox"/> SI TA STATUS EXTENSION<br><br><input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR<br><br><input type="checkbox"/> CHANGE WELL NAME<br><br><input type="checkbox"/> CONVERT WELL TYPE<br><br><input type="checkbox"/> NEW CONSTRUCTION<br><br><input type="checkbox"/> PLUG BACK<br><br><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION<br><br><input type="checkbox"/> TEMPORARY ABANDON<br><br><input type="checkbox"/> WATER DISPOSAL<br><br><input type="checkbox"/> APD EXTENSION<br><br>OTHER: <input style="width: 100px;" type="text"/> |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Requesting to change casing program. (see attached)

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 June 18, 2012**

|  |                                     |                              |
|--|-------------------------------------|------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>David F. Banko | <b>PHONE NUMBER</b><br>303 820-4480 | <b>TITLE</b><br>Permit Agent |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>6/8/2012             |                              |

**Vantage Energy Uinta LLC**  
**GDU 63-6-23**  
 2418' FNL, 2480' FEL  
 Sec. 6, T6S R3W  
 Duchesne County, Utah  
 Federal Lease UTU-78235

**NINE POINT DRILLING PROGRAM**

(All drilling procedures will comply with BLM *Onshore Oil and Gas Orders 1 and 2*)

**Operator respectfully requests that all information regarding this well be kept confidential.**

**a) GEOLOGIC MARKERS**

Anticipated tops of geologic markers are indicated in **Table 1**

**Table 1 Estimated Tops of Geologic Markers**

| Formation     | Vertical Depth | Measured Depth | Subsea Depth | Description                |
|---------------|----------------|----------------|--------------|----------------------------|
| Green River   | Surface        | Surface        | 6,975'       | Sandstone/siltstone/shale  |
| Garden Gulch  | 3,529'         | 3,582'         | 3,450'       | Sandstone/siltstone/shale  |
| Douglas Creek | 4,469'         | 4,532'         | 2,510'       | Sandstone/siltstone/shale  |
| Castle Peak   | 5,379'         | 5,442'         | 1,600'       | Sandstone/siltstone/shale  |
| Uteland Butte | 5,829'         | 5,892'         | 1,150'       | Carbonate/shale/sandstone  |
| Wasatch       | 6,059'         | 6,122'         | 920'         | Shale/sandstone            |
| Total Depth   | 6,200'         | 6,263'         | 779'         | TD ± 150' TVD into Wasatch |

Surface Elevation: 6,964' (Ground) 6,979' (Est. KB). Proposed Total Depth: 6,263' / 6,200' (MD/TVD)

**b) DEPTHS OF WATER AND MINERAL-BEARING ZONES**

Potential water-bearing zones in the vicinity include the Wasatch and Green River formations (Robson and Banta, 1995. *Ground Water Atlas of the United States Segment 2*, Hydrologic Investigations Atlas 730-C, U.S. Geological Survey, Reston, VA). A review of data from the Utah Division of Water Rights indicate no permitted water wells within a one mile radius of the proposed location. Utah Division of Oil, Gas, and Mining surface casing depth requirements will protect potential aquifers in the area.

The depths to potential water and/or mineral-bearing zones are indicated in **Table 2**.

**Table 2: Principal Anticipated Water and Mineral-bearing Zones**

| Formation    | Measured Depth | Subsea | Potential Contents       |
|--------------|----------------|--------|--------------------------|
| Green River  | Surface        | 6,975' | Surface – Possible Water |
| Garden Gulch | 3,582'         | 3,450' | Possible Water           |

|               |        |        |           |
|---------------|--------|--------|-----------|
| Douglas Creek | 4,532' | 2,510' | Oil / Gas |
| Castle Peak   | 5,442' | 1,600' | Oil / Gas |
| Uteland Butte | 5,892' | 1,150' | Oil / Gas |
| Wasatch       | 6,122' | 920'   | Oil / Gas |

### c) MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL EQUIPMENT

The maximum anticipated surface pressure for this well is calculated to be **1,364 psi**. Therefore, rules for a 2,000 psi rated BOP and choke manifold system are applicable. However, the typical rig inventory will consist of a 3,000 psi rated BOP and choke manifold. As such, the rig's BOP and choke manifold equipment will be tested to the standards for a 2,000 psi BOP system. A diagram of the proposed 2,000 psi rated BOP stack configuration is shown in **Fig. 1**.

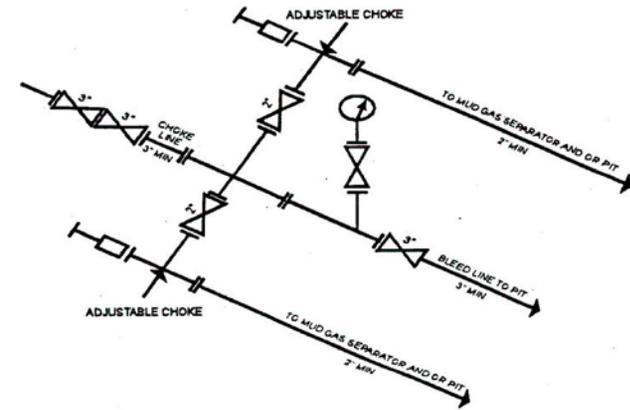
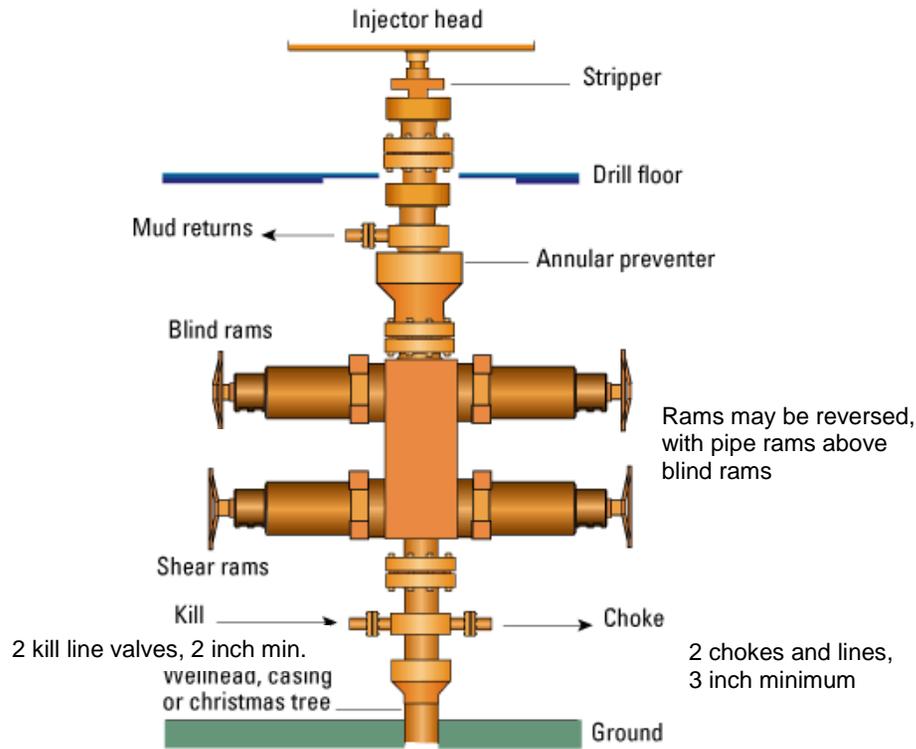
BOPs and choke manifold will be installed and pressure tested before drilling out from under surface casing (subsequent pressure tests will be performed whenever pressure seals are broken) and then will be checked daily as to mechanical operating condition. BOPs will be pressure tested at least once every 30 days. The annular preventer, pipe rams, and blind rams will be activated on each trip and Operator will conduct weekly BOP drills with the rig crew. Both manual and remote closing mechanisms will be installed on the BOP stack and will be readily available to the driller.

Ram type preventers and related pressure control equipment will be pressure tested to rated working pressure of the stack assembly if a test plug is used. If a plug is not used, the stack assembly will be tested to the rated working pressure of the stack assembly or to 70% of the minimum internal yield of the casing, whichever is less. **Please see variance request at end of program for this section.**

Annular type preventers will be pressure tested to 50% of their rated working pressure. A Sundry Notice (Form 3160~5), along with a copy of BOP test report, shall be submitted to the BLM within 5 working days following the test. All casings strings will be pressure tested to 0.22psi/ft or 1,500psi, whichever is greater, not to exceed 70% of internal yield. **Please see variance request at end of program for this section.**

**Figure 1: Pressure Control Schematic  
Operator and Well Name  
Location  
County and State**

**Generalized Setup for 2,000 psi Working Pressure System  
Actual BOP Stack Used May Vary in Some Details**



3M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY  
[54 FR 39528, Sept. 27, 1989]

**Installed BOP Stack Will Meet All Requirements of BLM Onshore Oil and Gas Order 2**

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with *Onshore Oil and Gas Order No. 2* for 2,000 psi systems. Irregardless of the rig selected, the rig's accumulator system shall have sufficient capacity to close all BOP equipment and retain 200 psi above precharge pressure. The proposed pressure control equipment will meet or exceed standards specified in the Order.

**d) CASING PROGRAM**

Casing of quality equal to or better than that indicated in **Tables 3 and 4** will be used for this well. Actual casing used will be dependent on availability.

**Table 3 Proposed Casing Program**

| Depth (MD) | Hole Diameter | Casing Diameter | Casing Weight and Grade               |
|------------|---------------|-----------------|---------------------------------------|
| 0 – ± 40'  | 20"           | 14"             | Optional Conductor – Only if Required |
| 0 – 500'   | 12 1/4"       | 8 5/8"          | 24# J55 ST&C, API New Pipe            |
| 0 – 6,263' | 7 7/8"        | 5 1/2"          | 15.5# K55 LT&C, API New Pipe          |

**Table 4: Proposed Casing Specifications and Design Safety Factors**

| Size                | Collapse (psi)   | Burst (psi) | Body Strength (1,000 lbs.) | Joint Strength (1,000 lbs.) | Thread | *Safety Factors    |                       |                      |
|---------------------|--|-------------|----------------------------|-----------------------------|--------|--------------------|-----------------------|----------------------|
|                     |  |             |                            |                             |        | Burst Design (1.2) | Collapse Design (1.0) | Tension Design (1.4) |
| 14"                 | NA – 0.219" wall structural and to seal shallow gravels to allow air drilling surface hole |             |                            |                             | Weld   | NA                 | NA                    | NA                   |
| 8 5/8"<br>24# J55   | 1,370  | 2,950       | 381                        | 244                         | ST&C   | 1.96               | 5.55                  | 4.26                 |
| 5 1/2"<br>15.5# J55 | 4,040  | 4,810       | 248                        | 217                         | LT&C   | 1.25               | 1.48                  | 1.62                 |

**\*Safety Factor Calculation Assumptions:****Surface Casing:**

**Burst Load:** Assumes greater of MASP (maximum anticipated surface pressure) exposure during a worse case kick scenario while drilling at total depth, with mud/gas mixture whose gradient is 0.22 psi/ft. OR, minimum required casing test pressure.

## MASP

$$\begin{aligned} \text{Load} &= (\text{Formation Gradient} - 0.22 \text{ psi/ft}) * \text{Total Depth, TVD} \\ &= (0.44 \text{ psi/ft} - 0.22 \text{ psi/ft}) * 6,200 \text{ ft.} \\ &= 1,364 \text{ psi} \end{aligned}$$

**TEST PRESSURE**

Load = Greater of 1,500 psig *or*  $0.22 \text{ psi/ft} * 300 \text{ ft} = 66 \text{ psig}$

Load = Greater of 1,500 psig *or* 1,364 psig *or* 66 psig

**SF Burst = 2,950 psi / 1,500 psi = 1.96**

**Collapse Load:** Assumes worse case loading of evacuated casing during cementing process.

Cement density = 15.8 ppg

Load =  $15.8 \text{ ppg} * 0.052 * 300 \text{ ft}$   
= 246.5 psi

**SF Collapse = 1370 psi / 246.5 psi = 5.55**

**Tension Load:** Assumes air weight at total depth + 50,000 lbs overpull design factor.

Load =  $(24 \text{ lbs/ft} * 300 \text{ ft}) + 50,000 \text{ lbs overpull}$   
= 57,200 lbs

**SF Tension = 244,000 lbs / 57,200 lbs = 4.26**

**Test Pressure =**

**Production Casing**

**Burst Load:** Assumes maximum load applied during the hydraulic fracture stimulations. It is Vantage Energy's policy not to exceed 80% rating of the production casing during the stimulation treatment. The 80% rating factor will also be the casing test pressure.

Load =  $4810 \text{ psi} * 0.80$   
= 3848 psi

**SF Burst = 4810 psi / 3848 psi = 1.25**

**Collapse Load:** Assumes worse case loading applied during the production cycle, with evacuated casing, and normally pressured formation gradient applied externally.

Load =  $0.44 \text{ psi/ft} * 6200 \text{ ft}$   
= 2728 psi

**SF Collapse = 4040 psi / 2728 psi = 1.48**

**Tension Load:** Assumes buoyed weight of casing at total depth + 50,000 lbs overpull design factor.

Load =  $[15.5 \text{ lbs/ft} * 6263 \text{ ft} * ((65.5 - 9.0) / 65.5)] + 50,000 \text{ lbs}$   
= 83,738 lbs + 50,000 lbs  
= 133,738 lbs

**SF Tension = 217,000 lbs / 133,738 lbs = 1.62**

**e) CEMENT PROGRAM****Table 5: Proposed Cement Program (Reference attached BJ Services Program)**

| Depth       | Hole Diameter | Casing Diameter | Cement   |
|-------------|---------------|-----------------|--|
| 0' – ± 40'  | 20"           | 14"             | Optional structural conductor if required: Grout with approximately 3.5 cubic yards of redi-mix back to surface (includes 100% excess)<br><br><b>TOC: Surface (Top-off per visual observation)</b>   |
| 0' – 300'   | 12 1/4"       | 8 5/8"          | <b><u>Single Slurry System (300' – Surface) + 40' Shoe Joint</u></b><br><br>225 sks Class G + 2% CaCl <sub>2</sub> + ¼ lb/sk celloflake.<br><br>Density: 15.8 ppg<br>Yield: 1.17 cuft/sk<br>Water: 5.0 gal/sk<br>Excess = 100% in open hole<br><br><b>TOC: Surface (Top-off per visual observation)</b>  |
| 0' - 6,263' | 7 7/8"        | 5 1/2"          | <b><u>Lead System (4,000' – 2,000')</u></b><br>129 sks Premium Lite II + 10% Gel + 10 lbs/sk gilsonite + 3% KCL + 0.5% Sodium Metasillicate + 5 lbs/sk CSE-2 + ¼ lb/sk celloflake + 3 lbs/sk Kol Seal + 0.5 lbs/sk Static Free + 0.002 gps FP-6L<br><br>Density: 11.0 ppg<br>Yield: 3.50 cuft/sk<br>Water: 21.4 gal/sk<br>*Excess: 30%<br><br><b><u>Tail System (6,263' – 4,000') + 40' Shoe Joint</u></b><br>413 sks 50:50 (Class G:Poz) + 2% gel + 3% KCL + 0.5% EC-1 + 0.15% R-3 + 0.3% Sodium Metasillicate + ¼ lb/sk celloflake + 0.05 lbs/sk Static Free + 0.002 gps FP-6L<br><br>Density: 14.4 ppg<br>Yield: 1.25 cuft/sk<br>Water: 5.48 gal/sk<br>*Excess: 30% |

\*Note: The production hole cement volume excess factor will be adjusted on location by the caliper log, and will be re-calculated using caliper volume + 10% excess factor.

**f) MUD PROGRAM**

The mud program for the proposed well is indicated in **Table 6**.

**Table 6 Proposed Mud Program (See attached Advantage mud program)**

| Interval (feet)                                | Mud Weight (lbs/gallon) | Viscosity (secs/qt) | Fluid Loss (ccs/30 min) | Mud Type      |
|--|-------------------------|---------------------|-------------------------|---------------|
| 0 – ± 40'                                      | NA                      | NA                  | NA                      | NA            |
| Set optional 14" conductor with bucket rig     |                         |                     |                         |               |
| 40' - 300'±                                    | NA                      | NA                  | N/C                     | Air/Mist      |
| Run/cement 8 5/8" surface casing               |                         |                     |                         |               |
| 300'± - 3,500'                                 | 8.3 – 8.9               | 28 – 48             | 10 - 18                 | FW / PHPA     |
| 3,500' - TD                                    | 8.4 – 8.9               | 34 – 58             | 8 - 10                  | 3% KCL / PHPA |
| Run Logs – Run/cement 5 1/2" production casing |                         |                     |                         |               |

Surface Hole Comments: Spud with “spudder rig” and air drill surface hole misting as may be required to assist with cuttings removal. Report any water encountered to the appropriate agencies. **Please see variance requests for this section.**

Production Hole Comments: Drill out surface casing with fresh water using pre-hydrated gel and PHPA polymer mud sweeps to assist with hole cleaning. At approximately 3,500' “mud up” and “close in” the fluid system to a 2-3% KCL base fluid. Use PHPA PAC and lignite for filtration control. Maintain fluid system through potential production zones to TD. Should seepage losses be experienced, control with LCM sweeps consisting of calcium carbonate, sawdust, cedar fiber, or mica.

Sufficient mud materials will be maintained on location to adequately maintain mud properties and control lost circulation zones that may be encountered. Monitoring equipment will be installed on site to detect changes in mud volume.

### g) LOGGING, CORING, AND TESTING PROGRAM

The proposed logging program is indicated in **Table 7**.

**Table 7 Proposed Logging Program**

| Log Suites            | Depth Range          | Remarks  |
|-----------------------|----------------------|--|
| DIL-SP-LD-CN          | Surface Casing to TD | Standard "triple combo" equivalent with resistivity-spontaneous potential, litho-density, compensated neutron, gamma ray, and caliper<br>Will pull GR to surface |
| Dipole Sonic          | ± 4,000' to TD       | Optional – Operator's discretion<br>Rock property data   |
| Rotary Sidewall Cores | ± 4,000' to TD       | Optional – Operator's discretion<br>PP/Lithology data (perm-porosity)  |

No coring or drill stem tests are planned. Mud logging unit will be operational from 200 feet above the Douglas Creek through total depth. Cuttings will be sampled every 20-30 feet.

Vantage Energy Uinta LLC

GDU 63-6-23, Drilling Program

Prospective zones from the Douglas Creek formation through total depth will be perforated, tested, and potentially acid-washed. It is anticipated that multi-stage hydraulic fracture stimulations of the reservoir will be required.

#### **h) ANTICIPATED PRESSURES AND HAZARDS**

No abnormal pressures are anticipated. Pressure gradient in the Green River and Wasatch sequence is expected to be sub-normal pressured to less than 0.44 psi/ft.

|  |  |
|--|--|
| Estimated BHP Douglas Creek (4,469')   | 1,966 psi  |
| Estimated BHP Wasatch (6,059')         | 2,666 psi  |
| Estimated BHP Total Depth (6,200')     | 2,728 psi  |
| Hydrostatic head of gas/mud column     | 0.22 psi/ft.                                     |
| <b>Maximum design surface pressure</b> | <b>0.44 – 0.22 psi/ft x 6,200 ft = 1,364 psi</b> |

No H<sub>2</sub>S zones are anticipated. Lost circulation can be encountered. A variety of sized lost circulation materials will be maintained on location in the event lost circulation is experienced. No abnormal lost circulation zones are anticipated. The proposed well is a southern extension test of producing wells in T5S-R3W. Abnormal pressures will not be experienced to the proposed depth in this area.

#### **i) DIRECTIONAL PROGRAM (See attached directional plan by Weatherford)**

The GDU 63-6-23 will be drilled as a directional well, with a bottom hole located in the center of SW¼ NE¼ Section 6, T6S-R3W on a 40-acre spacing pattern. The vertical section distance between the surface and the bottom hole is 665'. The bottom hole will be landed within a 200' radius target tolerance. The directional plan will consist of a build-and-drop “S” profile, with a planned KOP of 500', and a build/drop rate of 1.5°/100'.

The purpose of the directional well is to establish an “ideal” 40-acre drainage pattern for future development considerations.

#### **j) OTHER INFORMATION**

##### Contact Information and Personnel

##### Mailing Address

Vantage Energy Uinta LLC  
116 Inverness Drive, Suite 107  
Englewood, CO 80112  
Main Number: 303-386-8600  
Fax Number: 303-386-8700

Primary Contact: Seth Urruty

Office Direct: 303-386-8623

*Vantage Energy Uinta LLC*

*GDU 63-6-23, Drilling Program*

Fax Direct: 303-386-8723  
Mobile: 303-815-7678  
E-Mail: [Seth.Urruty@VantageEnergy.com](mailto:Seth.Urruty@VantageEnergy.com)

Drilling Operations: John Moran  
Office Direct: 303-386-8610  
Fax Direct: 303-386-8710  
Mobile: 303-249-2234  
E-Mail: [John.Moran@VantageEnergy.com](mailto:John.Moran@VantageEnergy.com)

Completion/Production Operations: Eric Burkhalter  
Office Direct: 303-386-8621  
Fax Direct: 303-386-8721  
Mobile: 817-480-5227  
E-Mail: [Eric.Burkhalter@VantageEnergy.com](mailto:Eric.Burkhalter@VantageEnergy.com)

Geologist: Karen Wagner  
Office Direct: 303-386-8626  
Fax Direct: 303-386-8726  
Mobile: 720-903-0740  
E-Mail: [Karen.Wagner@VantageEnergy.com](mailto:Karen.Wagner@VantageEnergy.com)

Landman: Michael Holland  
Office Direct: 303-386-8638  
Fax Direct: 303-386-8738  
Mobile: 303-396-3443  
E-Mail: [Michael.Holland@VantageEnergy.com](mailto:Michael.Holland@VantageEnergy.com)

**START DATE AND DURATION OF ACTIVITIES****Anticipated start date**

The drilling operations will commence as soon as possible following contracting of drilling rig and in compliance with restrictions imposed by lease stipulations and/or Conditions of Approval. It is therefore anticipated the access upgrade work and location work would commence on or about June 15, 2011, with a target spud date of July 1, 2011. It is anticipated the drilling phase will require 7 days.

**Completion**

The well pad will be of sufficient size to accommodate all required completion equipment and activities. It is anticipated select intervals will be perforated, stimulated and adequately tested for the presence of commercial hydrocarbons prior to moving uphole to the next prospective test interval. As such, it is anticipated the completion phase will require 45 days.

The total project duration is therefore estimated to be **52 days**, and therefore anticipated to be concluded on or about August 21, 2011.

A string of 2 7/8 inch 6.5 lb/ft. J-55 tubing would be run as the production tubing. A Sundry Notice will be submitted should there be any changes to the proposed completion program.

**VARIANCE REQUESTS**

1. Operator requests a variance to *Onshore Oil and Gas Order 2, Item B, No. 1h*, regulations requiring the surface casing be tested to the greater of 1500 psig, or 70% of the minimum internal yield.
  - a. The MASP for this well is calculated to be 1,364 psig, while the 70% yield rating is 2,065 psig.
  - b. Operator therefore requests approval to test the surface casing to the lesser value of 1,500 psig which is greater than the MASP value.
2. Operator requests a variance to *Onshore Oil and Gas Order 2, Item A*, regulations which outline test pressures for 3M pressure control systems.
  - a. The drilling contractor's standard inventory will consist of 3M pressure control systems; however, as cited above, the MASP for this well is calculated to be 1,364 psig. As such, 2M pressure control equipment is sufficient for the drilling of this well.
  - b. Operator therefore requests approval to test contractor's 3M BOPE to 2M pressure system standards. The double ram preventer will be tested to 2,000 psig, and the annular preventer will be tested to 1,500 psig. Safety valves and choke/kill valves and lines will all be tested to 2,000 psig.
3. Operator requests a variance to *Onshore Oil and Gas Order 2, Item E*, regulations for air/gas drilling operations. Operator plans to drill only the surface hole to a depth of 350', with a "spud rig", in a separate operation from the drilling rig. No hydrocarbons are present in the surface hole section and therefore, "gas" drilling is not applicable to this hole section. Therefore, for the purpose only of drilling the surface hole with an air rig, Operator requests the following four (4) variances from the order that states "...the

following equipment shall be in place and operational during air/gas drilling: (1) properly lubricated and maintained rotating head; (2) blooie line discharge one hundred feet (100') from wellbore; (3) automatic igniter or continuous pilot light on the blooie line; and (4) compressor located...a minimum of 100 feet (100') from the wellbore”.

- a. Operator requests approval to use a diverter bowl rather than a rotating head as specified in the Order. The diverter bowl forces air and cuttings to the reserve pit and is only used to drill the surface hole (to a total depth of 300'). The surface hole section is non-hydrocarbon bearing, and therefore formation pressures will not require a pressure rated rotating head. Should water flows be encountered, they will be reported to the appropriate agencies.
- b. Operator requests approval to use a blooie line with a discharge length of less than the required one hundred feet (100') from the wellbore in order to minimize the well pad size, and to direct the cuttings into the reserve pit. The wellbore is to be located approximately thirty-five feet (35') from the reserve pit which is to be seventy feet (70') wide. Therefore, a one hundred foot (100') blooie line would blow cuttings across the reserve pit. The requested length of blooie line to drill the surface hole is thirty-five feet (35'). This is the distance necessary to reach the edge of the reserve pit, and to therefore direct cuttings into the reserve pit in a safe and efficient manner.
- c. Operator requests approval to operate without an automatic igniter or continuous pilot light on the blooie line. The surface hole section is non-hydrocarbon bearing and therefore does not require a continuous ignition source.
- d. Operator requests approval to use a trailer mounted air compressor located less than one hundred feet (100') from the wellbore in order to minimize the location size. The compressor will be located fifty feet (50') from the wellbore in an opposite direction of the blooie line. The compressor has the following safety features: (1) shut-off valve on the trailer located approximately fifteen feet (15') from the air rig; (2) pressure relief valve on the compressor; and (3) spark arrestors on the motors. The compressor will only be used for the drilling of the surface hole, which is non-hydrocarbon bearing.

RECEIVED

MAR 18 2011

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JUL 11 2012

DIV. OF OIL, GAS & MINING

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

|   |  |  |  |
|---|--|--|--|
| 1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER  |  | 5. Lease Serial No.<br>UTU78235  |  |
| 1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone |  | 6. If Indian, Allottee or Tribe Name<br>---                              |  |
| 2. Name of Operator<br><b>Vantage Energy Uinta LLC</b>  |  | 7. If Unit or CA Agreement, Name and No.<br>Gilsonite Draw Uni UTU86249X |  |
| E-mail: mark.rothenberg@vantageenergy.com   |  | 8. Lease Name and Well No.<br>GDU 63-6-23                                |  |
| Contact: Mark Rothenberg  |  | 9. API Well No.<br>43-013-50905  |  |
| 3a. Address<br>116 Inverness Drive East, Suite 107<br>Englewood CO 80112  |  | 10. Field and Pool, or Exploratory<br>Wildcat                            |  |
| 3b. Phone No. (include area code)<br>303-386-8600   |  | 11. Sec., T., R., M., or Blk. and Survey or Area<br>Sec. 6 T 6S R 3W     |  |
| 4. Location of Well (Report location clearly and in accordance with any State Requirements.)*<br>At surface 2,418' FNL 2,480' FEL SW 1/4 NE 1/4<br>Lat: 39.989272 Long: 110.265075                                    |  | Meridian: U.S.B. PM  |  |
| At proposed production zone ±1,980' FNL ±1,980' FEL (SW/4NE/4)  |  | 12. County or parish<br>Duchesne   |  |
| 14. Distance in miles and direction from nearest town or post office. *<br>Location is ±14.5 miles south of Bridgeland, Utah.   |  | 13. State<br>Utah  |  |
| 15. Distance from proposed location to nearest property or lease line, ft. (Also nearest Drig, unit line, if any)<br>Unit= ±1,980'<br>Lease= ±1,980'  | 16. No. of acres in lease<br>2,250.5                   | 17. Spacing Unit dedicated to this well<br>160                           |  |
| 18. Distance from proposed location* to nearest well, drilling, completed or applied for, on this lease, ft.<br>GDU 63-5-11<br>± 4,335'   | 19. Proposed depth<br>6,200' TVD                       | 20. BLM/BIA Bond No. on file<br>LPM8907971 / UTB000288                   |  |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.)<br>6,965' GR  | 22. Approximate date work will start *<br>May 31, 2011 | 23. Estimated duration<br>45-60 days drig + completion                   |  |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>1. Well plat certified by a registered surveyor.</li> <li>2. A Drilling Plan.</li> <li>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).</li> </ul> | <ul style="list-style-type: none"> <li>4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).</li> <li>5. Operator certification.</li> <li>6. Such other site specific information and/or plans as may be required by the BLM.</li> </ul> |
|---|--|

|                          |                                       |                        |
|--------------------------|---------------------------------------|------------------------|
| 25. Signature<br>        | Name (Printed/Typed)<br>John J. Moran | Date<br>March 16, 2011 |
| Title<br>Senior Engineer | Vantage Energy Uinta LLC              |                        |

|   |                                       |                     |
|---|---------------------------------------|---------------------|
| Approved by (Signature)<br>                                   | Name (Printed/Typed)<br>Jerry Kenczka | Date<br>JUL 05 2012 |
| Title<br>Assistant Field Manager<br>Lands & Mineral Resources | Office<br>VERNAL FIELD OFFICE         |                     |

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(continued on page 2)

\*(Instructions on page 3)

NOS posted 12/27/2010

AFMSS# 11SX50184AE

UDOGM

NOTICE OF APPROVAL



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Vantage Energy Uinta LLC  
Well No: GDU 63-6-23  
API No: 43-013-50905

Location: SWNE, Sec. 6, T6S, R3W  
Lease No: UTU-78235  
Agreement: Gilsonite Draw Unit

**BLM OFFICE NUMBER: (435) 781-4400**  
**Forest Service Number: (435) 790-3924**

**BLM OFFICE FAX NO.: (435) 781-3420**  
**Forest Service Fax No.: (435) 781-5215**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

|  |   |
|--|---|
| Location Construction<br>(Notify Forest Service Environmental Scientist Sherry Fountain) | - Forty-Eight (48) hours prior to construction of location and access roads.  |
| Location Completion<br>(Notify Forest Service Environmental Scientist Sherry Fountain)   | - Prior to moving on the drilling rig.  |
| Spud Notice<br>(Notify Petroleum Engineer)   | - Twenty-Four (24) hours prior to spudding the well.  |
| Casing String & Cementing<br>(Notify Supv. Petroleum Tech.)                              | - Twenty-Four (24) hours prior to running casing and cementing all casing strings to:<br><a href="mailto:blm_ut_vn_opreport@blm.gov">blm ut vn opreport@blm.gov</a> |
| BOP & Related Equipment Tests<br>(Notify Supv. Petroleum Tech.)                          | - Twenty-Four (24) hours prior to initiating pressure tests.  |
| First Production Notice<br>(Notify Petroleum Engineer)                                   | - Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.                      |

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**Well Numbers: GDU 63-6-23 (all USFS surface)**

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.

**Additional Conditions of Approval:**

**Vantage 2011 CE Project - Required Mitigations and Design Elements**

Compiled by David Herron (USFS), June 26, 2012

As part of the approval decision for the Vantage 2011 CE Project, the following mitigations and conditions of approval are being required. These conditions are in addition to the design elements and mitigations already incorporated within lease stipulations, and within the Surface Use Plan of Operations affected by the decision for this project.

General

- Production equipment will be painted to better blend-in with the surrounding area. The specific color for each well site to be determined and provided by the Forest Service.
- Wells Final reclamation will occur after a well is no longer productive. Each well will be plugged, capped, and all surface equipment (including surface pipelines) will be removed at the end of its productive life.
- When no longer needed for project-related activities, each well pad will be recontoured to mimic the adjacent natural topography using heavy equipment, and previously salvaged soil material would be spread over the surface of the pad site. The reclaimed surface will then be reseeded with vegetation (seed mix would be determined by the Forest Service) and will generally mimic native vegetation surrounding the specific well site. Sufficient erosion control is assured when adequate groundcover is reestablished, water naturally infiltrates into the soil, and gullying, head-cutting, slumping, and deep or excessive rilling are not observed.
- Consider use of closed loop drilling systems, to eliminate the need for reserve pits, reduce closure and waste management costs, and reduce potential for contamination from leaking.

### Wildlife

- No drilling activities would occur between November 15 and April 1, to protect elk during the critical winter period.
- Netting will be placed over reserve pits, and reserve pit areas will be fenced, to minimize impacts to birds, bats, and other wildlife.
- Pump jacks will be equipped with high grade mufflers, to reduce noise impacts to wildlife and Forest visitors.

### Air Quality

- The Operator will use drill rigs that meet EPA Tier II emission standards or better.
- The Operator will install pump jack engines that meet the applicable New Source Performance Standards (NSPS) emission limits for pump jack engines.
- Reduce fugitive dust from roads by observing speed limits, and applying water to the roads as needed. Water for this purpose will be fresh water, not production water from oil and gas wells. If water application does not adequately reduce fugitive dust, the use of magnesium chloride (MgCl) or other dust suppression methods would be considered; however, MgCl should not be applied within 100 feet of perennial streams, wetlands, springs, wet areas, or ambient water.

### Soil and Water Resources

- To prevent erosion of disturbed soils, vegetation and/or structural measures to control erosion will be implemented as soon as possible after initial soil disturbance.
- The Operator will promptly revegetate all disturbed areas not necessary for future operations, including well pad fill slopes, with a Forest Service-approved seed mixture. Revegetation would commence immediately after construction, or immediately after the disturbed area is reclaimed or no longer needed for future operations.
- Engineering practices will be implemented as needed to control erosion from disturbed surfaces. Such engineering measures may include straw bales, silt fences, mulching, use of fiber mats, cross slope trenching, contour furrows, rock dams, terracing, or other erosion control practices as deemed necessary by the Forest Service.
- Reserve pits will be lined with a 20-mil pit liner on top of a protective felt layer to minimize the potential for leaks of pit fluids.

## Roads and Pipelines

- Placement of gas pipelines will be coordinated with Forest Service cultural resources staff, before placement occurs, to ensure that pipeline routes do not impact cultural resource sites.
- Gas gathering pipelines will be located in the 35-foot right-of-way along access roads, except as needed on a site-specific basis to resolve safety concerns, or to comply with other resource mitigation measures.
- All roads constructed by the Operator will be closed to public motorized use through the use of Forest Service approved signs and gates.
- Road drainage crossings will be of the typical dry creek drainage crossing type. Crossings will be designed so they would not cause headcutting, siltation, or accumulation of debris in the channel, and so drainages will not be blocked by the roadbed. Open/low water crossings may require improvement by hardening with rock base. Where culvert crossings are deemed necessary, culverts would be sized according to Forest Service engineer and hydrologist direction.
- All new and existing access roads associated with this project will be maintained and kept in good repair during drilling, completion, and producing operations. Road maintenance will include grading, maintaining drainage, watering (as needed), fixing mud holes, cleaning cattle guards, snow removal, sign maintenance (for signs associated with oil and gas wells or development), etc. Snow removal will be done in a manner approved by the Forest Service in order to reduce road surface loss and erosion.
- New road construction will be the minimum necessary for safely conducting the approved activity. When no longer required for this project, new roads will be closed by re-contouring to match local topography, scarification and reseeded.
- New access roads and surface-disturbing activities will conform to the BLM Gold Book (BLM 2007) standards and/or Forest Service specifications.
- Graveling or capping the roadbed will be performed as necessary to provide a well-constructed, safe road.
- Appropriate water control structures for roads will be installed to control erosion.
- Contractors and employees are required to comply with all posted speed limits.
- All construction/operations traffic and vehicles will be confined to the approved road ROW and any additional areas as specified in an approved APD. No cross-country travel by vehicles will be allowed.

## Range

- Fence well pads, as needed and as determined by the Forest Service, to prevent cattle from entering well pad areas.

- Fences and cattle guards damaged by project-related equipment or vehicles will be promptly repaired.
- Construction vehicles and equipment will be cleaned, power-washed, and free of soil and vegetation debris prior to entry and use of access roads to prevent transporting weed seeds.
- All seed mixtures, erosion control materials, and reclamation materials will be certified weed free.
- The Operator will implement a weed control program to identify and control weeds within and adjacent to project-related road and facilities. The Operator will reseed all portions of well pads and disturbed road and pipeline ROWs not utilized for the operational phase of the project. Reseeding will be accomplished using a Forest Service approved seed mixture. Post-construction seeding applications will continue until determined successful by the Forest Service. Weed control will be conducted through an approved Pesticide Use and Weed Control Plan. Weed monitoring and reclamation measures will be continued on an annual basis (or as frequently as the AO determines) throughout the LOP. Herbicides shall be selected from those approved for use on the ANF.

#### Cultural Resources

- All personnel, subcontractors, and consultants associated with the project will refrain from collecting, damaging, or impacting cultural resources on the Forest.
- If cultural resources are inadvertently discovered, construction activities will be halted within 100 feet of the discovery and the Forest Service notified. Operations in the area of the discovery will not resume until authorization to proceed has been received from the Forest Service.

#### Paleontological Resources

- Paleontological monitoring of surface-disturbing activities (road and well pad construction) will be required for these sites. Paleontological monitoring may involve concurrent observation of all construction activities within a given construction area, or may consist of periodic spot-checking and salvage of observed fossil resources, as determined by the Forest Service on a case-by-case basis.
- Any significant fossils identified during paleontological surveys or monitoring efforts will be collected by a qualified paleontologist, properly documented, and transferred to a Forest Service-approved paleontological repository for curation.
- If significant paleontological resources are discovered, construction activities would be halted and the Forest Service notified. Ground disturbing operations in the area of the discovery would not resume until authorization to proceed has been received from the Forest Service.

(end of document)

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- Additional cement required, for Cementing Program covering Production Casing strings. Top of cement for Production Casing string Cementing Program is Surface.
- Production casing cement shall be brought up and into the surface.
- Surface casing cement shall be brought to surface.
- A variance is granted for Onshore Order #2 Drilling Operations III. E. "Blooie line discharge 100 feet from well bore and securely anchored." Blooie line can be 35 feet. All requirements will be adhered to covering air/gas drilling operations as described in Onshore Order #2 III. E. 1. Drilling Operations, Special Drilling Operations, air/gas drilling.
- For the daily drilling report, covering air/gas drilling operations on the first day (when the surface hole is first drilled), operator shall note in the report the volume of water in units of barrels out on location, stored in pits-tanks.
- A BOPE system rated at 2M is the requirement, per the specifications of Onshore Order #2. The BOPE equipment shall be tested to 2M BOPE test requirements.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to [BLM\\_UT\\_VN\\_Welllogs@BLM.gov](mailto:BLM_UT_VN_Welllogs@BLM.gov). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9<br><br><b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b><br>UTU78235   |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7.UNIT or CA AGREEMENT NAME:</b><br>GILSONITE DRAW           |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>GDU 63-6-23  |
| <b>2. NAME OF OPERATOR:</b><br>VANTAGE ENERGY UINTA LLC  | <b>9. API NUMBER:</b><br>43013509050000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>116 Inverness Drive East, Ste 107 , Englewood , CO, 80112  | <b>PHONE NUMBER:</b><br>303 386-8600 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>2418 FNL 2480 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U  | <b>9. FIELD and POOL or WILDCAT:</b><br>UNDESIGNATED<br><br><b>COUNTY:</b><br>DUCHESNE<br><br><b>STATE:</b><br>UTAH |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION   |   |   |
|--|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT<br>Approximate date work will start: | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> SUBSEQUENT REPORT<br>Date of Work Completion:         | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input checked="" type="checkbox"/> SPUD REPORT<br>Date of Spud:<br>7/30/2012  | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input type="checkbox"/> DRILLING REPORT<br>Report Date:                       | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|  | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|  | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|  | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|  | <input type="checkbox"/> TUBING REPAIR                 | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|  | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|  | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input type="checkbox"/> OTHER                          | OTHER: <input style="width: 100px;" type="text"/>       |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Vantage Energy Uinta LLC (Vantage) intends to spud the above referenced well on Monday July 30, 2012 at approximately 9:00 am.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**

**FOR RECORD ONLY**

August 02, 2012

|  |                                     |                              |
|--|-------------------------------------|------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>David F. Banko | <b>PHONE NUMBER</b><br>303 820-4480 | <b>TITLE</b><br>Permit Agent |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>7/27/2012            |                              |

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: Vantage Energy Uinta LLC Operator Account Number: N 3295  
 Address: 116 Inverness Drive East, Suite 107  
city Englewood  
state CO zip 80112 Phone Number: (303) 386-8600

**Well 1**

| API Number  | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County   |
|---|-----------------------|-------------------|-----------|-----|----------------------------------|-----|----------|
| 4301350905  | GDU 63-6-23           |                   | SWNE      | 6   | 06S                              | 30W | Duchesne |
| Action Code   | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |          |
| A   | new                   | 18699             | 7/30/12   |     | 8/30/2012                        |     |          |
| <b>Comments:</b> This is a new well spud on 07/30/2012.<br>BHL: SWNE WSIC |                       |                   |           |     |                                  |     |          |

**Well 2**

| API Number       | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County |
|------------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
|                  |                       |                   |           |     |                                  |     |        |
| Action Code      | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |        |
|                  |                       |                   |           |     |                                  |     |        |
| <b>Comments:</b> |                       |                   |           |     |                                  |     |        |

**Well 3**

| API Number       | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County |
|------------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
|                  |                       |                   |           |     |                                  |     |        |
| Action Code      | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |        |
|                  |                       |                   |           |     |                                  |     |        |
| <b>Comments:</b> |                       |                   |           |     |                                  |     |        |

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Kimberly J. Rodell

Name (Please Print)

*Kimberly J. Rodell*  
Signature

Permit Agent

8/28/2012

Title

Date

**RECEIVED**

**AUG 29 2012**

Div. of Oil, Gas & Mining

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Aztec # 673  
Submitted By Kenny Gray Phone Number 970-361-3271  
Well Name/Number GDU 63-6-23  
Qtr/Qtr SW/NE Section 6 Township 6S Range 3W  
Lease Serial Number UTU-78235  
API Number 43-013-50905

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time \_\_\_\_\_ AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

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SEP 05 2012

DIV. OF OIL, GAS & MINING

Date/Time 09/06/2012 11:00 AM  PM

Remarks \_\_\_\_\_  
\_\_\_\_\_

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9<br><br><b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b><br>UTU78235   |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7.UNIT or CA AGREEMENT NAME:</b><br>GILSONITE DRAW           |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>GDU 63-6-23  |
| <b>2. NAME OF OPERATOR:</b><br>VANTAGE ENERGY UINTA LLC  | <b>9. API NUMBER:</b><br>43013509050000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>116 Inverness Drive East, Ste 107 , Englewood , CO, 80112  | <b>PHONE NUMBER:</b><br>303 386-8600 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>2418 FNL 2480 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U  | <b>9. FIELD and POOL or WILDCAT:</b><br>UNDESIGNATED<br><br><b>COUNTY:</b><br>DUCHESNE<br><br><b>STATE:</b><br>UTAH |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION  | TYPE OF ACTION   |   |   |
|---|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT<br>Approximate date work will start:                | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>Date of Work Completion:<br>9/6/2012 | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> SPUD REPORT<br>Date of Spud:   | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input type="checkbox"/> DRILLING REPORT<br>Report Date:                                      | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|   | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|   | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|   | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|   | <input type="checkbox"/> TUBING REPAIR                 | <input type="checkbox"/> VENT OR FLARE                  | <input type="checkbox"/> WATER DISPOSAL                 |
|   | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|   | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input checked="" type="checkbox"/> OTHER               | OTHER: <input type="text" value="BOPE Test"/>           |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted to notify Utah Division of Oil, Gas and Mining that the BOP was tested on 09/06/2012 at 11:00 A.M. Per a phone call with Rachel Medina on 09/06/2012, it is understood that UDOGM requires 24 hour notice prior to testing. For future testing, we will notify UDOGM prior to the testing. Please contact the undersigned with any questions. Thank you.

**Accepted by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 September 12, 2012

|  |                                     |                              |
|--|-------------------------------------|------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>David F. Banko | <b>PHONE NUMBER</b><br>303 820-4480 | <b>TITLE</b><br>Permit Agent |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>9/6/2012             |                              |

CONFIDENTIAL

**From:** Kenny <kennethkennygray@aol.com>  
**To:** <caroldaniels@utah.gov>, <rjurado@pgei.com>, <blm\_ut\_vn\_opreport@blm.gov...>  
**CC:** <ltorkelson@pgei.com>  
**Date:** 9/10/2012 10:43 AM  
**Subject:** Re Send Of BOP Test Notification GDU 63-6-23  
**Attachments:** 09-10-2012 Re Send Of BOP Test Notif..PDF

This is a re-send of the BOP test notification sent on 9/6/2012,  
Operator Changed From Petroglyph to Vantage Energy Unita LLC.  
Thank You  
Kenny

Kenneth R Gray  
Drilling Supervisor  
C bar K Oil & Gas Consulting Inc.  
806 N. Gurley Ave. # 4. Gillette, Wyo. 82716  
Aztec # 673 Ph. # 970-361-3271  
Cell Ph. # 307-315-3213  
Gillette Office Ph. # 307-257-2774  
kennethkennygray@aol.com  
krg4211@g-mail.com

43 013 50905  
6S 3W 6

RECEIVED  
SEP 11 2012  
DIV. OF OIL, GAS & MINING

BLM - Vernal Field Office - Notification Form

Operator Vantage Energy Unita LLC Rig Name/# Aztec 673  
Submitted By Kenny Gray Phone Number 970-361-3271  
Well Name/Number GDU 63-6-23  
Qtr/Qtr SW/NE Section 6 Township 6S Range R3W  
Lease Serial Number UTU 78235  
API Number 43-013-50905

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

RECEIVED  
SEP 11 2012  
DIV. OF OIL, GAS & MINING

Date/Time \_\_\_\_\_ AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time 09/06/2012 11:00 AM  PM

Remarks ReSend Operator Vantage Energy Unita LLC

BLM - Vernal Field Office - Notification Form

Operator Vantage Energy Rig Name/# Aztec 673  
Submitted By Kenny Gray Phone Number 970-361-3271  
Well Name/Number GDU 63-6-23  
Qtr/Qtr SW/NE Section 6 Township 6S Range 3W  
Lease Serial Number UTU 78235  
API Number 43-013-50905

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time \_\_\_\_\_ AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

RECEIVED  
SEP 11 2012  
DIV. OF OIL, GAS & MINING

Date/Time 09/11/2012 3:00 AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM  PM

Remarks 5 1/2" Production Csg

|  |  |
|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9<br><br>5. LEASE DESIGNATION AND SERIAL NUMBER:<br>UTU78235                              |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br><br>7. UNIT or CA AGREEMENT NAME:<br>GILSONITE DRAW   |
| 1. TYPE OF WELL<br>Gas Well  | 8. WELL NAME and NUMBER:<br>GDU 63-6-23  |
| 2. NAME OF OPERATOR:<br>VANTAGE ENERGY UINTA LLC   | 9. API NUMBER:<br>43013509050000   |
| 3. ADDRESS OF OPERATOR:<br>116 Inverness Drive East, Ste 107, Englewood, CO, 80112   | PHONE NUMBER:<br>303 386-8600 Ext  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2418 FNL 2480 FEL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U   | 9. FIELD and POOL or WILDCAT:<br>UNDESIGNATED<br><br>COUNTY:<br>DUCHESNE<br><br>STATE:<br>UTAH |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION   |   |   |
|--|--|---|---|
| <input type="checkbox"/> NOTICE OF INTENT<br>Approximate date work will start:                 | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>Date of Work Completion:<br>10/9/2012 | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> SPUD REPORT<br>Date of Spud:  | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> CONVERT WELL TYPE              |
| <input type="checkbox"/> DRILLING REPORT<br>Report Date:                                       | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|  | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|  | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|  | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|  | <input type="checkbox"/> TUBING REPAIR                 | <input checked="" type="checkbox"/> VENT OR FLARE       | <input type="checkbox"/> WATER DISPOSAL                 |
|  | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|  | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input type="checkbox"/> OTHER                          | OTHER: <input style="width: 100px;" type="text"/>       |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being filed to notify the Utah Division of Oil, Gas, and Mining that Vantage Energy Uinta LLC began flaring/venting gas on October 9, 2012 for the above referenced well. The well is currently flowing to an open top tank, with gas being vented to allow the well to clean. Vantage anticipates production of the well in this current state for at least two (2) days. Thank you.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining**

Date: October 29, 2012

By: *David F. Banko*

|                                       |                              |                       |
|---------------------------------------|------------------------------|-----------------------|
| NAME (PLEASE PRINT)<br>David F. Banko | PHONE NUMBER<br>303 820-4480 | TITLE<br>Permit Agent |
| SIGNATURE<br>N/A                      | DATE<br>10/12/2012           |                       |

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: Vantage Energy Uinta LLC Operator Account Number: N 3295  
 Address: 116 Inverness Drive East, Suite 107  
city Englewood  
state CO zip 80112 Phone Number: (303) 386-8600

**Well 1**

| API Number  | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County   |
|---|-----------------------|-------------------|-----------|-----|----------------------------------|-----|----------|
| 4301350905  | GDU 63-6-23           |                   | SWNE      | 6   | 6S                               | 3W  | Duchesne |
| Action Code   | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |          |
| A   | 18699                 | 18699             | 7/30/2012 |     | 10/9/2012                        |     |          |
| Comments: <u>GR-WS BHL: SWNE 11/29/2012</u> <b>CONFIDENTIAL</b> |                       |                   |           |     |                                  |     |          |

**Well 2**

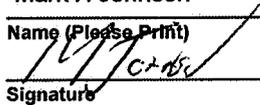
| API Number  | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County |
|-------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
|             |                       |                   |           |     |                                  |     |        |
| Action Code | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |        |
|             |                       |                   |           |     |                                  |     |        |
| Comments:   |                       |                   |           |     |                                  |     |        |

**Well 3**

| API Number  | Well Name             |                   | QQ        | Sec | Twp                              | Rng | County |
|-------------|-----------------------|-------------------|-----------|-----|----------------------------------|-----|--------|
|             |                       |                   |           |     |                                  |     |        |
| Action Code | Current Entity Number | New Entity Number | Spud Date |     | Entity Assignment Effective Date |     |        |
|             |                       |                   |           |     |                                  |     |        |
| Comments:   |                       |                   |           |     |                                  |     |        |

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Mark H Johnson  
 Name (Please Print) \_\_\_\_\_  
  
 Signature \_\_\_\_\_  
 Engineer \_\_\_\_\_ 11/29/2012  
 Title \_\_\_\_\_ Date \_\_\_\_\_

**RECEIVED**

**NOV 29 2012**

Div. of Oil, Gas & Mining

|  |  |
|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9<br><br>5. LEASE DESIGNATION AND SERIAL NUMBER:<br>UTU78235                            |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:<br><br>7. UNIT or CA AGREEMENT NAME:<br>GILSONITE DRAW |
| 1. TYPE OF WELL<br>Oil Well  | 8. WELL NAME and NUMBER:<br>GDU 63-6-23  |
| 2. NAME OF OPERATOR:<br>VANTAGE ENERGY UINTA LLC   | 9. API NUMBER:<br>43013509050000   |
| 3. ADDRESS OF OPERATOR:<br>116 Inverness Drive East, Ste 107, Englewood, CO, 80112   | PHONE NUMBER:<br>303 386-8600 Ext  |
| 9. FIELD and POOL or WILDCAT:<br>UNDESIGNATED  |  |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>2418 FNL 2480 FEL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U   | COUNTY:<br>DUCHESNE<br><br>STATE:<br>UTAH  |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION  |  |   |
|--|---|--|---|
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>Approximate date work will start:<br>12/13/2012<br><br><input type="checkbox"/> SUBSEQUENT REPORT<br>Date of Work Completion:<br><br><input type="checkbox"/> SPUD REPORT<br>Date of Spud:<br><br><input type="checkbox"/> DRILLING REPORT<br>Report Date: | <input type="checkbox"/> ACIDIZE<br><br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><br><input type="checkbox"/> CHANGE WELL STATUS<br><br><input type="checkbox"/> DEEPEN<br><br><input type="checkbox"/> OPERATOR CHANGE<br><br><input type="checkbox"/> PRODUCTION START OR RESUME<br><br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><br><input type="checkbox"/> TUBING REPAIR<br><br><input type="checkbox"/> WATER SHUTOFF<br><br><input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING<br><br><input type="checkbox"/> CHANGE TUBING<br><br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><br><input type="checkbox"/> FRACTURE TREAT<br><br><input type="checkbox"/> PLUG AND ABANDON<br><br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><br><input checked="" type="checkbox"/> VENT OR FLARE<br><br><input type="checkbox"/> SI TA STATUS EXTENSION<br><br><input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR<br><br><input type="checkbox"/> CHANGE WELL NAME<br><br><input type="checkbox"/> CONVERT WELL TYPE<br><br><input type="checkbox"/> NEW CONSTRUCTION<br><br><input type="checkbox"/> PLUG BACK<br><br><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION<br><br><input type="checkbox"/> TEMPORARY ABANDON<br><br><input type="checkbox"/> WATER DISPOSAL<br><br><input type="checkbox"/> APD EXTENSION<br><br>OTHER: <input style="width: 100px;" type="text"/> |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted to the Utah Division of Oil, Gas and Mining (UDGOM) on behalf of Vantage Energy Uinta LLC (Vantage). Vantage is requesting authorization to continue to vent/flare the referenced well through the end of January 2013 or until a gas gathering agreement has been finalized with Petroglyph. Estimated venting volumes are 50 MCF/day. Vantage is continuing to negotiate a gas gathering agreement with Petroglyph. The process is taking longer than anticipated. A tribal Right-of-Way (ROW) is necessary prior to finalizing the agreement. Vantage and Petroglyph are waiting for the approved ROW for finalization of the agreement. Vantage is requesting this extension through January 2013 due to holiday schedules or until a gas gathering agreement can be finalized. UDOGGM will be updated on the progress of this situation.

**Accepted by the Utah Division of Oil, Gas and Mining**

Date: December 20, 2012

By: *David F. Banko*

|                                       |                              |                       |
|---------------------------------------|------------------------------|-----------------------|
| NAME (PLEASE PRINT)<br>David F. Banko | PHONE NUMBER<br>303 820-4480 | TITLE<br>Permit Agent |
| SIGNATURE<br>N/A                      | DATE<br>12/13/2012           |                       |



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices**

**Sundry Conditions of Approval Well Number 43013509050000**

**Per R649-3-20, flaring of up to 1800 mcf/month of gas from an oil well is allowed without approval. This well appears to be under that threshold. If amounts go above that amount on a monthly basis beyond January 2013, then further approval would be necessary.**

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

CONFIDENTIAL  
FORM 8  
5. LEASE OR SIGNATURE NO. AND SERIAL NUMBER:  
UTU7825  
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  
7. UNIT or CA AGREEMENT NAME  
Gilsonite Draw - UTU86249X  
8. WELL NAME and NUMBER:  
GDU 63-6-23  
9. API NUMBER:  
4301350905  
10. FIELD AND POOL, OR WILDCAT  
Wildcat  
11. QTR/QTR, SECTION, TOWNSHIP, RANGE,  
MERIDIAN:  
SWNE 6 6S 3W U  
12. COUNTY  
Duchesne  
13. STATE  
UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL  GAS WELL  DRY  OTHER \_\_\_\_\_

b. TYPE OF WORK: NEW WELL  HORIZ. LATS.  DEEP-EN  RE-ENTRY  DIFF. RESVR.  OTHER \_\_\_\_\_

2. NAME OF OPERATOR:  
VANTAGE ENERGY UINTA LLC

3. ADDRESS OF OPERATOR: 116 Inverness Drive East CITY Englewood STATE CO ZIP 80112 PHONE NUMBER: (303) 386-8600

4. LOCATION OF WELL (FOOTAGES)  
AT SURFACE: 2416' FNL 2478' FEL SWNE Sec 6 6S 3W  
AT TOP PRODUCING INTERVAL REPORTED BELOW: 1951' FNL 1964' FEL SWNE Sec 6 6S 3W  
AT TOTAL DEPTH: 1959' FNL 1973' FEL SWNE Sec 6 6S 3W *BHL by HSM*

14. DATE SPUNDED: 7/30/2012 15. DATE T.D. REACHED: 9/10/2012 16. DATE COMPLETED: 10/1/2012 ABANDONED  READY TO PRODUCE  17. ELEVATIONS (DF, RKB, RT, GL): 6979' RKB

18. TOTAL DEPTH: MD 6,300 TVD 6,219 19. PLUG BACK T.D.: MD 6,287 TVD 6,206 20. IF MULTIPLE COMPLETIONS, HOW MANY? \*

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)  
Triple Combo, CBL

23. WAS WELL CORED? NO  YES  (Submit analysis)  
WAS DST RUN? NO  YES  (Submit report)  
DIRECTIONAL SURVEY? NO  YES  (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

| HOLE SIZE | SIZE/GRADE | WEIGHT (#/ft.) | TOP (MD) | BOTTOM (MD) | STAGE CEMENTER DEPTH | CEMENT TYPE & NO. OF SACKS | SLURRY VOLUME (BBL) | CEMENT TOP ** | AMOUNT PULLED |
|-----------|------------|----------------|----------|-------------|----------------------|----------------------------|---------------------|---------------|---------------|
| 20.00     | 14.00 K-55 | 42             | 0        | 54          |                      |                            |                     | 0 - Circ      |               |
| 12.25     | 8.625 J-55 | 24             | 0        | 530         |                      | Prem 350                   | 72                  | 0 - Circ      |               |
| 7.875     | 5.5 J-55   | 17             | 0        | 6,287       |                      | Expan 885                  | 272                 | 0 - Circ      |               |

25. TUBING RECORD

| SIZE       | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|------------|----------------|-----------------|------|----------------|-----------------|------|----------------|-----------------|
| 2.875 J-55 | 6,043          |                 |      |                |                 |      |                |                 |

26. PRODUCING INTERVALS

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) |
|----------------|----------|-------------|-----------|--------------|
| (A) DGCRK      | 4,532    |             |           |              |
| (B) CSLPK      | 5,410    |             |           |              |
| (C) UTEBT      | 5,892    |             |           |              |
| (D) WSTC       | 6,121    |             |           |              |

27. PERFORATION RECORD

| INTERVAL (Top/Bot - MD) | SIZE  | NO. HOLES | PERFORATION STATUS   |
|-------------------------|-------|-----------|--|
| 4,610 5,202             | 3-1/8 | 108       | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| 5,410 5,879             | 3-1/8 | 272       | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| 6,007 6,118             | 3-1/8 | 52        | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| 6,190 6,214             | 3-1/8 | 44        | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL                                 |
|----------------|---|
| 4,610-5,202    | water based, pumped 67,900 #, 20/40 mesh sand, 36,000 bbls  |
| 5,410-5,879    | water based, pumped 140,600 #, 20/40 mesh sand, 64,800 bbls |
| 6,007-6,214    | water based, pumped 59,600 #, 20/40 mesh sand, 49,900 bbls  |

RECEIVED  
NOV 27 2012

29. ENCLOSED ATTACHMENTS:

- ELECTRICAL/MECHANICAL LOGS
- SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION
- GEOLOGIC REPORT
- CORE ANALYSIS
- DST REPORT
- OTHER: misc rpts, WBD
- DIRECTIONAL SURVEY

Producing

**31. INITIAL PRODUCTION**

**INTERVAL A (As shown in item #26)**

|  |             |                                 |             |                            |               |                           |                         |                         |                           |                                       |
|--|-------------|---------------------------------|-------------|----------------------------|---------------|---------------------------|-------------------------|-------------------------|---------------------------|---------------------------------------|
| DATE FIRST PRODUCED:<br><b>10/9/2012</b> |             | TEST DATE:<br><b>10/11/2012</b> |             | HOURS TESTED:<br><b>24</b> |               | TEST PRODUCTION RATES: →  | OIL – BBL:<br><b>97</b> | GAS – MCF:<br><b>50</b> | WATER – BBL:<br><b>45</b> | PROD. METHOD:<br><b>Rod</b>           |
| CHOKE SIZE:                              | TBG. PRESS. | CSG. PRESS.                     | API GRAVITY | BTU – GAS                  | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL:<br><b>97</b> | GAS – MCF:<br><b>50</b> | WATER – BBL:<br><b>45</b> | INTERVAL STATUS:<br><b>Commingled</b> |

**INTERVAL B (As shown in item #26)**

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

**INTERVAL C (As shown in item #26)**

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

**INTERVAL D (As shown in item #26)**

|                      |             |             |             |               |               |                           |            |            |              |                  |
|----------------------|-------------|-------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: |             | TEST DATE:  |             | HOURS TESTED: |               | TEST PRODUCTION RATES: →  | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD:    |
| CHOKE SIZE:          | TBG. PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS     | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

**32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)**

**Vented**

**33. SUMMARY OF POROUS ZONES (Include Aquifers):**

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

**34. FORMATION (Log) MARKERS:**

| Formation | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. | Name          | Top (Measured Depth) |
|-----------|----------|-------------|------------------------------|---------------|----------------------|
|           |          |             |                              | Garden Gulch  | 3,582                |
|           |          |             |                              | Douglas Creek | 4,532                |
|           |          |             |                              | Castle Peak   | 5,410                |
|           |          |             |                              | Uteland Butte | 5,892                |
|           |          |             |                              | Wasatch       | 6,121                |

**35. ADDITIONAL REMARKS (Include plugging procedure)**

Contact Mark Johnson at mark@banko1.com or 303.820.4480 with any questions on this submission.

**36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.**

NAME (PLEASE PRINT) Mark Johnson TITLE Permit Agent  
 SIGNATURE \_\_\_\_\_ DATE 11/20/2012

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
 1594 West North Temple, Suite 1210  
 Box 145801  
 Salt Lake City, Utah 84114-5801

Phone: 801-538-5340  
 Fax: 801-359-3940



Vantage Energy Uinta LLC  
GDU 63-6-23

API: 43-013-50905

SHL: 2,418' FNL 2,480' FEL (SW/4 NE/4)  
BHL: ±1,959' FNL ±1,975' FEL (SW/4 NE/4)

Sec. 6 T6S R3W

Duchesne County, Utah

Surface: Federal

Federal Mineral Lease: UTU78235

Gilsonite Draw Federal Unit: UTU86249X

20" Hole  
14" Casing  
42# J-55 to 54'

12-1/4" Hole  
8-5/8" Casing  
24# J-55 to 530'  
Prem 350 sxs

7-7/8" Hole  
5-1/2" Casing  
17# J-55 to 6,287'  
Expan 885 sxs

2-7/8" Tubing  
6 1/2# J-55  
Set to 6,043'

Douglas Creek

4,610' – 5,202'  
108 Holes

Pumped 67,900 #, 20/40  
mesh sand, 36,000 bbls

Castle Peak

5,410' – 5,879'  
272 Holes

Pumped 140,600 #, 20/40  
mesh sand, 64,800 bbls

Uteland Butte

6,007' – 6,118'  
52 Holes

Pumped 29,800 #, 20/40  
mesh sand, 28,200 bbls

Wasatch

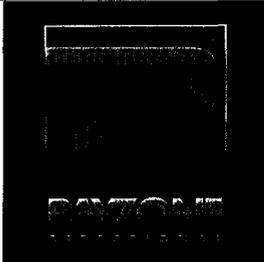
6,190' – 6,214'  
44 Holes

Pumped 29,800 #, 20/40  
mesh sand, 22,500 bbls

6,219' TVD / 6,300' MD

Date: 11/20/2012  
Prepared By:

**BANKO**  
PETROLEUM MANAGEMENT INC.



Job Number: UT121022  
 Company: Petroglyph  
 Lease/Well: GDU\_63-6-23  
 Location: Sec. 6, T6S, R3W  
 Rig Name: Aztec #673  
 RKB: 6979'  
 G.L. or M.S.L.: GL-6964'

State/Country: Utah/USA  
 Declination: 11.25  
 Grid: True  
 File name: C:\WINSERVE\UT121022.SVY  
 Date/Time: 11-Sep-12 / 10:26  
 Curve Name: Actual

**Payzone Directional**

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane 48.11  
 Vertical Section Referenced to Wellhead  
 Rectangular Coordinates Referenced to Wellhead

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | C L O S U R E  |                  | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
|                         |                      |                           |                           |           |           |                           | Distance<br>FT | Direction<br>Deg |                               |
| .00                     | .00                  | .00                       | .00                       | .00       | .00       | .00                       | .00            | .00              | .00                           |
| 588.00                  | .02                  | 105.12                    | 588.00                    | -.03      | .10       | .06                       | .10            | 105.11           | .00                           |
| 711.00                  | .31                  | 158.10                    | 711.00                    | -.34      | .24       | -.05                      | .42            | 144.43           | .24                           |
| 834.00                  | .40                  | 212.19                    | 834.00                    | -1.01     | .14       | -.57                      | 1.02           | 172.17           | .27                           |
| 955.00                  | .83                  | 282.01                    | 954.99                    | -1.19     | -.94      | -1.50                     | 1.52           | 218.43           | .65                           |
| 1018.00                 | 1.93                 | 314.01                    | 1017.97                   | -.36      | -2.15     | -1.84                     | 2.18           | 260.60           | 2.07                          |
| 1080.00                 | 2.33                 | 335.77                    | 1079.93                   | 1.52      | -3.42     | -1.53                     | 3.74           | 293.94           | 1.44                          |
| 1142.00                 | 2.97                 | 357.37                    | 1141.87                   | 4.27      | -4.01     | -.13                      | 5.86           | 316.80           | 1.90                          |
| 1204.00                 | 3.56                 | 23.58                     | 1203.77                   | 7.64      | -3.32     | 2.63                      | 8.33           | 336.55           | 2.56                          |
| 1266.00                 | 4.09                 | 48.28                     | 1265.63                   | 10.88     | -.89      | 6.60                      | 10.91          | 355.30           | 2.77                          |

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | C L O S U R E  |                  | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
|                         |                      |                           |                           |           |           |                           | Distance<br>FT | Direction<br>Deg |                               |
| 1328.00                 | 5.19                 | 53.08                     | 1327.43                   | 14.03     | 3.00      | 11.60                     | 14.35          | 12.06            | 1.88                          |
| 1390.00                 | 6.24                 | 51.22                     | 1389.12                   | 17.83     | 7.87      | 17.76                     | 19.49          | 23.81            | 1.72                          |
| 1452.00                 | 7.29                 | 51.92                     | 1450.69                   | 22.36     | 13.59     | 25.05                     | 26.17          | 31.28            | 1.70                          |
| 1514.00                 | 8.09                 | 52.98                     | 1512.13                   | 27.42     | 20.17     | 33.32                     | 34.04          | 36.34            | 1.31                          |
| 1576.00                 | 8.83                 | 53.42                     | 1573.46                   | 32.88     | 27.47     | 42.41                     | 42.85          | 39.88            | 1.20                          |
| 1638.00                 | 9.58                 | 54.75                     | 1634.66                   | 38.69     | 35.51     | 52.27                     | 52.52          | 42.54            | 1.26                          |
| 1699.00                 | 10.55                | 50.78                     | 1694.72                   | 45.15     | 43.98     | 62.89                     | 63.03          | 44.25            | 1.95                          |
| 1761.00                 | 11.47                | 48.14                     | 1755.58                   | 52.86     | 52.97     | 74.72                     | 74.83          | 45.06            | 1.69                          |
| 1823.00                 | 12.04                | 48.50                     | 1816.28                   | 61.26     | 62.40     | 87.36                     | 87.44          | 45.53            | .93                           |
| 1885.00                 | 12.79                | 49.11                     | 1876.83                   | 70.03     | 72.43     | 100.68                    | 100.75         | 45.97            | 1.23                          |
| 1947.00                 | 13.81                | 48.41                     | 1937.16                   | 79.44     | 83.16     | 114.95                    | 115.00         | 46.31            | 1.67                          |
| 2009.00                 | 14.15                | 48.48                     | 1997.33                   | 89.37     | 94.37     | 129.92                    | 129.97         | 46.56            | .55                           |
| 2071.00                 | 14.80                | 48.20                     | 2057.36                   | 99.68     | 105.94    | 145.42                    | 145.46         | 46.75            | 1.05                          |
| 2133.00                 | 15.34                | 48.94                     | 2117.22                   | 110.34    | 118.03    | 161.54                    | 161.57         | 46.93            | .92                           |
| 2195.00                 | 15.42                | 48.98                     | 2177.00                   | 121.14    | 130.43    | 177.98                    | 178.01         | 47.12            | .13                           |
| 2258.00                 | 15.29                | 49.11                     | 2237.76                   | 132.07    | 143.03    | 194.66                    | 194.68         | 47.28            | .21                           |
| 2320.00                 | 14.85                | 49.29                     | 2297.62                   | 142.60    | 155.23    | 210.78                    | 210.79         | 47.43            | .71                           |
| 2382.00                 | 14.72                | 49.33                     | 2357.57                   | 152.92    | 167.23    | 226.60                    | 226.61         | 47.56            | .21                           |
| 2444.00                 | 14.37                | 48.45                     | 2417.58                   | 163.16    | 178.96    | 242.17                    | 242.17         | 47.65            | .67                           |
| 2506.00                 | 14.19                | 47.05                     | 2477.67                   | 173.44    | 190.28    | 257.46                    | 257.47         | 47.65            | .63                           |
| 2568.00                 | 14.15                | 47.42                     | 2537.78                   | 183.74    | 201.43    | 272.63                    | 272.64         | 47.63            | .16                           |
| 2631.00                 | 14.38                | 47.66                     | 2598.84                   | 194.22    | 212.88    | 288.16                    | 288.17         | 47.62            | .38                           |
| 2692.00                 | 14.85                | 48.06                     | 2657.87                   | 204.55    | 224.29    | 303.55                    | 303.56         | 47.64            | .79                           |
| 2754.00                 | 15.16                | 49.64                     | 2717.75                   | 215.11    | 236.38    | 319.60                    | 319.60         | 47.70            | .83                           |
| 2816.00                 | 15.25                | 49.77                     | 2777.58                   | 225.63    | 248.78    | 335.85                    | 335.86         | 47.79            | .16                           |
| 2878.00                 | 14.97                | 49.98                     | 2837.44                   | 236.04    | 261.14    | 352.01                    | 352.01         | 47.89            | .46                           |
| 2941.00                 | 15.73                | 48.28                     | 2898.19                   | 246.96    | 273.75    | 368.68                    | 368.68         | 47.95            | 1.40                          |
| 3003.00                 | 15.42                | 46.42                     | 2957.91                   | 258.23    | 285.99    | 385.32                    | 385.32         | 47.92            | .95                           |
| 3065.00                 | 15.34                | 46.00                     | 3017.69                   | 269.61    | 297.86    | 401.76                    | 401.76         | 47.85            | .22                           |
| 3127.00                 | 16.08                | 47.27                     | 3077.38                   | 281.13    | 310.07    | 418.54                    | 418.54         | 47.80            | 1.32                          |

| Measured<br>Depth<br>FT | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth |           |           | Vertical<br>Section<br>FT | C L O S U R E  |                  | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
|                         |                      |                           |                           | N-S<br>FT | E-W<br>FT |                           | Distance<br>FT | Direction<br>Deg |                               |
| 3189.00                 | 16.79                | 48.36                     | 3136.84                   | 292.91    | 323.07    | 436.08                    | 436.08         | 47.80            | 1.25                          |
| 3251.00                 | 17.45                | 49.68                     | 3196.10                   | 304.88    | 336.85    | 454.32                    | 454.33         | 47.85            | 1.24                          |
| 3313.00                 | 17.23                | 49.59                     | 3255.28                   | 316.84    | 350.93    | 472.80                    | 472.80         | 47.92            | .36                           |
| 3375.00                 | 16.52                | 49.68                     | 3314.61                   | 328.50    | 364.64    | 490.79                    | 490.79         | 47.98            | 1.15                          |
| 3437.00                 | 16.26                | 48.00                     | 3374.09                   | 340.01    | 377.81    | 508.28                    | 508.28         | 48.01            | .87                           |
| 3499.00                 | 15.38                | 47.66                     | 3433.74                   | 351.36    | 390.34    | 525.18                    | 525.18         | 48.01            | 1.43                          |
| 3561.00                 | 14.59                | 46.78                     | 3493.63                   | 362.24    | 402.11    | 541.21                    | 541.21         | 47.99            | 1.33                          |
| 3623.00                 | 13.93                | 46.34                     | 3553.72                   | 372.74    | 413.20    | 556.48                    | 556.48         | 47.95            | 1.08                          |
| 3685.00                 | 13.89                | 46.87                     | 3613.90                   | 382.98    | 424.03    | 571.38                    | 571.38         | 47.91            | .22                           |
| 3747.00                 | 13.10                | 46.83                     | 3674.19                   | 392.88    | 434.58    | 585.84                    | 585.84         | 47.89            | 1.27                          |
| 3809.00                 | 12.44                | 45.38                     | 3734.66                   | 402.38    | 444.46    | 599.54                    | 599.54         | 47.85            | 1.18                          |
| 3871.00                 | 11.38                | 44.72                     | 3795.32                   | 411.41    | 453.52    | 612.31                    | 612.32         | 47.79            | 1.72                          |
| 3933.00                 | 10.42                | 47.18                     | 3856.20                   | 419.57    | 461.93    | 624.02                    | 624.04         | 47.75            | 1.72                          |
| 3995.00                 | 9.67                 | 49.33                     | 3917.25                   | 426.77    | 470.00    | 634.84                    | 634.85         | 47.76            | 1.35                          |
| 4057.00                 | 8.79                 | 48.98                     | 3978.45                   | 433.28    | 477.52    | 644.78                    | 644.79         | 47.78            | 1.42                          |
| 4120.00                 | 7.81                 | 49.33                     | 4040.79                   | 439.23    | 484.40    | 653.87                    | 653.88         | 47.80            | 1.56                          |
| 4182.00                 | 6.91                 | 48.57                     | 4102.28                   | 444.44    | 490.39    | 661.81                    | 661.82         | 47.81            | 1.46                          |
| 4244.00                 | 6.20                 | 48.54                     | 4163.87                   | 449.12    | 495.70    | 668.89                    | 668.90         | 47.82            | 1.15                          |
| 4306.00                 | 5.49                 | 49.95                     | 4225.55                   | 453.25    | 500.47    | 675.20                    | 675.21         | 47.83            | 1.17                          |
| 4368.00                 | 4.61                 | 49.51                     | 4287.31                   | 456.78    | 504.64    | 680.66                    | 680.67         | 47.85            | 1.42                          |
| 4430.00                 | 4.35                 | 51.79                     | 4349.12                   | 459.85    | 508.38    | 685.50                    | 685.50         | 47.87            | .51                           |
| 4491.00                 | 3.30                 | 52.85                     | 4409.98                   | 462.34    | 511.60    | 689.55                    | 689.56         | 47.90            | 1.73                          |
| 4554.00                 | 1.63                 | 44.08                     | 4472.92                   | 464.08    | 513.67    | 692.26                    | 692.26         | 47.90            | 2.71                          |
| 4616.00                 | .83                  | 19.45                     | 4534.91                   | 465.13    | 514.43    | 693.53                    | 693.53         | 47.88            | 1.52                          |
| 4678.00                 | .74                  | 22.67                     | 4596.90                   | 465.93    | 514.74    | 694.28                    | 694.29         | 47.85            | .16                           |
| 4740.00                 | .22                  | 10.40                     | 4658.90                   | 466.41    | 514.91    | 694.74                    | 694.75         | 47.83            | .85                           |
| 4802.00                 | .04                  | 48.01                     | 4720.90                   | 466.55    | 514.95    | 694.86                    | 694.86         | 47.82            | .31                           |
| 4864.00                 | .00                  | 267.74                    | 4782.90                   | 466.56    | 514.96    | 694.88                    | 694.89         | 47.82            | .06                           |
| 4926.00                 | .40                  | 133.09                    | 4844.90                   | 466.41    | 515.12    | 694.90                    | 694.90         | 47.84            | .65                           |
| 4988.00                 | .57                  | 144.16                    | 4906.89                   | 466.01    | 515.46    | 694.88                    | 694.89         | 47.88            | .31                           |

| Measured<br>Depth<br>FT  | Incl<br>Angle<br>Deg | Drift<br>Direction<br>Deg | True<br>Vertical<br>Depth | N-S<br>FT | E-W<br>FT | Vertical<br>Section<br>FT | C L O S U R E  |                  | Dogleg<br>Severity<br>Deg/100 |
|--------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
|                          |                      |                           |                           |           |           |                           | Distance<br>FT | Direction<br>Deg |                               |
| 5050.00                  | .53                  | 169.52                    | 4968.89                   | 465.48    | 515.69    | 694.70                    | 694.70         | 47.93            | .39                           |
| 5112.00                  | .79                  | 178.97                    | 5030.89                   | 464.77    | 515.75    | 694.27                    | 694.27         | 47.98            | .45                           |
| 5174.00                  | 1.14                 | 210.43                    | 5092.88                   | 463.81    | 515.45    | 693.40                    | 693.41         | 48.02            | 1.00                          |
| 5236.00                  | 1.05                 | 208.46                    | 5154.87                   | 462.78    | 514.87    | 692.28                    | 692.28         | 48.05            | .16                           |
| 5298.00                  | .75                  | 242.07                    | 5216.86                   | 462.09    | 514.24    | 691.35                    | 691.35         | 48.06            | .96                           |
| 5360.00                  | .62                  | 319.29                    | 5278.86                   | 462.16    | 513.66    | 690.97                    | 690.97         | 48.02            | 1.39                          |
| 5422.00                  | .70                  | 284.09                    | 5340.85                   | 462.50    | 513.07    | 690.76                    | 690.76         | 47.97            | .66                           |
| 5484.00                  | 1.41                 | 223.97                    | 5402.84                   | 462.05    | 512.18    | 689.79                    | 689.79         | 47.95            | 1.97                          |
| 5546.00                  | 1.63                 | 220.41                    | 5464.82                   | 460.83    | 511.08    | 688.15                    | 688.16         | 47.96            | .39                           |
| 5608.00                  | 1.80                 | 207.49                    | 5526.79                   | 459.29    | 510.05    | 686.37                    | 686.37         | 48.00            | .68                           |
| 5670.00                  | .44                  | 193.43                    | 5588.78                   | 458.20    | 509.55    | 685.26                    | 685.26         | 48.04            | 2.22                          |
| 5732.00                  | .53                  | 359.67                    | 5650.78                   | 458.25    | 509.49    | 685.26                    | 685.26         | 48.03            | 1.55                          |
| 5794.00                  | .31                  | 16.90                     | 5712.78                   | 458.70    | 509.54    | 685.59                    | 685.59         | 48.01            | .41                           |
| 5856.00                  | .40                  | 52.49                     | 5774.78                   | 458.99    | 509.76    | 685.95                    | 685.95         | 48.00            | .38                           |
| 5918.00                  | .48                  | 290.37                    | 5836.78                   | 459.21    | 509.69    | 686.04                    | 686.05         | 47.98            | 1.24                          |
| 5980.00                  | .83                  | 274.42                    | 5898.77                   | 459.34    | 509.00    | 685.61                    | 685.62         | 47.94            | .63                           |
| 6042.00                  | 1.23                 | 272.18                    | 5960.76                   | 459.40    | 507.88    | 684.82                    | 684.83         | 47.87            | .65                           |
| 6104.00                  | 1.14                 | 202.40                    | 6022.75                   | 458.85    | 506.98    | 683.79                    | 683.80         | 47.85            | 2.19                          |
| 6167.00                  | 1.19                 | 260.36                    | 6085.74                   | 458.16    | 506.10    | 682.67                    | 682.68         | 47.85            | 1.79                          |
| 6229.00                  | 1.27                 | 246.12                    | 6147.73                   | 457.78    | 504.84    | 681.47                    | 681.48         | 47.80            | .51                           |
| <b>Projection to bit</b> |                      |                           |                           |           |           |                           |                |                  |                               |
| 6300.00                  | 1.27                 | 246.12                    | 6218.71                   | 457.14    | 503.40    | 679.98                    | 679.99         | 47.76            | .00                           |

**HALLIBURTON**

**VANTAGE ENERGY LLC  
116 ENVERNESS DR E  
ENGLEWOOD, Colorado**

GDU 63-6-23

**Aztec 673**

## **Post Job Summary Cement Production Casing**

Prepared For: John Moran Jr.  
Date Prepared: September 13, 2012  
Version: 1

Service Supervisor: MCKEE, RALPH

Submitted by: Chris Cicirello

**HALLIBURTON**

# HALLIBURTON

## Wellbore Geometry

| Job Tubulars      |                   |         |       |           | MD     |           | Excess % | Shoe Joint Length ft |
|-------------------|-------------------|---------|-------|-----------|--------|-----------|----------|----------------------|
| Type              | Description       | Size in | ID in | Wt lbm/ft | Top ft | Bottom ft |          |                      |
| Casing            | SURFACE CASING    | 8.63    | 8.097 | 24.00     | 0.00   | 530.00    |          |                      |
| Open Hole Section | OPEN HOLE         |         | 7.875 |           | 530.00 | 6,277.00  | 40       |                      |
| Casing            | PRODUCTION CASING | 5.50    | 4.892 | 17.00     | 0.00   | 6,277.00  | 44.59    |                      |

## Pumping Schedule

| Fluid # | Fluid Type    | Fluid Name     | Density lbm/gal | Avg Rate bbl/min | Volume      |
|---------|---------------|----------------|-----------------|------------------|-------------|
| 1       | Spacer        | Water          | 8.33            | 4.00             | 10.0 bbl    |
| 2       | Spacer        | Superflush 101 | 10.00           | 4.00             | 20.0 bbl    |
| 3       | Spacer        | Water          | 8.34            | 4.00             | 10.0 bbl    |
| 4       | Cement Slurry | Lead Cement    | 12.50           | 6.00             | 495.0 sacks |
| 5       | Cement Slurry | Tail Cement    | 13.40           | 6.00             | 390.0 sacks |
| 6       | Spacer        | Displacement   | 8.45            | 8.00             | 145.0 bbl   |

## Fluids Pumped

**Stage/Plug # 1**    **Fluid 1:**    Water  
 FRESH WATER  
 Fluid Density: 8.33 lbm/gal  
 Fluid Volume: 10.00 bbl  
 Pump Rate: 4.00 bbl/min

**Stage/Plug # 1**    **Fluid 2:**    Superflush 101  
 SUPER FLUSH 101 - SBM (12199)  
 Fluid Density: 10.00 lbm/gal  
 Fluid Volume: 20.00 bbl  
 Pump Rate: 4.00 bbl/min

**Stage/Plug # 1**    **Fluid 3:**    Water  
 FRESH WATER  
 Fluid Density: 8.34 lbm/gal  
 Fluid Volume: 10.00 bbl  
 Pump Rate: 4.00 bbl/min

**Stage/Plug # 1**    **Fluid 4:**    Lead Cement  
 EXPANDACEM (TM) SYSTEM  
 0.6 % HR-5  
 1 lbm Granulite TR 1/4  
 Fluid Weight: 12.50 lbm/gal  
 Slurry Yield: 1.91 ft<sup>3</sup>/sack  
 Total Mixing Fluid: 10.28 Gal  
 Volume: 495.0 sacks  
 Calculated Fill: 4,000.00 ft  
 Calculated Top of Fluid: 0.00 ft

# HALLIBURTON

**Stage/Plug # 1 Fluid 5:** Tail Cement  
EXPANDACEM (TM) SYSTEM  
1 lbm Granulite TR 1/4

Fluid Weight: 13.40 lbm/gal  
Slurry Yield: 1.49 ft<sup>3</sup>/sack  
Total Mixing Fluid: 7.06 Gal  
Volume: 390.0 sacks  
Calculated Fill: 2,054.00 ft  
Calculated Top of Fluid: 4,000.00 ft  
Pump Rate: 6.00 bbl/min

**Stage/Plug # 1 Fluid 6:** Displacement  
KCL WATER

Fluid Density: 8.45 lbm/gal  
Fluid Volume: 145.00 bbl  
Pump Rate: 8.00 bbl/min

## Job Summary

### Job Information

|   |                       |
|---|-----------------------|
| <b>Job Start Date</b>                                 | 9/13/2012 12:53:00 AM |
| <b>Job MD</b>   | 6,300.0 ft            |
| <b>Job TVD</b>  | 6,300.0 ft            |
| <b>Height of Plug Container/Swage Above Rig Floor</b> | 3.0 ft                |
| <b>Surface Temperature at Time of Job</b>             | 65 degF               |
| <b>Mud Type</b>                                       | Water Based Mud       |
| <b>Actual Mud Density</b>                             | 8.5 lbm/gal           |
| <b>Time Circulated before job</b>                     | 2.00 hour(s)          |
| <b>Mud Volume Circulated</b>                          | 648.00 bbl            |
| <b>Rate at Which Well was Circulated</b>              | 5.400 bbl/min         |
| <b>Units of Gas Detected While Circulating</b>        | 900 API Gas Units     |
| <b>Pipe Movement During Hole Circulation</b>          | None                  |
| <b>Time From End Mud Circ. to Job Start</b>           | 15.00 minute          |
| <b>Pipe Movement During Cementing</b>                 | None                  |
| <b>Calculated Displacement</b>                        | 144.80 bbl            |
| <b>Amount of Cement Returns</b>                       | 20.00 bbl             |
| <b>Job Displaced by (rig/halco)</b>                   | Cement Unit HP Pumps  |
| <b>Annular flow Before Job? (Water/Gas)</b>           | Unknown               |
| <b>Annular flow After Job? (Water/Gas)</b>            | Unknown               |
| <b>Length of Rat Hole</b>                             | 12.50 ft              |

### Cementing Equipment

|  |  |
|--|--|
| <b>Number of Centralizers Used</b>       | 30   |
| <b>Pipe Centralization</b>               | Bottom Joints (1 TO 10) and Through Production Int |
| <b>Brand of Float Equipment Used</b>     | HALLIBURTON  |
| <b>Did Float Equipment Hold?</b>         | Yes  |
| <b>Plug set used?</b>                    | Yes  |
| <b>Brand of Plug set used?</b>           | HALLIBURTON  |
| <b>Did Plugs Bump?</b>                   | Yes  |
| <b>Calculated Pressure to Bump Plugs</b> | 1,508.0 psig                                       |

# HALLIBURTON

## Service Supervisor Reports

### Job Log

| Date/Time        | Activity Code                            | Pump Rate | Volume | Pressure (psig) | Comments  |
|------------------|--|-----------|--------|-----------------|---|
| 09/12/2012 19:00 | Call Out                                 |           |        |                 | Crew Called out for Vantage Energy AWS 673  |
| 09/12/2012 20:30 | Pre-Convoy Safety Meeting                |           |        |                 | Discussed route to location, fatigue, convoy order, and wildlife  |
| 09/12/2012 20:45 | Depart from Service Center or Other Site |           |        |                 | Departed for AWS 673  |
| 09/12/2012 22:50 | Arrive At Loc                            |           |        |                 | Arrived at location Requested On Location Time 23:00  |
| 09/12/2012 23:00 | Assessment Of Location Safety Meeting    |           |        |                 | Assessed location and determined best place to spot equipment   |
| 09/12/2012 23:10 | Pre-Rig Up Safety Meeting                |           |        |                 | Discussed areas that could be rigged up with casing crew still on location. Discussed safe lifting, red zone, and pinch points. |
| 09/12/2012 23:30 | Rig-Up Equipment                         |           |        |                 | Rigged up all equipment and iron, waiting to rig up floor and plug container  |
| 09/13/2012 00:30 | Pre-Job Safety Meeting                   |           |        |                 | Discussed job procedure, high pressure iron, and Rig down procedure for the floor   |
| 09/13/2012 00:45 | Rig-Up Completed                         |           |        |                 | Plug container and floor completely rigged up, ready to begin   |
| 09/13/2012 00:53 | Other                                    | 1.5       | 3      | 16.0            | Pump 3BBLS Fresh Water to Fill Lines  |
| 09/13/2012 00:56 | Pressure Test                            |           |        |                 | Pressure Test Pump and Lines to 5000PSI   |
| 09/13/2012 01:02 | Pump Water                               | 4         | 10     | 108.0           | Pump 10BBLS Fresh Water Spacer  |
| 09/13/2012 01:05 | Pump Spacer                              | 4         | 20     | 113.0           | Pump 20BBLS Super Flush at 10PPG  |
| 09/13/2012 01:11 | Pump Water                               | 4         | 10     | 110.0           | Pump 10BBLS Fresh Water   |
| 09/13/2012 01:16 | Pump Lead Cement                         | 6         | 168.3  | 150.0           | Pump 495sks ExpandaCem Lead Cement at 12.5 PPG Y: 1.91ft <sup>3</sup> /sk W: 10.28gal/sk  |
| 09/13/2012 01:50 | Pump Tail Cement                         | 6         | 103.5  | 220.0           | Pump 390sks ExpandaCem Tail Cement at 13.4PPG Y: 1.49ft <sup>3</sup> /sk W: 7.06gal/sk  |
| 09/13/2012 01:58 | Shutdown                                 |           |        |                 | Trouble with Bulk delivery hose, clogged off, temporary shutdown  |
| 09/13/2012 01:59 | Other                                    | 6         |        | 60.0            | Resume pumping, hose cleared  |

# HALLIBURTON

| Date/Time        | Activity Code                                    | Pump Rate | Volume | Pressure (psig) | Comments   |
|------------------|--|-----------|--------|-----------------|--|
| 09/13/2012 02:16 | Shutdown   |           |        |                 | Shutdown to wash pump and lines to the pit   |
| 09/13/2012 02:18 | Drop Top Plug                                    |           |        |                 | Dropped top plug witnessed by driller  |
| 09/13/2012 02:23 | Pump Displacement                                | 8         | 144.8  | 120.0           | Begin pumping KCL displacement total of 1050lbs/134bbls fresh water  |
| 09/13/2012 02:40 | Slow Rate  | 4         | 124    | 1209.0          | Slowed rate to 4BPM to bump plug, with 124bbls gone cement returns to surface                              |
| 09/13/2012 02:44 | Slow Rate  | 2         | 140    | 1649.0          | Slowed rate to 2BPM to bump plug   |
| 09/13/2012 02:46 | Bump Plug  |           |        | 2362.0          | Bumped plug at 1753PSI took to 2362PSI per company man instruction, total of 20BBLs cement back to surface |
| 09/13/2012 02:50 | Check Floats                                     |           |        |                 | Floats held with 1BBL back to truck  |
| 09/13/2012 03:00 | Pre-Rig Down Safety Meeting                      |           |        |                 | Discussed rig down procedure, pinch points, fatigue, line of fire  |
| 09/13/2012 03:15 | Rig-Down Equipment                               |           |        |                 | Begin rigging down HES iron  |
| 09/13/2012 04:00 | Rig-Down Completed                               |           |        |                 | All HES iron rigged down, plug container and manifold securely put away                                    |
| 09/13/2012 04:10 | Pre-Convoy Safety Meeting                        |           |        |                 | Discussed fatigue, night driving, wildlife, and route  |
| 09/13/2012 04:30 | Depart Location for Service Center or Other Site |           |        |                 | Depart Location. Thank you for using Halliburton   |

# HALLIBURTON

# Cementing Job Summary

The Road to Excellence Starts with Safety

|                                       |                         |                                    |                        |
|---------------------------------------|-------------------------|------------------------------------|------------------------|
| Sold To #: 351199                     | Ship To #: 2670294      | Quote #:                           | Sales Order #: 9796466 |
| Customer: Vantage Energy LLC          |                         | Customer Rep: John Moran           |                        |
| Well Name: GDU                        | Well #: 63-6-23         | API/UWI #:                         |                        |
| Field:                                | City (SAP):<br>DUCHESNE | County/Parish: Duchesne            | State: Utah            |
| Contractor: Aztec                     |                         | Rig/Platform Name/Num: Aztec 673   |                        |
| Job Purpose: Cement Production Casing |                         |                                    |                        |
| Well Type: Development Well           |                         | Job Type: Cement Production Casing |                        |
| Sales Person: SPENCER,<br>WESTON      |                         | Srvc Supervisor: MCKEE,<br>RALPH   | MBU ID Emp #: 259268   |

### Job Personnel

| HES Emp Name    | Exp Hrs | Emp #  | HES Emp Name    | Exp Hrs | Emp #  | HES Emp Name   | Exp Hrs | Emp #  |
|-----------------|---------|--------|-----------------|---------|--------|----------------|---------|--------|
| BROWN, CHARLIE  | 5.0     | 123456 | LANE, BRIAN     | 5.0     | 524219 | MCKEE, RALPH R | 5.0     | 259268 |
| SMITH, KC Hyrum | 5.0     | 462378 | WILKISON, KEVIN | 5.0     | 491065 |                |         |        |

### Equipment

| HES Unit # | Distance-1 way |
|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
|            | 75 mile        | 10248059   | 75 mile        | 10574660C  | 75 mile        | 11127525   | 75 mile        |
| 11127544   | 75 mile        | 11259879   | 75 mile        |            |                |            |                |

### Job Hours

| Date         | On Location Hours | Operating Hours                            | Date | On Location Hours | Operating Hours | Date | On Location Hours | Operating Hours |
|--------------|-------------------|--|------|-------------------|-----------------|------|-------------------|-----------------|
| 9/12         | 01:00             | 0  | 9/13 | 04:00             | 03:00           |      |                   |                 |
| <b>TOTAL</b> |                   | Total is the sum of each column separately |      |                   |                 |      |                   |                 |

### Job

### Job Times

| Formation Name              | Formation Depth (MD) Top | Bottom            | Called Out  | Date            | Time            | Time Zone |
|-----------------------------|--------------------------|-------------------|-------------|-----------------|-----------------|-----------|
|                             |                          |                   | On Location | 12 - Sep - 2012 | 19:00           | MST       |
| Form Type                   | BHST                     |                   | Job Started | 12 - Sep - 2012 | 22:50           | MST       |
| Job depth MD                | 6287. ft                 | Job Depth TVD     | 6287. ft    | Job Started     | 13 - Sep - 2012 | 00:53     |
| Water Depth                 |                          | Wk Ht Above Floor | 3. ft       | Job Completed   | 13 - Sep - 2012 | 02:50     |
| Perforation Depth (MD) From |                          | To                |             | Departed Loc    | 13 - Sep - 2012 | 04:00     |

### Well Data

| Description       | New / Used | Size in | ID in | Weight lbm/ft | Top MD ft | Bottom MD ft | Top TVD ft | Bottom TVD ft |
|-------------------|------------|---------|-------|---------------|-----------|--------------|------------|---------------|
| OPEN HOLE         |            |         | 7.875 |               | 530.      | 6287.        |            |               |
| PRODUCTION CASING | Unknown    | 5.5     | 4.892 | 17.           |           | 6287.        |            |               |
| SURFACE CASING    | Unknown    | 8.625   | 8.097 | 24.           |           | 530.         |            |               |

### Sales/Rental/3<sup>rd</sup> Party (HES)

| Description                                  | Qty | Qty uom | Depth | Supplier |
|--|-----|---------|-------|----------|
| PLUG,CMTG, TOP, 5 1/2, HWE, 4.38 MIN/5.09 MA | 1   | EA      |       |          |

### Tools and Accessories

| Type         | Size | Qty | Make | Depth   | Type        | Size | Qty | Make | Depth | Type           | Size | Qty | Make |
|--------------|------|-----|------|---------|-------------|------|-----|------|-------|----------------|------|-----|------|
| Guide Shoe   |      |     |      |         | Packer      |      |     |      |       | Top Plug       | 5.5  | 1   | HES  |
| Float Shoe   | 5.5  | 1   | HES  | 6242.41 | Bridge Plug |      |     |      |       | Bottom Plug    |      |     |      |
| Float Collar |      |     |      |         | Retainer    |      |     |      |       | SSR plug set   |      |     |      |
| Insert Float |      |     |      |         |             |      |     |      |       | Plug Container | 5.5  | 1   | HES  |
| Stage Tool   |      |     |      |         |             |      |     |      |       | Centralizers   | 5.5  | 30  | HES  |

### Miscellaneous Materials

| Gelling Agt   | Conc | Surfactant | Conc | Acid Type | Qty  | Conc | % |
|---------------|------|------------|------|-----------|------|------|---|
| Treatment Fld | Conc | Inhibitor  | Conc | Sand Type | Size | Qty  |   |

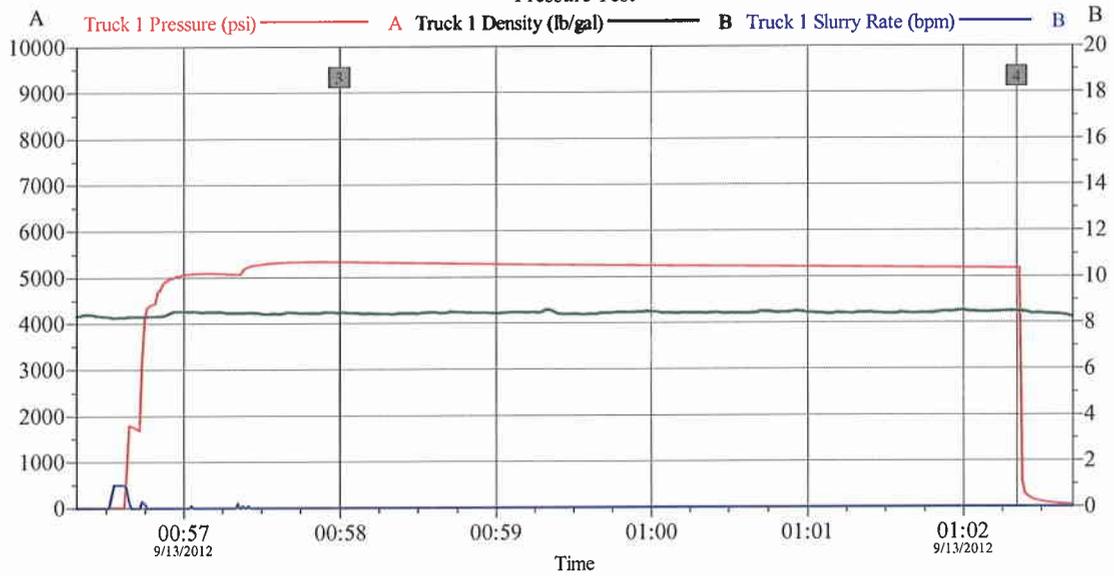
| Fluid Data                               |                |  |        |                                   |                        |                           |                  |              |                        |
|--|----------------|--|--------|-----------------------------------|------------------------|---------------------------|------------------|--------------|------------------------|
| Stage/Plug #: 1                          |                |  |        |                                   |                        |                           |                  |              |                        |
| Fluid #                                  | Stage Type     | Fluid Name                             | Qty    | Qty uom                           | Mixing Density lbm/gal | Yield ft <sup>3</sup> /sk | Mix Fluid Gal/sk | Rate bbl/min | Total Mix Fluid Gal/sk |
| 1  | Water          |  | 10.00  | bbbl                              | 8.33                   | .0                        | .0               | .0           |                        |
| 2  | Superflush 101 | SUPER FLUSH 101 - SBM (12199)          | 20.00  | bbbl                              | 10.                    | 2.11                      | 13.09            | 6.0          |                        |
| 3  | Water          |  | 10.00  | bbbl                              | 8.34                   | .0                        | .0               | 6.0          |                        |
| 4  | Lead Cement    | EXPANDACEM (TM) SYSTEM (452979)        | 495.0  | sacks                             | 12.5                   | 1.91                      | 10.28            | 6.0          | 10.28                  |
|  | 0.6 %          | HR-5, 50 LB SK (100005050)             |        |                                   |                        |                           |                  |              |                        |
|  | 1 lbm          | GRANULITE TR 1/4, 50 LB SK (100064073) |        |                                   |                        |                           |                  |              |                        |
|  | 10.28 Gal      | FRESH WATER                            |        |                                   |                        |                           |                  |              |                        |
| 5  | Tail Cement    | EXPANDACEM (TM) SYSTEM (452979)        | 390.0  | sacks                             | 13.4                   | 1.49                      | 7.06             | 6.0          | 7.06                   |
|  | 1 lbm          | GRANULITE TR 1/4, 50 LB SK (100064073) |        |                                   |                        |                           |                  |              |                        |
|  | 7.06 Gal       | FRESH WATER                            |        |                                   |                        |                           |                  |              |                        |
| 6  | Displacement   |  | 145.00 | bbbl                              | 8.45                   | .0                        | .0               | 7.0          |                        |
|  | 42 gal/bbl     | WATER - FRESH - GAL (24047)            |        |                                   |                        |                           |                  |              |                        |
|  | 7.15 lbm/bbl   | POTASSIUM CHLORIDE 7% (100001585)      |        |                                   |                        |                           |                  |              |                        |
| Calculated Values                        |                | Pressures                              |        |                                   | Volumes                |                           |                  |              |                        |
| Displacement                             | 144.8          | Shut In: Instant                       |        | Lost Returns                      |                        | Cement Slurry             |                  | Pad          |                        |
| Top Of Cement                            |                | 5 Min                                  |        | Cement Returns                    | 20                     | Actual Displacement       | 144.8            | Treatment    |                        |
| Frac Gradient                            |                | 15 Min                                 |        | Spacers                           | 40                     | Load and Breakdown        |                  | Total Job    |                        |
| Rates                                    |                |  |        |                                   |                        |                           |                  |              |                        |
| Circulating                              | 6              | Mixing                                 | 6      | Displacement                      | 8                      | Avg. Job                  | 7                |              |                        |
| Cement Left In Pipe                      | Amount         | 44.59ft                                | Reason | Shoe Joint                        |                        |                           |                  |              |                        |
| Frac Ring # 1 @                          | ID             | Frac ring # 2 @                        | ID     | Frac Ring # 3 @                   | ID                     | Frac Ring # 4 @           | ID               |              |                        |
| The Information Stated Herein Is Correct |                |  |        | Customer Representative Signature |                        |                           |                  |              |                        |

# HALLIBURTON

## Data Acquisition

### Vantage Energy LLC GDU 63-6-23 Production

#### Pressure Test



| Global Event Log |          |              |     |
|------------------|----------|--------------|-----|
| Intersection     | PSI      | Intersection | PSI |
| Test Lines       | 00:58:00 | 5330         |     |
| Pressure Test    | 01:02:21 | 5169         |     |

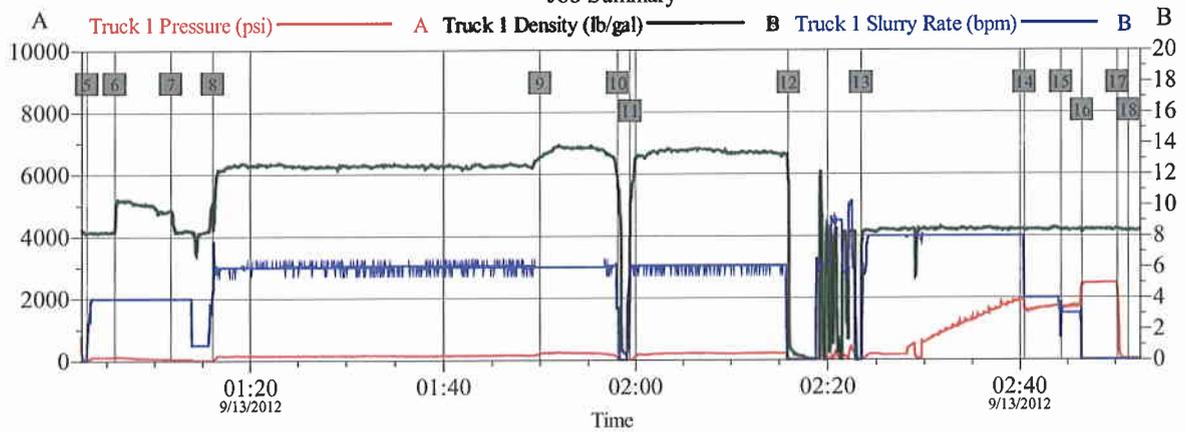
|                   |                       |                        |
|-------------------|-----------------------|------------------------|
| Customer:         | Job Date: 13-Sep-2012 | Sales Order #: 9796466 |
| Well Description: | UWI:                  |                        |

**HALLIBURTON**  
OptiCem v6.4.9  
31-Oct-12 12:50



Vantage Energy LLC  
 GDU 63-6-23 Production

Job Summary



| Global Event Log     |                |                                   |                |
|----------------------|----------------|-----------------------------------|----------------|
| Intersection         | PSI            | Intersection                      | PSI            |
| 5 Pump Water         | 01:02:55 19.00 | Pump Super Flush                  | 01:05:49 111.0 |
| 7 Pump Water         | 01:11:40 61.00 | Pump Lead Cement                  | 01:16:02 4.000 |
| 9 Pump Tail Cement   | 01:50:00 210.9 | Trouble with Bulk Delivery System | 01:58:08 66.96 |
| 11 Resume Pumping    | 01:59:26 20.00 | Shutdown                          | 02:15:59 62.96 |
| 13 Pump Displacement | 02:23:27 17.00 | Slow Rate                         | 02:40:28 1709  |
| 15 Slow Rate         | 02:44:18 1649  | Bump Plug                         | 02:46:30 2362  |
| 17 Check Floats      | 02:50:14 2311  | Job Complete                      | 02:51:22 28.00 |

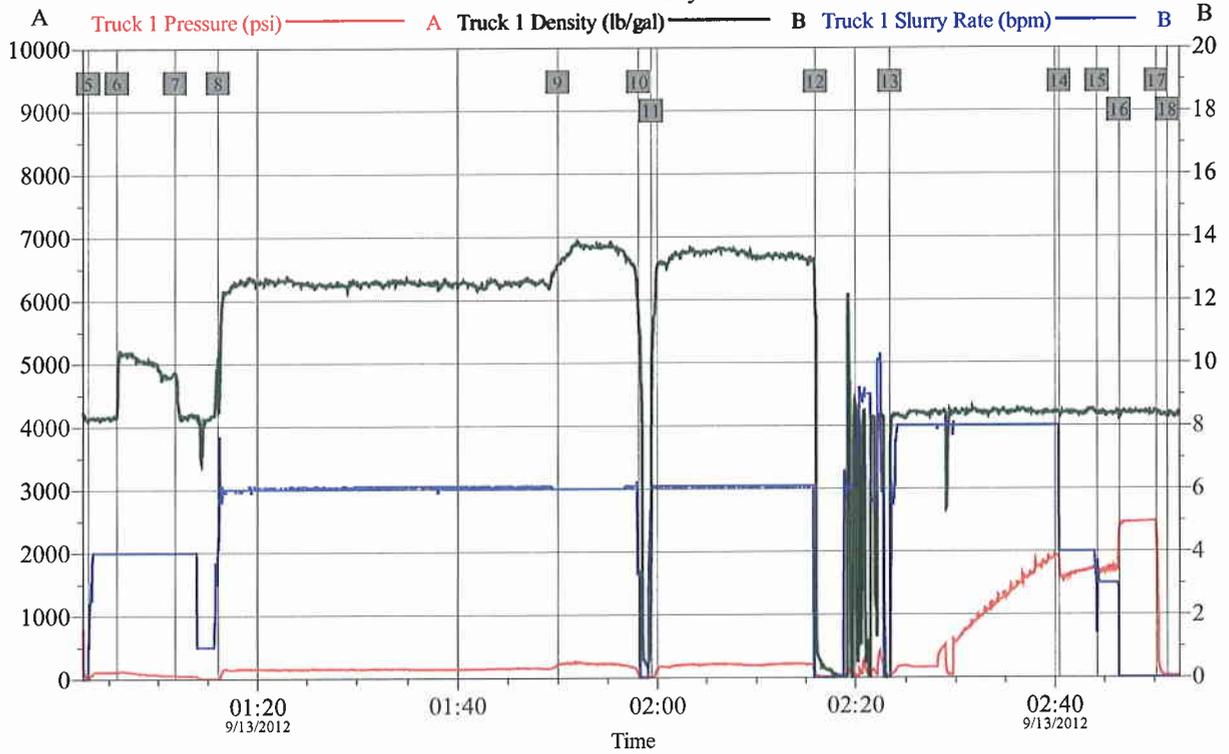
|                   |                       |                        |
|-------------------|-----------------------|------------------------|
| Customer:         | Job Date: 13-Sep-2012 | Sales Order #: 9796466 |
| Well Description: | UWI:                  |                        |

**HALLIBURTON**  
 OptiCem v6.4.9  
 31-Oct-12 12:53



Vantage Energy LLC  
GDU 63-6-23 Production

Job Summary



|                   |                       |                        |
|-------------------|-----------------------|------------------------|
| Customer:         | Job Date: 13-Sep-2012 | Sales Order #: 9796466 |
| Well Description: | UWI:                  |                        |

**HALLIBURTON**  
OptiCem v6.4.9  
31-Oct-12 12:53

# HALLIBURTON

## Lab Data

### LAB RESULTS - Lead

#### Cementing Rockies, Vernal

##### Job Information

|                |                |          |                           |            |             |
|----------------|----------------|----------|---------------------------|------------|-------------|
| Request/Slurry | 270151/1       | Rig Name | AZTEC WELL SERVICING #673 | Date       | 08/SEP/2012 |
| Submitted By   | Thomas Stumpf  | Job Type | Production Casing         | Bulk Plant | Vernal      |
| Customer       | Vantage Energy | Location | Duchesne                  | Well       | GDU 63-6-23 |

##### Well Information

|                   |        |           |         |      |       |
|-------------------|--------|-----------|---------|------|-------|
| Casing/Liner Size | 5 1/2" | Depth MD  | 6277 ft | BHST | 153 F |
| Hole Size         | 7 7/8" | Depth TVD | 6277 ft | BHCT | 109 F |

##### Cement Information - Lead Design

| Conc   | UOM      | Cement/Additive          | Type | Sample Date  | Lot No.       | Cement Properties |             |                     |
|--------|----------|--------------------------|------|--------------|---------------|-------------------|-------------|---------------------|
|        |          |                          |      |              |               | Slurry Density    | 12.50       | PPG                 |
|        |          |                          |      |              |               | Slurry Yield      | 1.91        | ft <sup>3</sup> /sk |
|        |          |                          |      |              |               | Water Requirement | 10.28       | GPS                 |
|        |          |                          |      |              |               | Water Source      | Fresh Water |                     |
| 100.00 | % BWOC   | EconoCem<br>Cement Blend | Bulk | Sep 09, 2012 |               |                   |             |                     |
| 0.600  | % BWOC   | HR-5 (PB)                | Bulk | Sep 09, 2012 | sxc0sb-20s306 |                   |             |                     |
| 1.000  | lb/sk    | Granulite TR 1/4         | Bulk | Sep 09, 2012 | 8/22/2012     |                   |             |                     |
| 10.28  | gal/sack | Fresh Water              | Lab  | Mar 08, 2012 | 3/8/12        |                   |             |                     |

##### Operation Test Results Request ID 270151/1

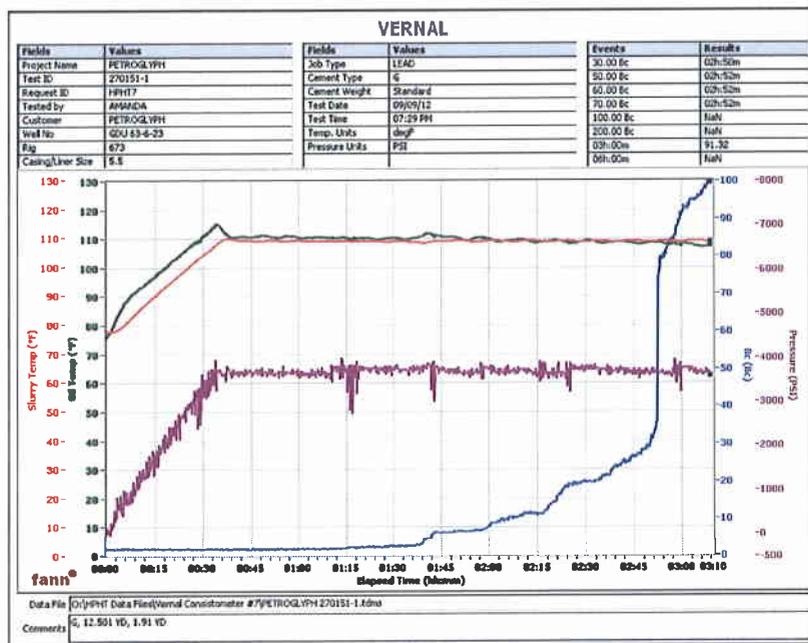
##### Thickening Time, Request Test ID:2904237

| Temp (°F) | Pressure (psi) | Reached in (min) | Start BC | 30 Bc (hh:mm) | 50 Bc (hh:mm) | 70 Bc (hh:mm) |
|-----------|----------------|------------------|----------|---------------|---------------|---------------|
| 109       | 3,698          | 34               | 2        | 02:50         | 02:52         | 02:52         |

##### Mixability (0 - 5) - 0 is not mixable, Request Test ID:2904238

Mixability rating (0 - 5)

5



# HALLIBURTON

LAB RESULTS - Tail

## Cementing Rockies, Vernal

### Job Information

|                |                |          |                           |            |             |
|----------------|----------------|----------|---------------------------|------------|-------------|
| Request/Slurry | 270152/1       | Rig Name | AZTEC WELL SERVICING #673 | Date       | 08/SEP/2012 |
| Submitted By   | Thomas Stumpf  | Job Type | Production Casing         | Bulk Plant | Vernal      |
| Customer       | Vantage Energy | Location | Duchesne                  | Well       | GDU 63-6-23 |

### Well Information

|                   |        |           |         |      |       |
|-------------------|--------|-----------|---------|------|-------|
| Casing/Liner Size | 5 1/2" | Depth MD  | 6277 ft | BHST | 153 F |
| Hole Size         | 7 7/8" | Depth TVD | 6277 ft | BHCT | 109 F |

### Cement Information - Tail Design

| Conc   | UOM      | Cement/Additive               | Sample Type | Sample Date | Lot No. | Cement Properties |             |                     |
|--------|----------|-------------------------------|-------------|-------------|---------|-------------------|-------------|---------------------|
|        |          | EconoCem                      |             |             |         | Slurry Density    | 13.40       | PPG                 |
| 100.00 | % BWOC   | Cement Blend                  |             |             |         | Slurry Yield      | 1.49        | ft <sup>3</sup> /sk |
| 3.000  | % BWOW   | KCl (Potassium Chloride) Salt |             |             |         | Water Requirement | 7.06        | GPS                 |
| 1.000  | lb/sk    | Granulite TR 1/4              |             |             |         | Water Source      | Fresh Water |                     |
| 7.06   | gal/sack | Fresh Water                   |             |             |         |                   |             |                     |

### Operation Test Results Request ID 270152/1

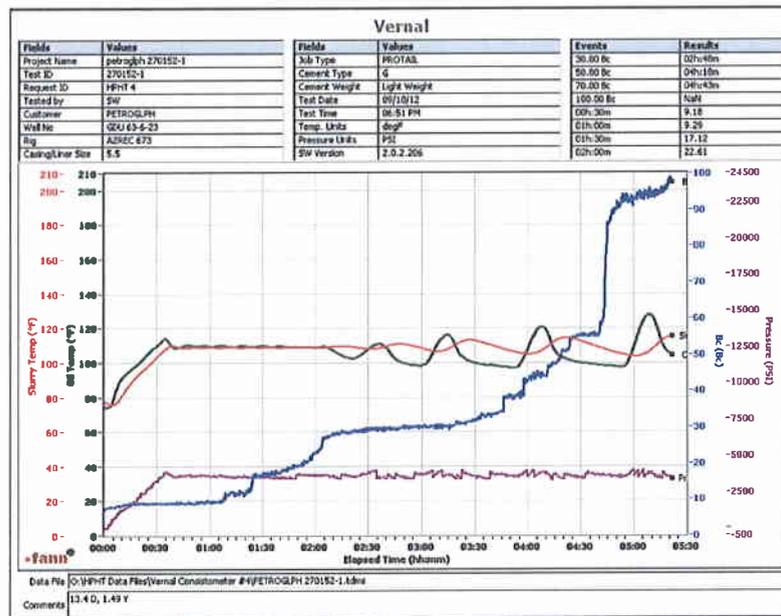
#### Thickening Time, Request Test ID:2904240

| Temp (°F) | Pressure (psi) | Reached in (min) | Start BC | 30 Bc (hh:mm) | 50 Bc (hh:mm) | 70 Bc (hh:mm) | Termination Time | Termination BC |
|-----------|----------------|------------------|----------|---------------|---------------|---------------|------------------|----------------|
| 109       | 3,694          | 34               | 7        | 02:48         | 04:18         | 04:43         | 05:21            | 98             |

#### Mixability (0 - 5) - 0 is not mixable, Request Test ID:2904241

Mixability rating (0 - 5)

5



**VANTAGE ENERGY LLC  
116 ENVERNESS DR E  
ENGLEWOOD, Colorado**

GDU 63-6-23

Interval Rollup  
Duchesne County, Utah

Sales Order: 9853843

## **Post Job Report**

For: John Moran Jr.

Date: Saturday, September 29, 2012

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**HALLIBURTON**



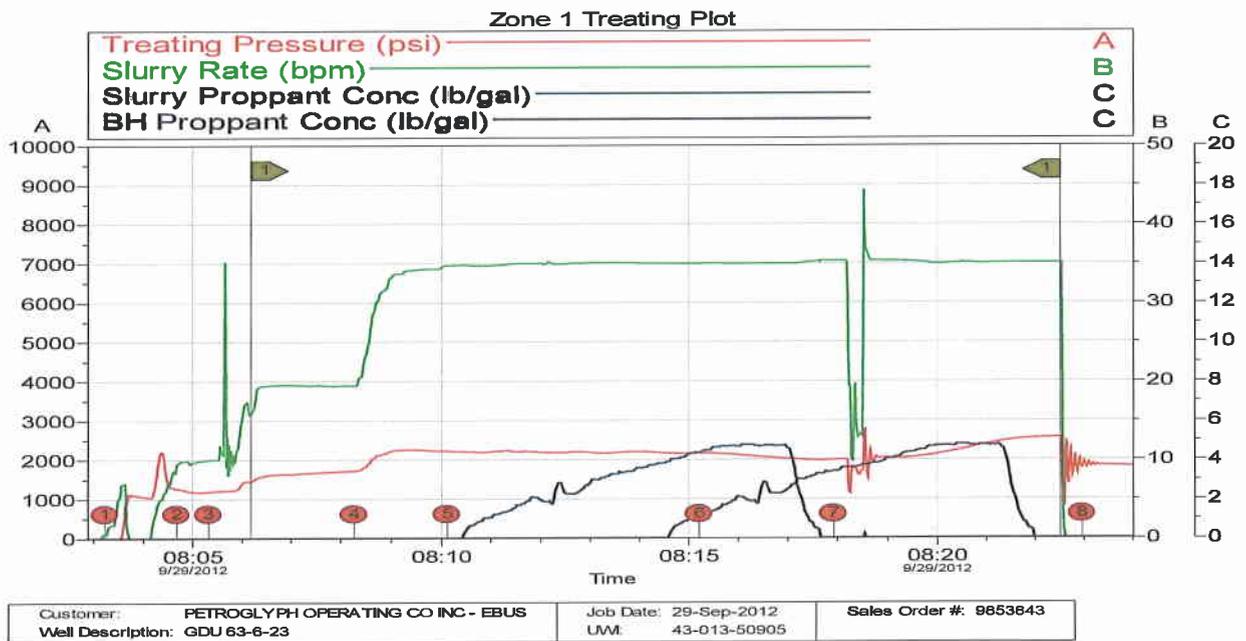
**1.0 PERFORMANCE HIGHLIGHTS**

**1.1 Job Event Log**

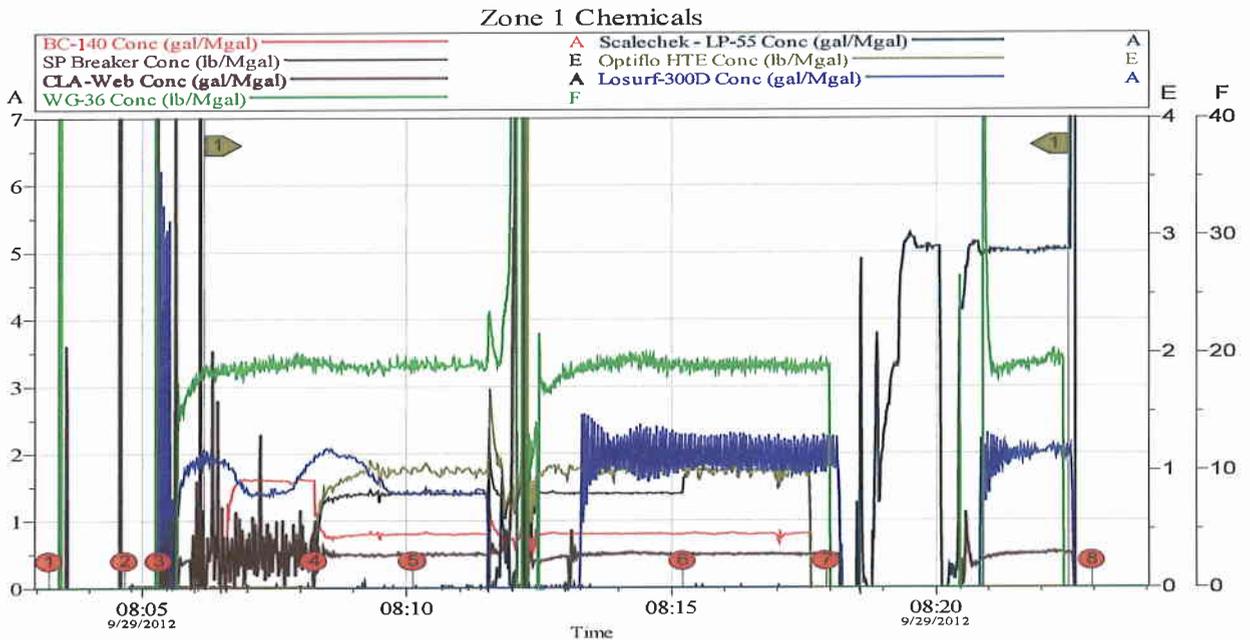
| Stage Number | Event Number | Time               | Description     | Comment                         | Treating Pressure psi | Slurry Rate bpm | Treatment Clean Volume gal | Treatment Slurry Volume gal |
|--------------|--------------|--------------------|-----------------|---------------------------------|-----------------------|-----------------|----------------------------|-----------------------------|
|              | 1            | 29-Sep-12 07:30:48 | Start Job       | Starting Job                    |                       |                 |                            |                             |
|              | 2            | 07:34:41           | Pressure Test   | Zone 1                          | 4633                  | 0.0             | 34                         | 31                          |
| 1            |              | 08:03:14           | Stage 1         | Breakdown                       | -44                   | 0.5             | 233                        | 72                          |
| 2            |              | 08:04:40           | Stage 2         | Acid                            | 1267                  | 9.4             | 190                        | 192                         |
| 3            |              | 08:05:19           | Stage 3         | Spacer                          | 1185                  | 10.0            | 439                        | 452                         |
|              |              | 08:06:10           | Start Averaging | Start Avg Trt 1                 | 1445                  | 15.8            | 820                        | 923                         |
| 4            |              | 08:08:16           | Stage 4         | Pad                             | 1716                  | 19.5            | 2538                       | 2610                        |
| 5            |              | 08:10:07           | Stage 5         | 1.0-5.0 ppg 20/40 Premium White | 2218                  | 34.7            | 4930                       | 5035                        |
| 6            |              | 08:15:12           | Stage 6         | 5.0 ppg 20/40 Premium White     | 2159                  | 35.0            | 11433                      | 12515                       |
| 7            |              | 08:17:55           | Stage 7         | Flush                           | 1987                  | 35.3            | 14874                      | 16505                       |
|              |              | 08:22:30           | End Averaging   | End Avg Trt 1                   | 2562                  | 35.1            | 21316                      | 23036                       |
|              | 3            | 08:22:37           | ISIP            |                                 | 2083                  | 0.7             | 21407                      | 23129                       |
| 8            |              | 08:22:57           | Stage 8         | Shut-In                         | 1792                  | 0.0             | 21407                      | 23129                       |

**2.0 ATTACHMENTS**

**2.1 Zone 1 Treating Plot**

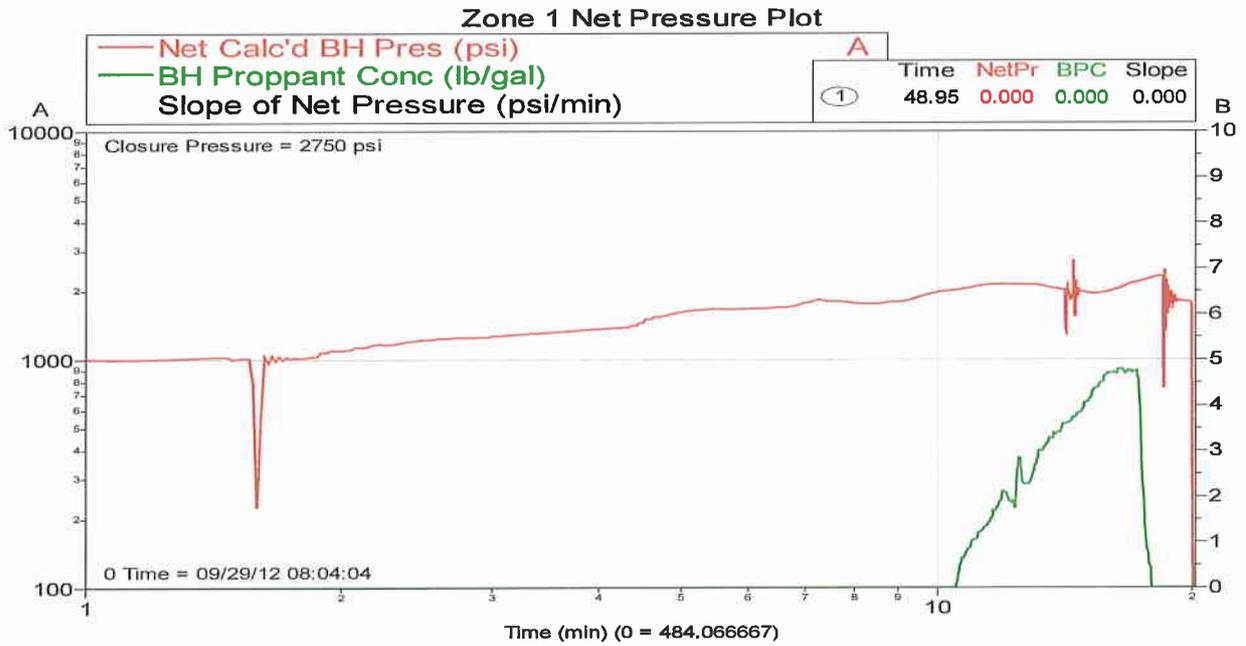


2.2 Zone 1 Chemicals



|  |                       |                        |
|--|-----------------------|------------------------|
| Customer: PETROGLYPH OPERATING CO INC - EBUS | Job Date: 29-Sep-2012 | Sales Order #: 9853843 |
| Well Description: GDU 63-6-23                | UWI: 43-013-50905     |                        |

2.3 Zone 1 Net Pressure Plot



|  |                       |                        |
|--|-----------------------|------------------------|
| Customer: PETROGLYPH OPERATING CO INC - EBUS | Job Date: 29-Sep-2012 | Sales Order #: 9853843 |
| Well Description: GDU 63-6-23                | UWI: 43-013-50905     |                        |

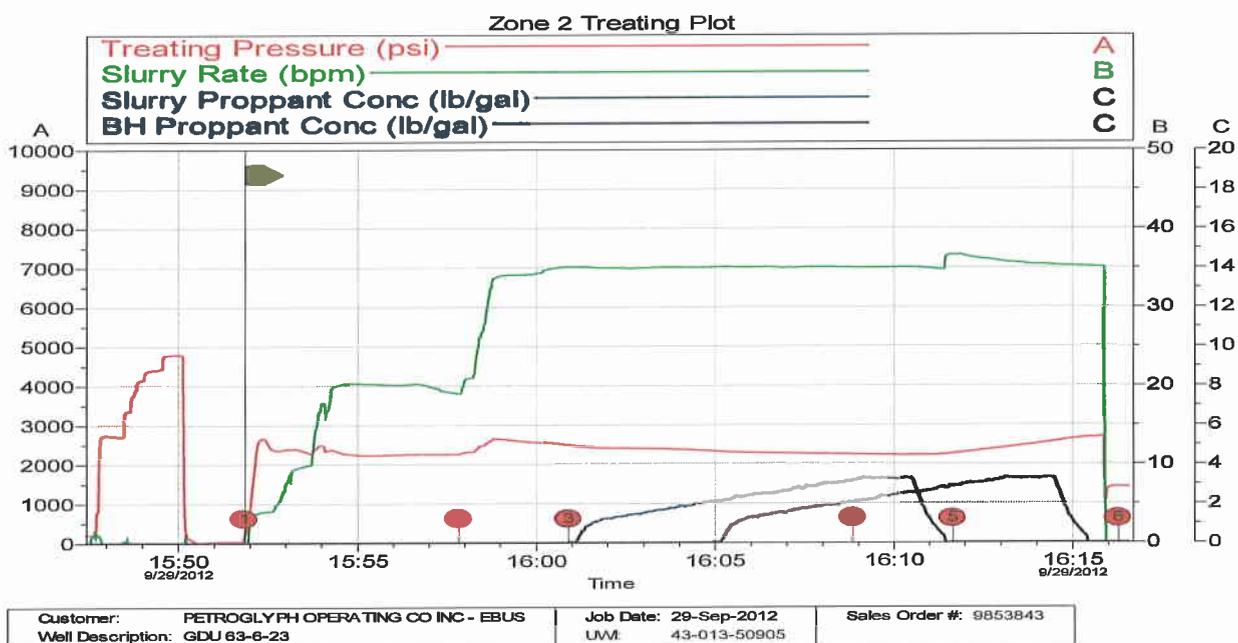
**3.0 PERFORMANCE HIGHLIGHTS**

**3.1 Job Event Log**

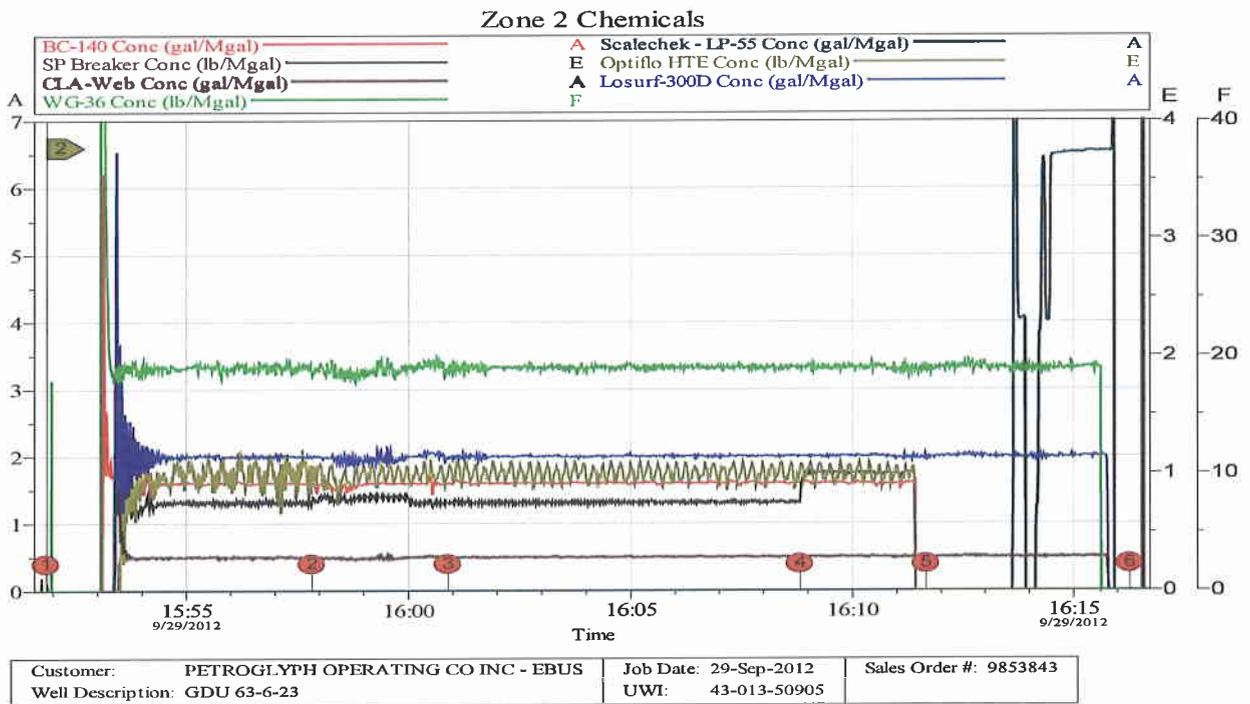
| Stage Number | Event Number | Time               | Description                                       | Comment                               | Treating Pressure psi | Slurry Rate bpm | Treatment Clean Volume gal | Treatment Slurry Volume gal |
|--------------|--------------|--------------------|---|---------------------------------------|-----------------------|-----------------|----------------------------|-----------------------------|
|              | 12           | 29-Sep-12 08:37:18 | Pause   | Suspending Job                        | 0                     | 0.0             | 0                          | 12                          |
|              | 13           | 08:40:00           | Customer or Contractor Equip Problem - Start Time | Wireline couldnt get down to set plug | 0                     | 0.0             | 0                          | 12                          |
|              | 14           | 15:41:12           | Customer or Contractor Equip Problem - End Time   |                                       | 0                     | 0.0             | 0                          | 12                          |
|              | 15           | 15:43:47           | Resume  | Resuming Job                          | 4                     | 2.1             | 0                          | 12                          |
|              | 16           | 15:49:52           | Pressure Test                                     | Zone 2                                | 4785                  | 0.0             | 19                         | 330                         |
| 1            |              | 15:51:50           | Stage 1   | Breakdown                             | 160                   | 0.0             | 5                          | 0                           |
|              |              | 15:51:51           | Start Averaging                                   | Start Avg Trt 2                       | 209                   | 0.0             | 9                          | 0                           |
| 2            |              | 15:57:50           | Stage 2   | Pad                                   | 2256                  | 19.0            | 3825                       | 3829                        |
| 3            |              | 16:00:54           | Stage 3   | 1.0-3.0 ppg 20/40 Premium White       | 2484                  | 35.1            | 7869                       | 7856                        |
| 4            |              | 16:08:49           | Stage 4   | 3.0 ppg 20/40 Premium White           | 2248                  | 35.0            | 18449                      | 19525                       |
| 5            |              | 16:11:39           | Stage 5   | 250 gal 15% Acid & Flush              | 2266                  | 36.6            | 22221                      | 23694                       |
| 6            |              | 16:16:16           | Stage 6   | Shut-In                               | 1423                  | 0.0             | 28294                      | 30058                       |
|              |              | 16:17:28           | End Averaging                                     | End Avg Trt 2                         | -20                   | 0.0             | 28493                      | 30058                       |

**4.0 ATTACHMENTS**

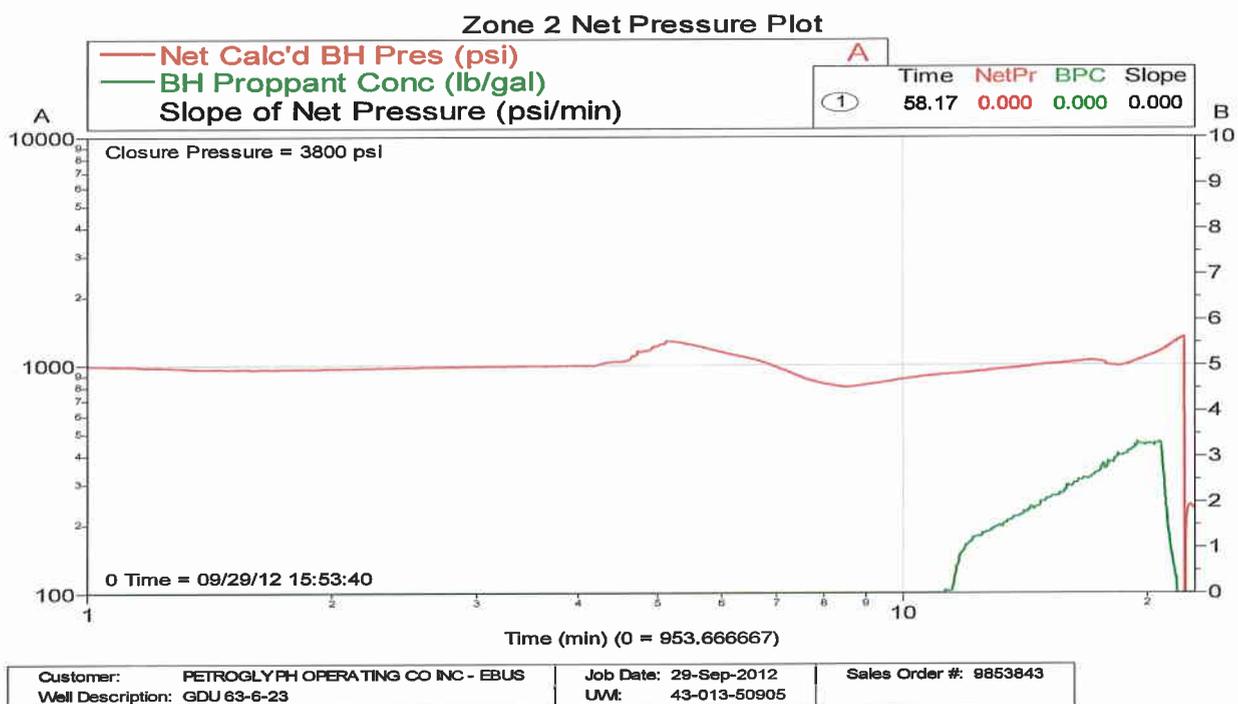
**4.1 Zone 2 Treating Plot**



4.2 Zone 2 Chemicals



4.3 Zone 2 Net Pressure Plot



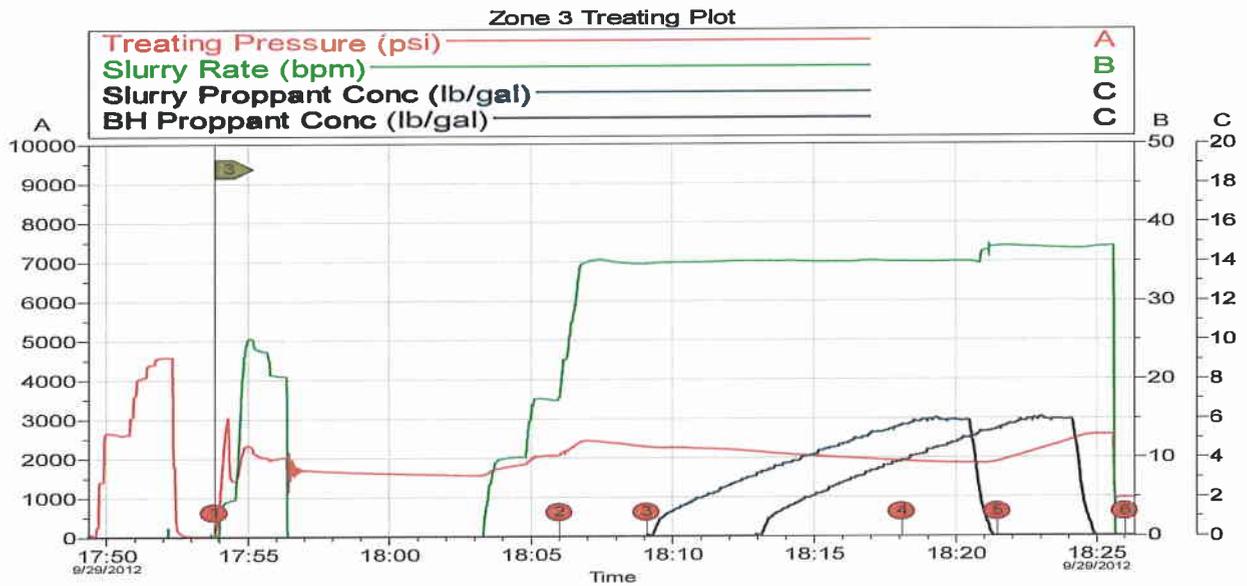
**5.0 PERFORMANCE HIGHLIGHTS**

**5.1 Job Event Log**

| Stage Number | Event Number | Time                  | Description  | Comment                         | Treating Pressure psi | Slurry Rate bpm | Treatment Clean Volume gal | Treatment Slurry Volume gal |
|--------------|--------------|-----------------------|--|---------------------------------|-----------------------|-----------------|----------------------------|-----------------------------|
|              | 17           | 29-Sep-12<br>16:17:34 | Pause  | Suspending Job                  | 0                     | 0.0             | 135                        | 0                           |
|              | 18           | 17:49:05              | Resume   | Resuming Job                    | -25                   | 0.0             | 135                        | 0                           |
|              | 19           | 17:52:08              | Pressure Test  | Zone 3                          | 4574                  | 0.0             | 169                        | 0                           |
| 1            |              | 17:53:49              | Stage 1  | Breakdown                       | 28                    | 0.0             | 337                        | 1                           |
|              |              | 17:53:50              | Start Averaging  | Start Avg Trt 3                 | 36                    | 0.0             | 17                         | 0                           |
|              | 20           | 17:56:25              | HES or HES Sub-Contractor Equipment Problem - Start Time | Crosslinker wont run in LA1     | 1294                  | 1.0             | 1731                       | 1740                        |
|              | 21           | 18:03:18              | HES or HES Sub-Contractor Equipment Problem - End Time   | Cleared debris in micromotion   | 1574                  | 0.0             | 1735                       | 1740                        |
| 2            |              | 18:06:00              | Stage 2  | Pad                             | 2077                  | 17.7            | 3100                       | 3135                        |
| 3            |              | 18:09:05              | Stage 3  | 1.0-6.0 ppg 20/40 Premium White | 2287                  | 34.7            | 7288                       | 7374                        |
| 4            |              | 18:18:05              | Stage 4  | 6.0 ppg 20/40 Premium White     | 1912                  | 35.0            | 18557                      | 20597                       |
| 5            |              | 18:21:27              | Stage 5  | 250 gal 15% Acid & Flush        | 1888                  | 36.9            | 22699                      | 25581                       |
| 6            |              | 18:26:01              | Stage 6  | Shut-In                         | 962                   | 0.0             | 28888                      | 32047                       |
|              |              | 18:28:16              | End Averaging  | End Avg Trt 3                   | -17                   | 0.0             | 28923                      | 32047                       |

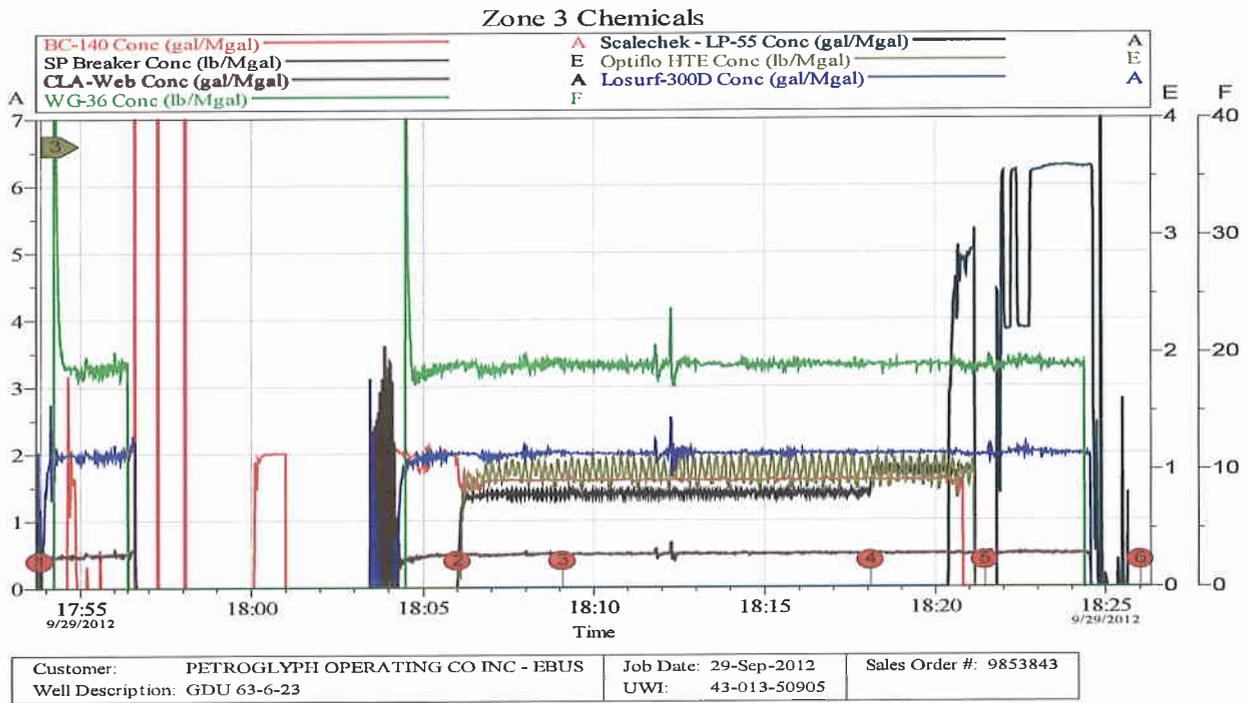
**6.0 ATTACHMENTS**

**6.1 Zone 3 Treating Plot**

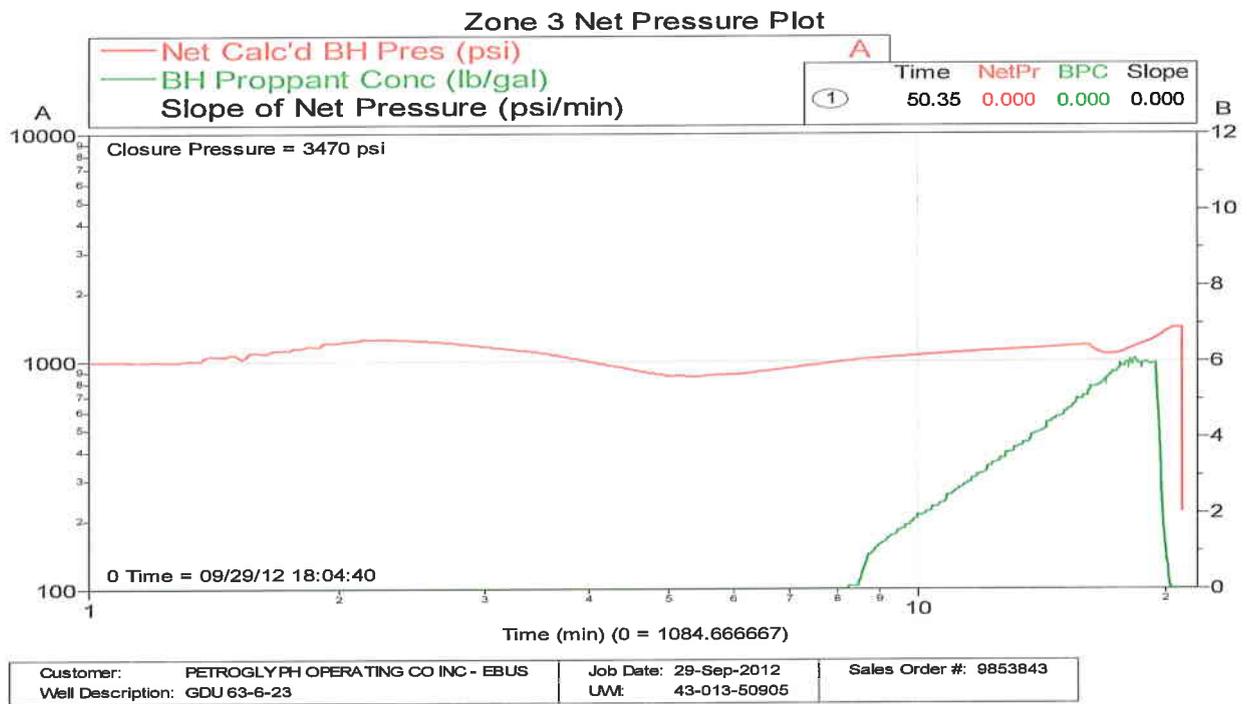


|  |                       |                        |
|--|-----------------------|------------------------|
| Customer: PETROGLYPH OPERATING CO INC - EBUS | Job Date: 29-Sep-2012 | Sales Order #: 9853843 |
| Well Description: GDU 63-6-23                | UWI: 43-013-50905     |                        |

6.2 Zone 3 Chemicals



6.3 Zone 3 Net Pressure Plot



---

**VANTAGE ENERGY LLC  
116 ENVERNESS DR E  
ENGLEWOOD, Colorado**

GDU 63-6-23

Interval 4  
Duchesne County, Utah

Sales Order: 9853843

## **Post Job Report**

For: John Moran Jr.

Date: Saturday, September 29, 2012

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**HALLIBURTON**



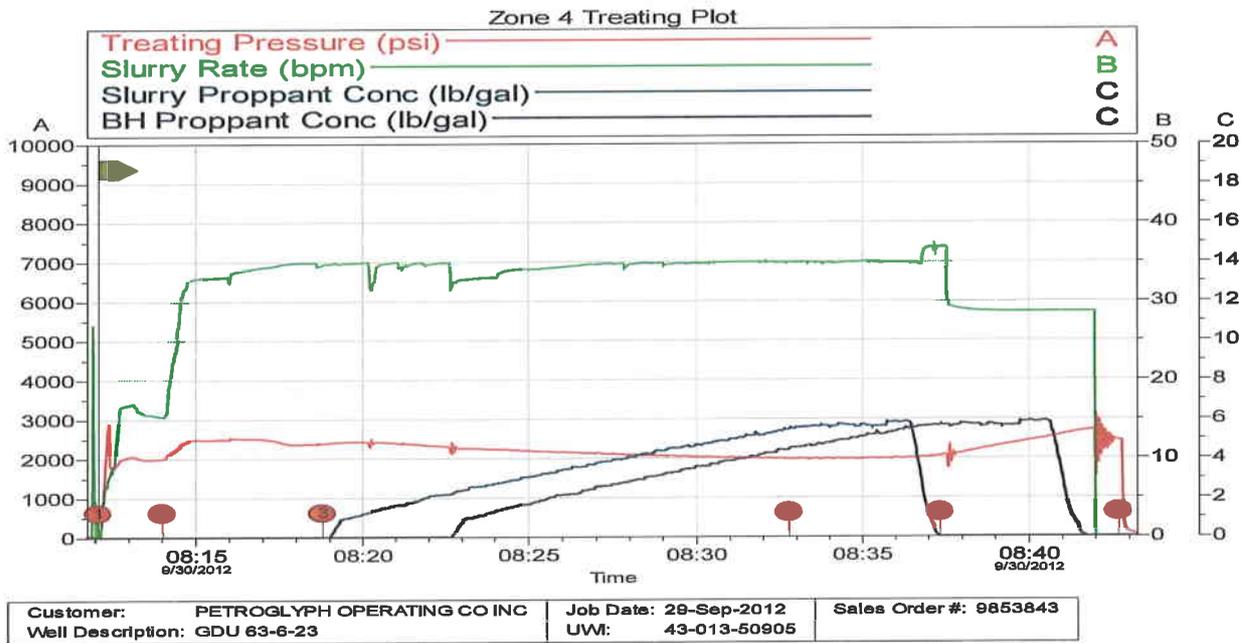
**7.0 PERFORMANCE HIGHLIGHTS**

**7.1 Job Event Log**

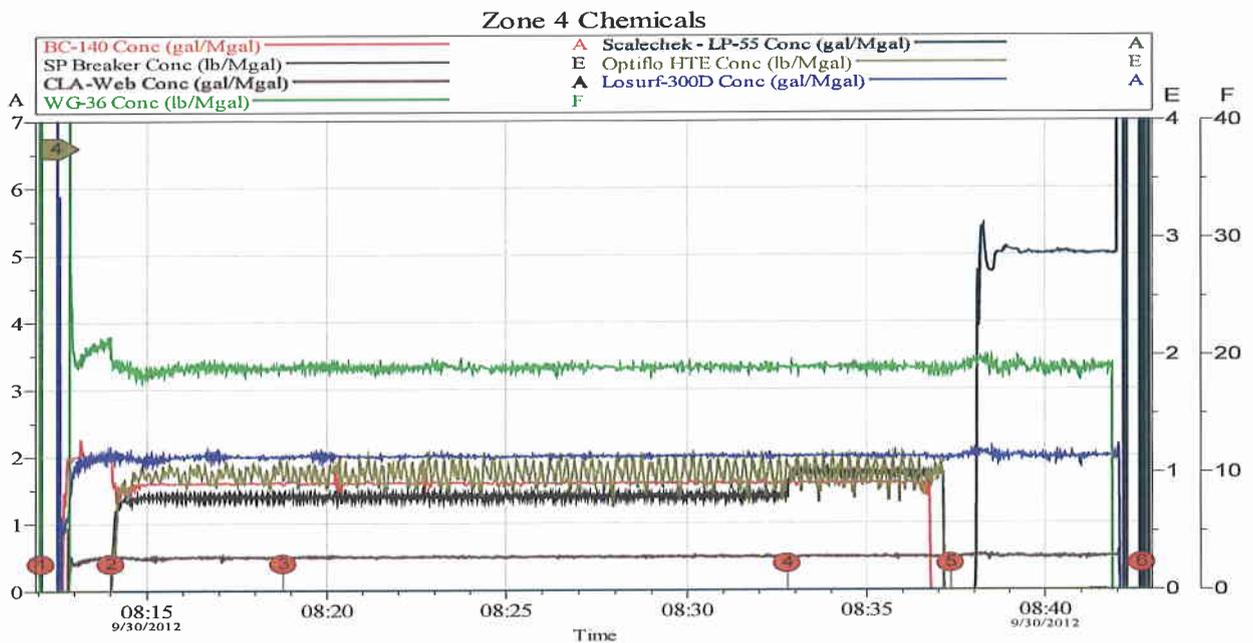
| Stage Number | Event Number | Time               | Description                            | Comment                         | Treating Pressure psi | Slurry Rate bpm | Treatment Clean Volume gal | Treatment Slurry Volume gal |
|--------------|--------------|--------------------|--|---------------------------------|-----------------------|-----------------|----------------------------|-----------------------------|
|              | 22           | 29-Sep-12 18:28:24 | Pause                                  | Suspending Job                  | 0                     | 0.0             | 0                          | 0                           |
|              | 23           | 30-Sep-12 06:00:00 | Crew Arrive Shop                       |                                 | 0                     | 0.0             | 0                          | 0                           |
|              | 24           | 06:05:00           | Pre-Convoy Safety Meeting              |                                 | 0                     | 0.0             | 0                          | 0                           |
|              | 25           | 06:15:00           | Crew Leave Shop                        |                                 | 0                     | 0.0             | 0                          | 0                           |
|              | 26           | 07:45:00           | Arrive at Location from Service Center |                                 | 0                     | 0.0             | 0                          | 0                           |
|              | 27           | 07:57:19           | Resume                                 | Resuming Job                    | 0                     | 0.0             | 0                          | 0                           |
|              | 28           | 07:59:57           | Pressure Test                          | Zone 4                          | 4576                  | 0.0             | 52                         | 67                          |
|              | 29           | 08:01:00           | Pre-Job Safety Meeting                 |                                 | 8                     | 4.0             | 106                        | 176                         |
|              | 30           | 08:01:21           | Pause                                  | Suspending Job                  | 0                     | 0.0             | 106                        | 226                         |
|              | 31           | 08:09:52           | Resume                                 | Resuming Job                    | 11                    | 3.8             | 106                        | 226                         |
| 1            |              | 08:12:05           | Stage 1                                | Breakdown                       | 51                    | 1.8             | 3                          | 1                           |
|              |              | 08:12:06           | Start Averaging                        | Start Avg Trt 4                 | 61                    | 0.2             | 5                          | 1                           |
| 2            |              | 08:14:01           | Stage 2                                | Pad                             | 2001                  | 15.4            | 1092                       | 1083                        |
| 3            |              | 08:18:47           | Stage 3                                | 1.0-6.0 ppg 20/40 Premium White | 2385                  | 34.6            | 7668                       | 7573                        |
| 4            |              | 08:32:47           | Stage 4                                | 6.0 ppg 20/40 Premium White     | 1985                  | 34.9            | 25061                      | 27835                       |
| 5            |              | 08:37:21           | Stage 5                                | 250 gal 15% Acid & Flush        | 2054                  | 36.8            | 30515                      | 34562                       |
| 6            |              | 08:42:41           | Stage 6                                | Shut-In                         | 2453                  | 0.0             | 35879                      | 40236                       |
|              |              | 08:44:04           | End Averaging                          | End Avg Trt 4                   | 140                   | 0.0             | 35879                      | 40236                       |

**8.0 ATTACHMENTS**

**8.1 Zone 4 Treating Plot**

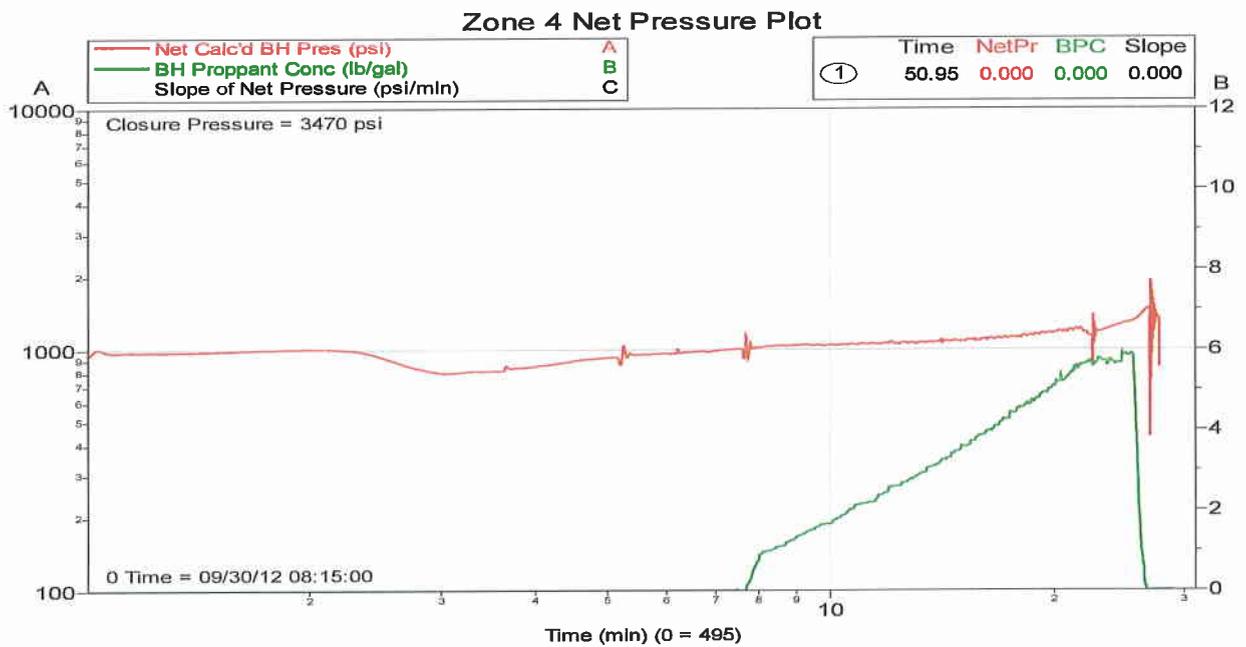


8.2 Zone 4 Chemicals



|                                       |                       |                        |
|---------------------------------------|-----------------------|------------------------|
| Customer: PETROGLYPH OPERATING CO INC | Job Date: 29-Sep-2012 | Sales Order #: 9853843 |
| Well Description: GDU 63-6-23         | UWI: 43-013-50905     |                        |

8.3 Zone 4 Net Pressure Plot



|                                       |                       |                        |
|---------------------------------------|-----------------------|------------------------|
| Customer: PETROGLYPH OPERATING CO INC | Job Date: 29-Sep-2012 | Sales Order #: 9853843 |
| Well Description: GDU 63-6-23         | UWI: 43-013-50905     |                        |

---

**VANTAGE ENERGY LLC  
116 ENVERNESS DR E  
ENGLEWOOD, Colorado**

GDU 63-6-23

Interval 5  
Duchesne County, Utah

Sales Order: 9853843

## **Post Job Report**

For: John Moran Jr.

Date: Saturday, September 29, 2012

Notice: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

**HALLIBURTON**



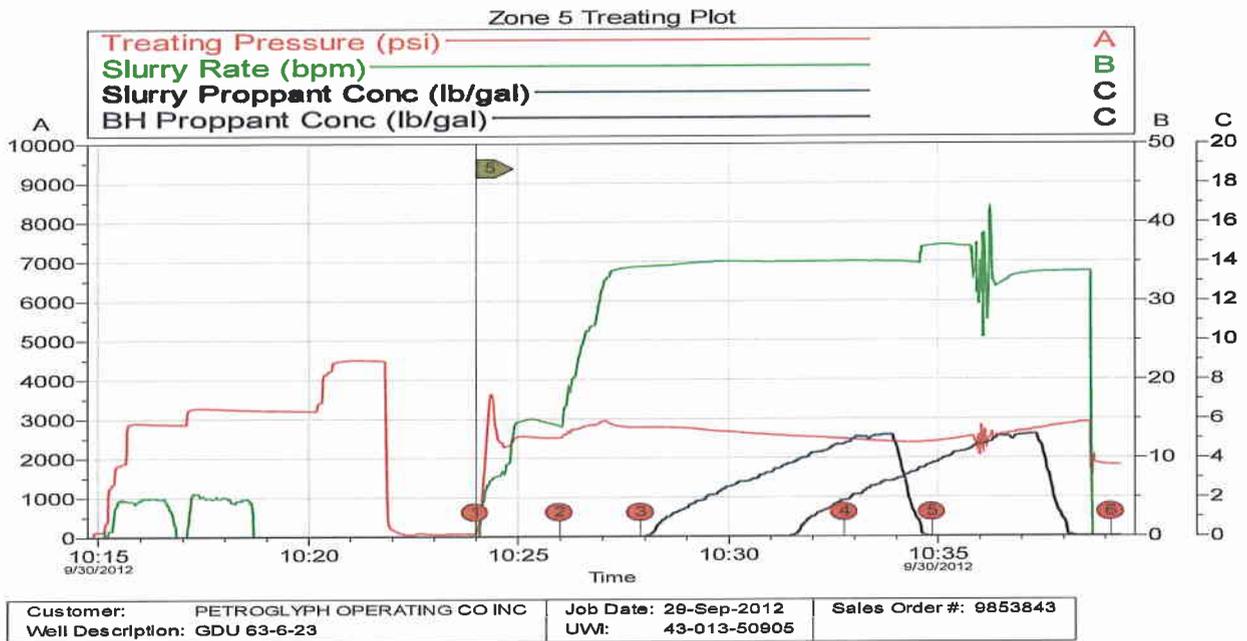
**9.0 PERFORMANCE HIGHLIGHTS**

**9.1 Job Event Log**

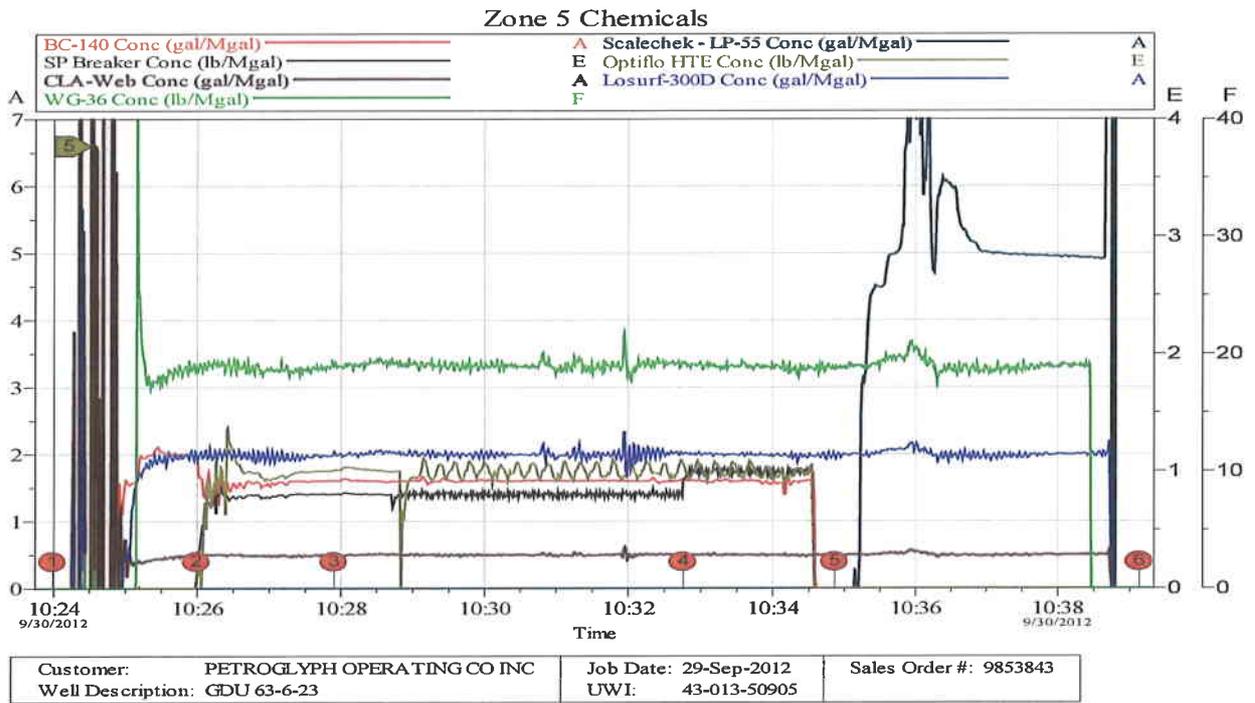
| Stage Number | Event Number | Time               | Description     | Comment                         | Treating Pressure psi | Slurry Rate bpm | Treatment Clean Volume gal | Treatment Slurry Volume gal |
|--------------|--------------|--------------------|-----------------|---------------------------------|-----------------------|-----------------|----------------------------|-----------------------------|
|              | 32           | 30-Sep-12 08:44:12 | Pause           | Suspending Job                  | 0                     | 0.0             | 0                          | 0                           |
|              | 33           | 10:14:53           | Resume          | Resuming Job                    | 22                    | 0.0             | 0                          | 0                           |
|              | 34           | 10:21:16           | Pressure Test   | Zone 5                          | 4495                  | 0.0             | 388                        | 590                         |
| 1            |              | 10:23:59           | Stage 1         | Breakdown                       | 78                    | 0.0             | 414                        | 590                         |
|              |              | 10:24:00           | Start Averaging | Start Avg Trt 5                 | 86                    | 0.0             | 0                          | 0                           |
| 2            |              | 10:25:59           | Stage 2         | Pad                             | 2515                  | 14.2            | 888                        | 921                         |
| 3            |              | 10:27:54           | Stage 3         | 1.0-6.0 ppg 20/40 Premium White | 2784                  | 34.4            | 3190                       | 3176                        |
| 4            |              | 10:32:45           | Stage 4         | 6.0 ppg 20/40 Premium White     | 2485                  | 35.0            | 9370                       | 10288                       |
| 5            |              | 10:34:52           | Stage 5         | 250 gal 15% Acid & Flush        | 2409                  | 37.0            | 12062                      | 13403                       |
| 6            |              | 10:39:08           | Stage 6         | Shut-In                         | 1819                  | 0.0             | 17102                      | 18908                       |
|              |              | 10:41:48           | End Averaging   | End Avg Trt 5                   | 27                    | 0.0             | 17102                      | 18908                       |

**10.0 ATTACHMENTS**

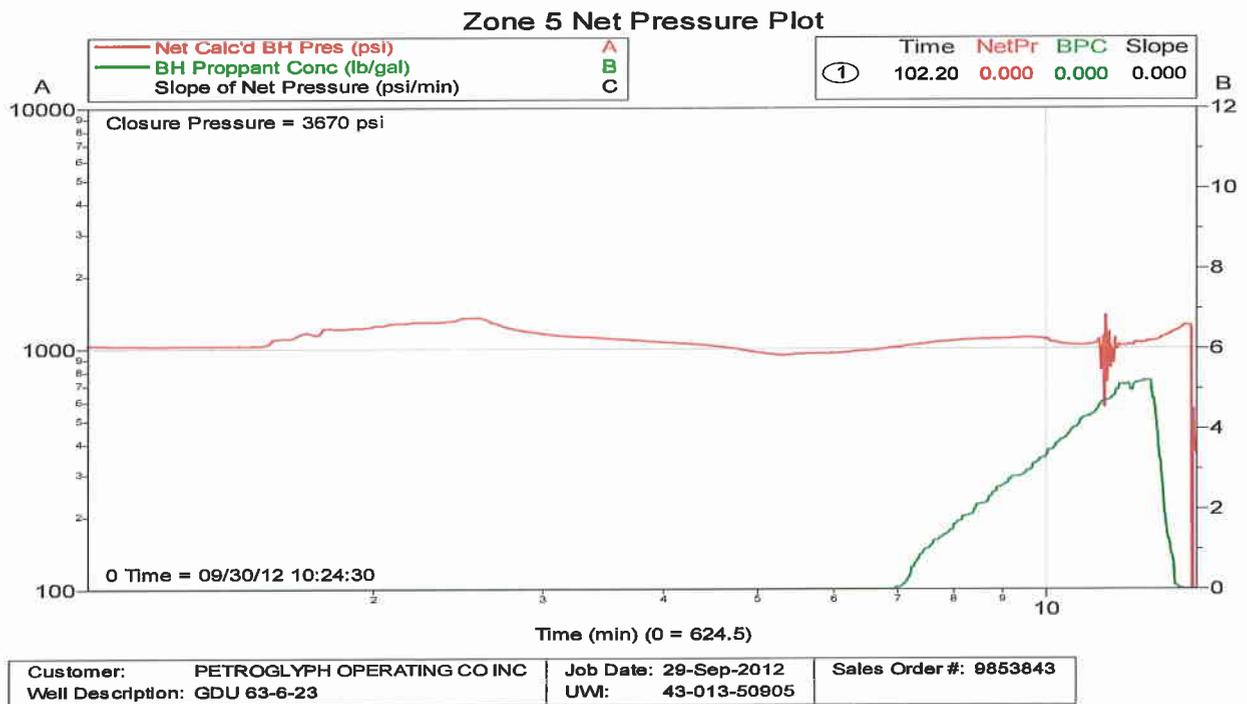
**10.1 Zone 5 Treating Plot**



10.2 Zone 5 Chemicals



10.3 Zone 5 Net Pressure Plot



**VANTAGE ENERGY LLC  
116 ENVERNESS DR E  
ENGLEWOOD, Colorado**

GDU 63-6-23

Interval 6  
Duchesne County, Utah

Sales Order: 9853843

## **Post Job Report**

For: John Moran Jr.  
Date: Saturday, September 29, 2012

Notice: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

**HALLIBURTON**



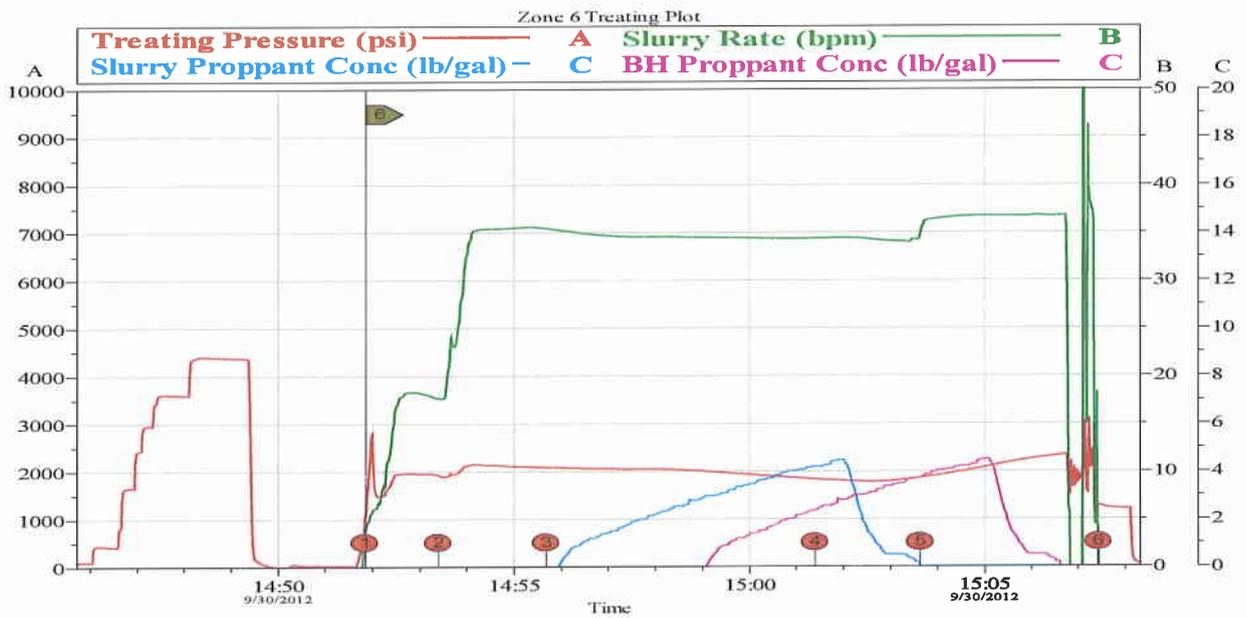
**11.0 PERFORMANCE HIGHLIGHTS**

**11.1 Job Event Log**

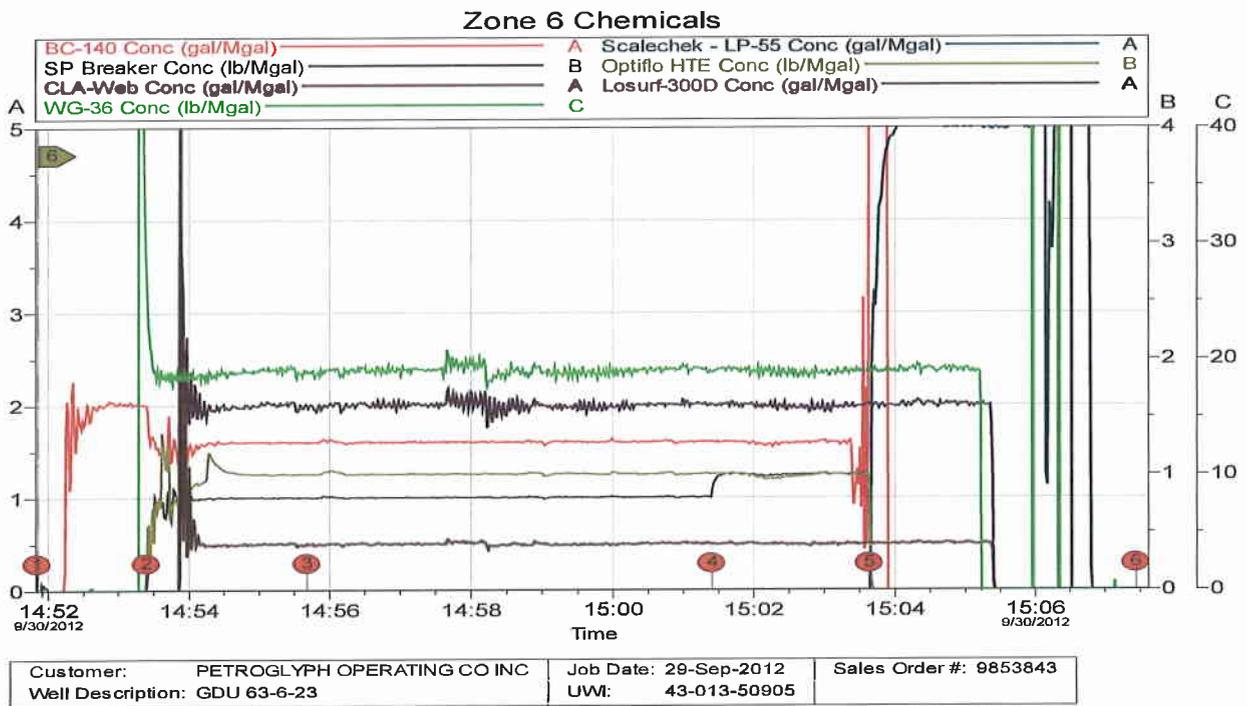
| Stage Number | Event Number | Time               | Description                            | Comment                         | Treating Pressure psi | Slurry Rate bpm | Treatment Clean Volume gal | Treatment Slurry Volume gal |
|--------------|--------------|--------------------|--|---------------------------------|-----------------------|-----------------|----------------------------|-----------------------------|
|              | 35           | 30-Sep-12 10:42:00 | Pause                                  | Suspending Job                  | 0                     | 0.0             | 0                          | 0                           |
|              | 36           | 11:29:20           | Resume                                 | Resuming Job                    | 49                    | 0.0             | 0                          | 0                           |
|              | 37           | 11:32:30           | Pressure Test                          | Zone 6                          | 4642                  | 0.0             | 98                         | 152                         |
|              | 38           | 12:50:12           | Pause                                  | Suspending Job                  | 0                     | 0.0             | 420                        | 158                         |
|              | 39           | 13:53:27           | Resume                                 | Resuming Job                    | 0                     | 0.0             | 420                        | 158                         |
|              | 40           | 14:14:23           | Pause                                  | Suspending Job                  | 0                     | 0.0             | 430                        | 158                         |
|              | 41           | 14:40:48           | Resume                                 | Resuming Job                    | 0                     | 0.0             | 430                        | 158                         |
| 1            |              | 14:51:50           | Stage 1                                | Breakdown                       | 842                   | 2.9             | 457                        | 163                         |
|              |              | 14:51:51           | Start Averaging                        | Start Avg Trt 6                 | 1046                  | 3.8             | 2                          | 3                           |
| 2            |              | 14:53:23           | Stage 2                                | Pad                             | 1930                  | 17.7            | 941                        | 925                         |
| 3            |              | 14:55:41           | Stage 3                                | 1.0-6.0 ppg 20/40 Premium White | 2086                  | 35.5            | 3939                       | 3996                        |
| 4            |              | 15:01:24           | Stage 4                                | 6.0 ppg 20/40 Premium White     | 1831                  | 34.4            | 11272                      | 12320                       |
| 5            |              | 15:03:38           | Stage 5                                | Flush                           | 1862                  | 34.6            | 14280                      | 15534                       |
| 6            |              | 15:07:26           | Stage 6                                | Shut-In                         | 1287                  | 6.3             | 18905                      | 20825                       |
|              |              | 15:12:53           | End Averaging                          | End Avg Trt 6                   | -14                   | 0.0             | 18913                      | 20826                       |
|              | 42           | 15:12:55           | End Job                                | Ending Job                      | -14                   | 0.0             | 18914                      | 20826                       |
|              | 43           | 15:15:00           | Post-Job Safety Meeting (Pre Rig-Down) |                                 | -14                   | 0.0             | 18914                      | 20826                       |

12.0 ATTACHMENTS

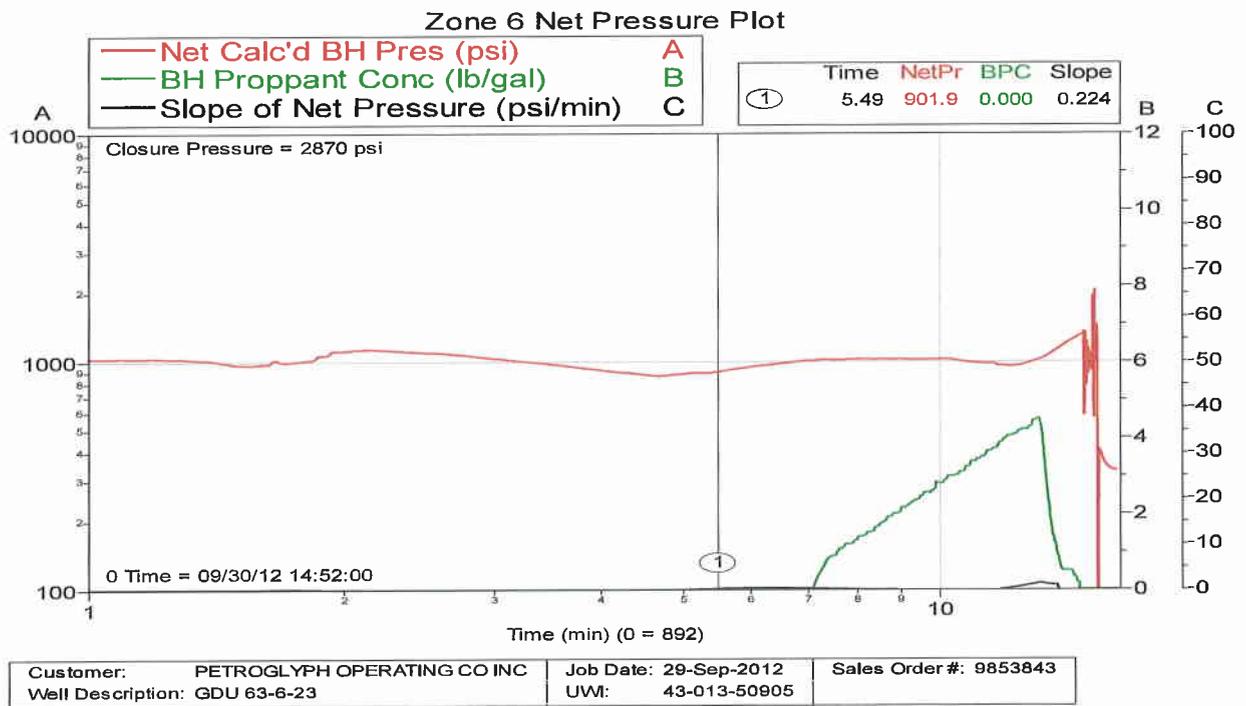
12.1 Zone 6 Treating Plot



12.2 Zone 6 Chemicals



12.3 Zone 6 Net Pressure Plot



|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | <b>FORM 9</b><br><br><b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>UTU78235                                     |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b><br><br><b>7. UNIT or CA AGREEMENT NAME:</b><br>GILSONITE DRAW          |
| <b>1. TYPE OF WELL</b><br>Oil Well   | <b>8. WELL NAME and NUMBER:</b><br>GDU 63-6-23  |
| <b>2. NAME OF OPERATOR:</b><br>VANTAGE ENERGY UINTA LLC  | <b>9. API NUMBER:</b><br>43013509050000   |
| <b>3. ADDRESS OF OPERATOR:</b><br>116 Inverness Drive East, Ste 107 , Englewood , CO, 80112  | <b>PHONE NUMBER:</b><br>303 386-8600 Ext  |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>2418 FNL 2480 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U  | <b>9. FIELD and POOL or WILDCAT:</b><br>UNDESIGNATED<br><br><b>COUNTY:</b><br>DUCHESNE<br><br><b>STATE:</b><br>UTAH |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION  |  |   |
|--|---|--|---|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br><b>1/24/2013</b><br><br><input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:<br><br><input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:<br><br><input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date: | <input type="checkbox"/> ACIDIZE<br><input type="checkbox"/> CHANGE TO PREVIOUS PLANS<br><input type="checkbox"/> CHANGE WELL STATUS<br><input type="checkbox"/> DEEPEN<br><input type="checkbox"/> OPERATOR CHANGE<br><input type="checkbox"/> PRODUCTION START OR RESUME<br><input type="checkbox"/> REPERFORATE CURRENT FORMATION<br><input type="checkbox"/> TUBING REPAIR<br><input type="checkbox"/> WATER SHUTOFF<br><input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING<br><input type="checkbox"/> CHANGE TUBING<br><input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS<br><input type="checkbox"/> FRACTURE TREAT<br><input type="checkbox"/> PLUG AND ABANDON<br><input type="checkbox"/> RECLAMATION OF WELL SITE<br><input type="checkbox"/> SIDETRACK TO REPAIR WELL<br><input checked="" type="checkbox"/> VENT OR FLARE<br><input type="checkbox"/> SI TA STATUS EXTENSION<br><input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR<br><input type="checkbox"/> CHANGE WELL NAME<br><input type="checkbox"/> CONVERT WELL TYPE<br><input type="checkbox"/> NEW CONSTRUCTION<br><input type="checkbox"/> PLUG BACK<br><input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION<br><input type="checkbox"/> TEMPORARY ABANDON<br><input type="checkbox"/> WATER DISPOSAL<br><input type="checkbox"/> APD EXTENSION<br>OTHER: <input style="width: 100px;" type="text"/> |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted to the Utah Division of Oil, Gas and Mining (UDOGM) on behalf of Vantage Energy Uinta LLC (Vantage). Vantage is requesting authorization to continue to vent/flare the referenced well through the end of February 2013 or until a gas gathering agreement has been finalized with Petroglyph. Vantage and Petroglyph are waiting for an approved tribal Right-of-Way (ROW). UDOGM will be updated on the progress of this situation. Thank you.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining**

**Date:** February 06, 2013

**By:** David F. Banko

|  |                                     |                              |
|--|-------------------------------------|------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>David F. Banko | <b>PHONE NUMBER</b><br>303 820-4480 | <b>TITLE</b><br>Permit Agent |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>1/24/2013            |                              |

|  |  |  |
|--|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  |  | <b>FORM 9</b>  |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b><br><br>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. |  | <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>UTU78235 |
|  |  | <b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>               |
| <b>1. TYPE OF WELL</b><br>Oil Well   |  | <b>7. UNIT or CA AGREEMENT NAME:</b><br>GILSONITE DRAW     |
| <b>2. NAME OF OPERATOR:</b><br>VANTAGE ENERGY UINTA LLC  |  | <b>8. WELL NAME and NUMBER:</b><br>GDU 63-6-23             |
| <b>3. ADDRESS OF OPERATOR:</b><br>116 Inverness Drive East, Ste 107, Englewood, CO, 80112  |  | <b>9. API NUMBER:</b><br>43013509050000                    |
| <b>PHONE NUMBER:</b><br>303 386-8600 Ext   |  | <b>9. FIELD and POOL or WILDCAT:</b><br>UNDESIGNATED       |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>2418 FNL 2480 FEL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: SWNE Section: 06 Township: 06.0S Range: 03.0W Meridian: U  |  | <b>COUNTY:</b><br>DUCHESNE                                 |
|  |  | <b>STATE:</b><br>UTAH                                      |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION   | TYPE OF ACTION   |   |   |
|--|--|---|---|
| <input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b><br>Approximate date work will start:<br>11/16/2012 | <input type="checkbox"/> ACIDIZE                       | <input type="checkbox"/> ALTER CASING                   | <input type="checkbox"/> CASING REPAIR                  |
| <input type="checkbox"/> <b>SUBSEQUENT REPORT</b><br>Date of Work Completion:                                  | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS      | <input type="checkbox"/> CHANGE TUBING                  | <input type="checkbox"/> CHANGE WELL NAME               |
| <input type="checkbox"/> <b>SPUD REPORT</b><br>Date of Spud:   | <input type="checkbox"/> CHANGE WELL STATUS            | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input checked="" type="checkbox"/> CONVERT WELL TYPE   |
| <input type="checkbox"/> <b>DRILLING REPORT</b><br>Report Date:  | <input type="checkbox"/> DEEPEN                        | <input type="checkbox"/> FRACTURE TREAT                 | <input type="checkbox"/> NEW CONSTRUCTION               |
|  | <input type="checkbox"/> OPERATOR CHANGE               | <input type="checkbox"/> PLUG AND ABANDON               | <input type="checkbox"/> PLUG BACK                      |
|  | <input type="checkbox"/> PRODUCTION START OR RESUME    | <input type="checkbox"/> RECLAMATION OF WELL SITE       | <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION |
|  | <input type="checkbox"/> REPERFORATE CURRENT FORMATION | <input type="checkbox"/> SIDETRACK TO REPAIR WELL       | <input type="checkbox"/> TEMPORARY ABANDON              |
|  | <input type="checkbox"/> TUBING REPAIR                 | <input checked="" type="checkbox"/> VENT OR FLARE       | <input type="checkbox"/> WATER DISPOSAL                 |
|  | <input type="checkbox"/> WATER SHUTOFF                 | <input type="checkbox"/> SI TA STATUS EXTENSION         | <input type="checkbox"/> APD EXTENSION                  |
|  | <input type="checkbox"/> WILDCAT WELL DETERMINATION    | <input type="checkbox"/> OTHER                          | OTHER: <input type="text"/>                             |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

This Sundry Notice is being submitted to the Utah Division of Oil, Gas and Mining on behalf of Vantage Energy Uinta LLC (Vantage). 1) Vantage is requesting to change the GDU 63-6-23 well classification from gas to an oil well. 2) Notification is also being given that as of 11/16/2012 the well is still venting approximately 50 MCF per day. Vantage is in the final stages of negotiating a gas gathering agreement. Vantage is anticipating this agreement and tie in construction facilities to be finalized within the next 45-60 days. 3) Current production averages 95 BO and 50 MCF per day. If there are any questions or concerns about this process please contact Mark Johnson at 303-820-4480. Thank you.

|  |                                     |                              |
|--|-------------------------------------|------------------------------|
| <b>NAME (PLEASE PRINT)</b><br>David F. Banko | <b>PHONE NUMBER</b><br>303 820-4480 | <b>TITLE</b><br>Permit Agent |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>11/9/2012            |                              |

**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 9

|  |  |  |
|--|--|--|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b>   |  | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br><b>UTU78235</b> |
| Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:                      |
| 1. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____  |  | 7. UNIT or CA AGREEMENT NAME:<br><b>UTU86249X</b>          |
| 2. NAME OF OPERATOR:<br><b>Vantage Energy Uinta LLC</b>  |  | 8. WELL NAME and NUMBER:<br><b>GDU 63-6-23</b>             |
| 3. ADDRESS OF OPERATOR:<br><b>116 Inverness Dr. E Ste 107</b> CITY <b>Englewood</b> STATE <b>CO</b> ZIP <b>80112</b>   | PHONE NUMBER:<br><b>(303) 386-8672</b> | 9. API NUMBER:<br><b>4301350905</b>                        |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE: <b>2418' FNL 2480 FEL</b>  |  | 10. FIELD AND POOL, OR WILDCAT:<br><b>Wildcat</b>          |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: <b>SWNE 6 T6S R3W</b>   |  | COUNTY: <b>Duchesne</b>                                    |
|  |  | STATE: <b>UTAH</b>   |

| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA   |  |   |  |
|---|--|---|--|
| TYPE OF SUBMISSION  | TYPE OF ACTION   |   |  |
| <input checked="" type="checkbox"/> NOTICE OF INTENT<br>(Submit in Duplicate)<br><br>Approximate date work will start:<br><u>9/29/2012</u><br><br><input type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br><br>Date of work completion: _____ | <input type="checkbox"/> ACIDIZE                                   | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION |
|   | <input type="checkbox"/> ALTER CASING                              | <input type="checkbox"/> FRACTURE TREAT                   | <input type="checkbox"/> SIDETRACK TO REPAIR WELL      |
|   | <input type="checkbox"/> CASING REPAIR                             | <input type="checkbox"/> NEW CONSTRUCTION                 | <input type="checkbox"/> TEMPORARILY ABANDON           |
|   | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS                  | <input type="checkbox"/> OPERATOR CHANGE                  | <input type="checkbox"/> TUBING REPAIR                 |
|   | <input type="checkbox"/> CHANGE TUBING                             | <input type="checkbox"/> PLUG AND ABANDON                 | <input type="checkbox"/> VENT OR FLARE                 |
|   | <input type="checkbox"/> CHANGE WELL NAME                          | <input type="checkbox"/> PLUG BACK                        | <input type="checkbox"/> WATER DISPOSAL                |
|   | <input type="checkbox"/> CHANGE WELL STATUS                        | <input type="checkbox"/> PRODUCTION (START/RESUME)        | <input type="checkbox"/> WATER SHUT-OFF                |
|   | <input checked="" type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input type="checkbox"/> OTHER: _____                  |
|   | <input type="checkbox"/> CONVERT WELL TYPE                         | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION |  |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
Please see attached request to commingle the Wasatch and Green River producing formations in the above referenced well.

**COPY SENT TO OPERATOR**  
Date: 1-23-2014  
Initials: KS

|   |                                 |
|---|---------------------------------|
| NAME (PLEASE PRINT) <u>Megan Finnegan</u> | TITLE <u>Regulatory Analyst</u> |
| SIGNATURE                                 | DATE <u>12/12/2013</u>          |

(This space for State use only)

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**  
Date: 1/22/2014  
By: [Signature]

Federal Approval Of This  
Action Is Necessary

**RECEIVED**  
**DEC 17 2013**

(See Instructions on Reverse Side)  
*\*future submittals should be done electronically via epermit system*  
DIV. OF OIL, GAS & MINING

In accordance with Utah Division of Oil, Gas and Mining's Rule 649-3-22, Completion Into Two Or More Pools, Vantage Energy Uinta LLC is submitting this sundry to request commingling approval for the Wasatch and Green River Formations based on the following conclusions:

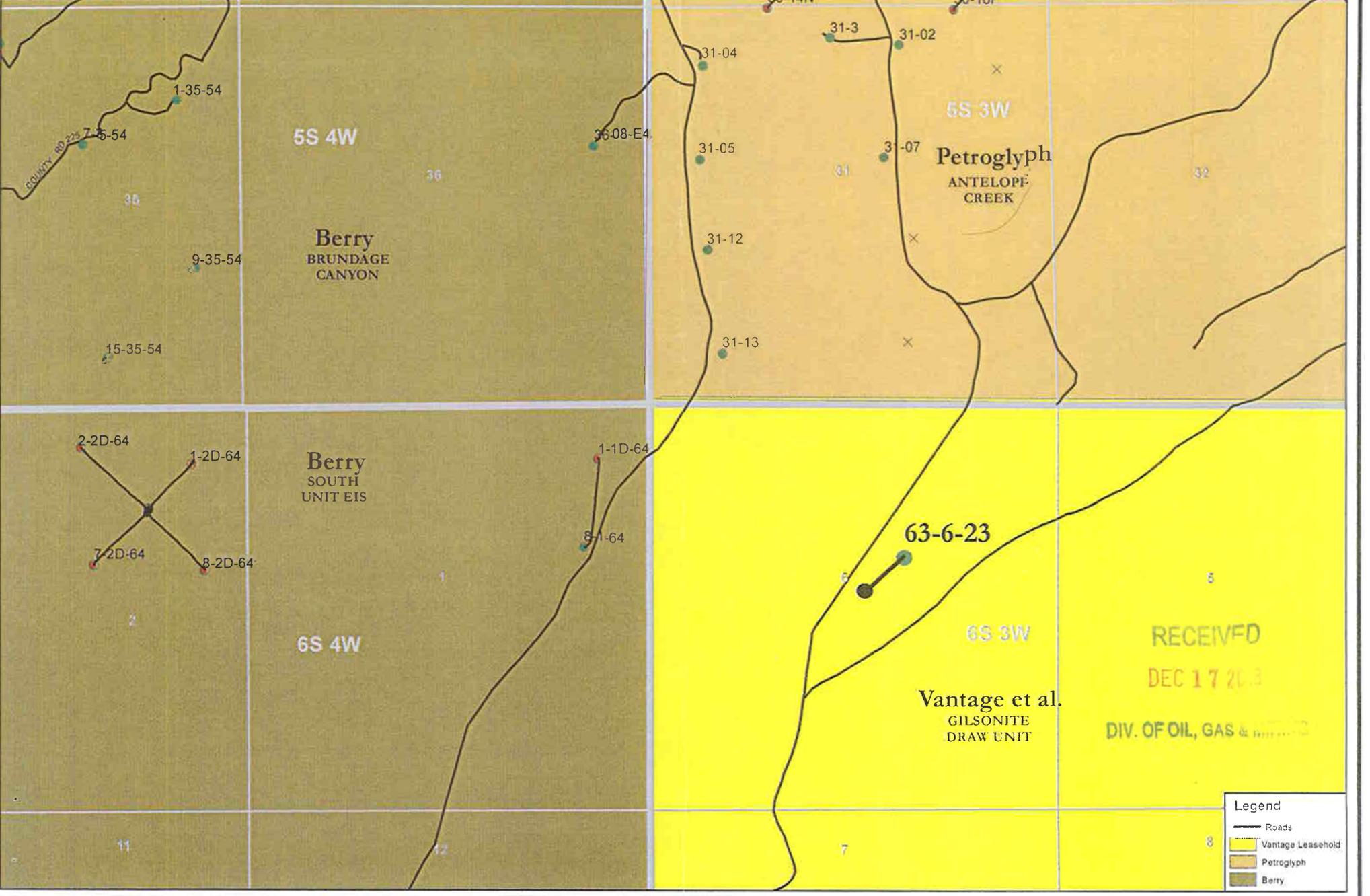
- Oil and associated gas compositions are similar across all formations.
- The respective well is located in a undesignated field within the Gilsonite Draw Federal Unit (UTU86249X) to allow for the production of a wildcat well. Vantage is presently requesting that 360 acres be allocated for the well.
- Below and above the spaced interval, Working Interest owners and mineral owners remain the same across the spacing unit.
- The pressure profile across the formations is similar and Vantage does not anticipate any cross flow.
- Following commingling, production will be considered to be from one pool.
- In the event that allocation by zone or interval is required, Vantage would use representative sampling obtained from production logs and allocate on a percentage basis by zone or interval.

A letter, an affidavit of notice and a plat are attached.

VANTAGE ENERGY

**Gilsonite Draw Unit**

0 0.125 0.25 Miles



**Legend**

- Roads
- Vantage Lessehold
- Petroglyph
- Berry

**AFFIDAVIT OF NOTICE**

I, Michael Holland, the affiant herein, being of lawful age and duly sworn upon his oath deposes and states as follows:

Michael Holland is a Senior Landman for Vantage Energy Uinta LLC, a Delaware Corporation, with headquarters located at 116 Inverness Drive East, Suite 107, Englewood, CO 80112, and is duly authorized to make this affidavit on behalf of said corporation.

Vantage Energy Uinta LLC has submitted sundry notices to commingle production from the Wasatch and Green River formations in the following well lying within the boundaries of BLM Oil and Gas Lease USA UTU-78235:

Federal GDU 63-6-23

This Affidavit is made in accordance with Utah's Oil, Gas and Mining regulation R649-3-22. As Operator, Vantage has provided sundry notices to the owners of all contiguous oil and gas leases or drilling units overlying the pool for the aforementioned well to the parties listed below:

FIML Natural Resources, LLC  
410 17<sup>th</sup> Street, Suite 900  
Denver, CO 80202  
Attn: Mark Bingham  
Senior Vice President

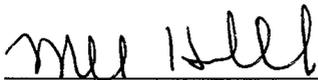
Petroglyph Operating Company Inc.  
P.O. Box 607  
Roosevelt, UT 84066  
Attn: Land Manager

ExxonMobil Corporation  
c/o XTO Energy Inc.  
810 Houston Street  
Fort Worth, TX 76102  
Attn: Paul Keffer

Berry Petroleum Company  
1999 Broadway, Suite 3700  
Denver, CO 80202  
Attn: Terry Laudick

This instrument is executed this 12<sup>th</sup> day of December, 2013.

Affiant



Michael Holland  
Senior Landman

RECEIVED

DEC 17 2013

DIV. OF OIL, GAS & MINING



Petroglyph Operating Company Inc.  
P.O. Box 607  
Roosevelt, UT 84066  
Attn: Land Manager

December 11, 2013

Re: Sundry Notices  
GDU 63-6-23 Well  
Township 6 South, Range 3 West  
Section 6: SW/4NE/4  
Duchesne County, Utah

Dear Sir or Madam,

Vantage Energy Uinta LLC ("Vantage") has submitted Sundry Notices to commingle production from the Wasatch and Green River Formations in the subject well. Pursuant to the Utah OGM regulations, we have enclosed a copy of the Sundry Notice and a plat showing the owners of contiguous leases.

If you should have any questions regarding these Sundry Notices, please feel free to contact me at 303-386-8638.

Sincerely,

Michael Holland  
Senior Landman

Enclosures.

Cc: mth, jm, su, ka, mf

RECEIVED  
DEC 17 2013  
DIV. OF OIL, GAS & MINING



FIML Natural Resources, LLC.  
410 17<sup>th</sup> Street, Suite 900  
Denver, CO 80202  
Attn: Mark Bingham  
Senior Vice President

December 11, 2013

Re: Sundry Notices  
GDU 63-6-23 Well  
Township 6 South, Range 3 West  
Section 6: SW/4NE/4  
Duchesne County, Utah

Dear Mr. Bingham,

Vantage Energy Uinta LLC ("Vantage") has submitted Sundry Notices to commingle production from the Wasatch and Green River Formations in the subject well. Pursuant to the Utah OGM regulations, we have enclosed a copy of the Sundry Notice and a plat showing the owners of contiguous leases.

If you should have any questions regarding these Sundry Notices, please feel free to contact me at 303-386-8638.

Sincerely,

Michael Holland  
Senior Landman

Enclosures.

Cc: mth, jm, su, ka, mf

RECEIVED

DEC 17 2013

DIV. OF OIL, GAS & MINING



ExxonMobil Corporation  
c/o XTO Energy Inc.  
810 Houston Street  
Fort Worth, TX 76102  
Attn: Mr. Paul Keffer

December 11, 2013

Re: Sundry Notices  
GDU 63-6-23 Well  
Township 6 South, Range 3 West  
Section 6: SW/4NE/4  
Duchesne County, Utah

Dear Mr. Keffer,

Vantage Energy Uinta LLC ("Vantage") has submitted Sundry Notices to commingle production from the Wasatch and Green River Formations in the subject well. Pursuant to the Utah OGM regulations, we have enclosed a copy of the Sundry Notice and a plat showing the owners of contiguous leases.

If you should have any questions regarding these Sundry Notices, please feel free to contact me at 303-386-8638.

Sincerely,

Michael Holland  
Senior Landman

Enclosures.

Cc: mth, jm, su, ka, mf

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DEC 17 2013

DIV. OF OIL, GAS & MINING



Berry Petroleum Company  
1999 Broadway, Suite 3700  
Denver, CO 80202  
Attn: Mr. Terry Laudick

December 11, 2013

Re: Sundry Notices  
GDU 63-6-23 Well  
Township 6 South, Range 3 West  
Section 6: SW/4NE/4  
Duchesne County, Utah

Dear Mr. Laudick,

Vantage Energy Uinta LLC ("Vantage") has submitted Sundry Notices to commingle production from the Wasatch and Green River Formations in the subject well. Pursuant to the Utah OGM regulations, we have enclosed a copy of the Sundry Notice and a plat showing the owners of contiguous leases.

If you should have any questions regarding these Sundry Notices, please feel free to contact me at 303-386-8638.

Sincerely,

Michael Holland  
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