

**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>GORDON CREEK NW-32-13-8   |               |                 |              |               |
| <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>WILDCAT   |               |                 |              |               |
| <b>4. TYPE OF WELL</b><br>Gas Well      Coalbed Methane Well: NO  |                  |                    |  |                |  | <b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>  |               |                 |              |               |
| <b>6. NAME OF OPERATOR</b><br>GORDON CREEK, LLC   |                  |                    |  |                |  | <b>7. OPERATOR PHONE</b><br>403 453-1608  |               |                 |              |               |
| <b>8. ADDRESS OF OPERATOR</b><br>1179 E Main #345, Price, UT, 84501   |                  |                    |  |                |  | <b>9. OPERATOR E-MAIL</b><br>rironside@thunderbirdenergy.com  |               |                 |              |               |
| <b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b><br>Sec 31+32 Fee Lease  |                  |                    | <b>11. MINERAL OWNERSHIP</b><br>FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>    |                |  | <b>12. SURFACE OWNERSHIP</b><br>FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> |               |                 |              |               |
| <b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b><br>Mark Jacobs   |                  |                    |  |                |  | <b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b><br>801-226-3407  |               |                 |              |               |
| <b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b><br>914 East 300 North, Orem, UT 84097   |                  |                    |  |                |  | <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 checked="" type="checkbox"/> DIRECTIONAL <input 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   |                  | 1261 FNL 878 FWL   |  | NWNW           | 32   | 13.0 S  | 8.0 E         | S               |              |               |
| Top of Uppermost Producing Zone   |                  | 1261 FNL 878 FWL   |  | NWNW           | 32   | 13.0 S  | 8.0 E         | S               |              |               |
| At Total Depth  |                  | 1261 FNL 878 FWL   |  | NWNW           | 32   | 13.0 S  | 8.0 E         | S               |              |               |
| <b>21. COUNTY</b><br>CARBON   |                  |                    | <b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b><br>878  |                |  | <b>23. NUMBER OF ACRES IN DRILLING UNIT</b><br>40   |               |                 |              |               |
|   |                  |                    | <b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b><br>2180   |                |  | <b>26. PROPOSED DEPTH</b><br>MD: 4538 TVD: 4538   |               |                 |              |               |
| <b>27. ELEVATION - GROUND LEVEL</b><br>7606   |                  |                    | <b>28. BOND NUMBER</b><br>RLB0010790   |                |  | <b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b><br>91-5193   |               |                 |              |               |
| <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  | 11               | 8.625              | 0 - 450  | 24.0           | J-55 ST&C  | 8.7   | Class G       | 212             | 1.142        | 15.84         |
| PROD  | 7.875            | 5.5                | 0 - 4538   | 17.0           | N-80 LT&C  | 10.0  | Class G       | 394             | 2.69         | 10.7          |
| <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 checked="" 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 type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)   |                  |                    |  |                | <input checked="" type="checkbox"/> TOPOGRAPHICAL MAP                      |   |               |                 |              |               |
| <b>NAME</b> Barry Brumwell  |                  |                    | <b>TITLE</b> Vice President-Operations   |                |  | <b>PHONE</b> 403 453-1608   |               |                 |              |               |
| <b>SIGNATURE</b>  |                  |                    | <b>DATE</b> 09/26/2011   |                |  | <b>EMAIL</b> bbrumwell@thunderbirdenergy.com  |               |                 |              |               |
| <b>API NUMBER ASSIGNED</b><br>43007502440000  |                  |                    | <b>APPROVAL</b>  |                |  | <br>Permit Manager  |               |                 |              |               |

**DRILLING PLAN and PROGRAM**

Attached to UDOGM Form 3

**GORDON CREEK, LLC.****NW-32-13-8**

SURFACE LOCATION: 1,260.92' FNL &amp; 878.17' FWL

NW/4 of NW/4 of Section 32-13S-8E

Carbon County, Utah

**1. SURFACE GEOLOGIC FORMATION**

Emery Sandstone Member of the Mancos Shale

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS**

|                                   |           |
|-----------------------------------|-----------|
| Mancos Blue Gate Shale top:       | 2,164' KB |
| Lower Blue Gate Bentonite Marker: | 3,933' KB |
| Ferron SS:                        | 4,068' KB |

**3. PROJECTED GAS & H<sub>2</sub>O ZONES**

While no groundwater is expected to be encountered, groundwater *may* be encountered within the Emery Sandstone Member of the Mancos Shale. Any water encountered will be reported on a Form 7 "Report of Water Encountered During Drilling". All indications of usable water will be reported.

Casing & cementing will be done to protect potentially productive hydrocarbons, lost circulation zones, abnormal pressure zones and prospectively valuable mineral deposits.

Surface casing will be tested to 500 psi and the Production casing will be tested to 1,500 psi, with a minimum of 1 psi/ft of the last casing string setting depth.

**4. PROPOSED CASING AND CEMENTING PROGRAMS**

Refer to EXHIBIT "A" for casing design information

**A. CASING PROGRAM**

| HOLE SIZE<br>(in)             | CASING SIZE<br>(in)            | WEIGHT<br>(#/ft) | GRADE | JOINT | DEPTH SET<br>(ft) |
|-------------------------------|--------------------------------|------------------|-------|-------|-------------------|
| 17                            | 12 <sup>3</sup> / <sub>4</sub> | 40.5             | H-40  | ST&C  | 0 – 40            |
| 11                            | 8 <sup>5</sup> / <sub>8</sub>  | 24.00            | J-55  | ST&C  | 0 – 450           |
| 7 <sup>7</sup> / <sub>8</sub> | 5 <sup>1</sup> / <sub>2</sub>  | 17.00            | N-80  | LT&C  | 0 – 4,538         |

**B. CEMENTING PROGRAM**

The 8 <sup>5</sup>/<sub>8</sub>" surface casing will be set and cemented full length with approximately 212 sacks of 0-1-0 Class "G" cement + 2% CaCl<sub>2</sub> + 0.25 #/sk of cellophane flakes mixed at 15.84 ppg (yield = 1.142 ft<sup>3</sup>/sk); volume based on nominal hole size + 100% excess. The cement will be circulated back to surface. In the event that the cement is not circulated back to surface, a 1" top out job will be performed with 0-1-0 Class "G" cement + 2% CaCl<sub>2</sub> + 0.25 #/sk of cellophane flakes mixed at 15.84 ppg (yield = 1.142 ft<sup>3</sup>/sk).

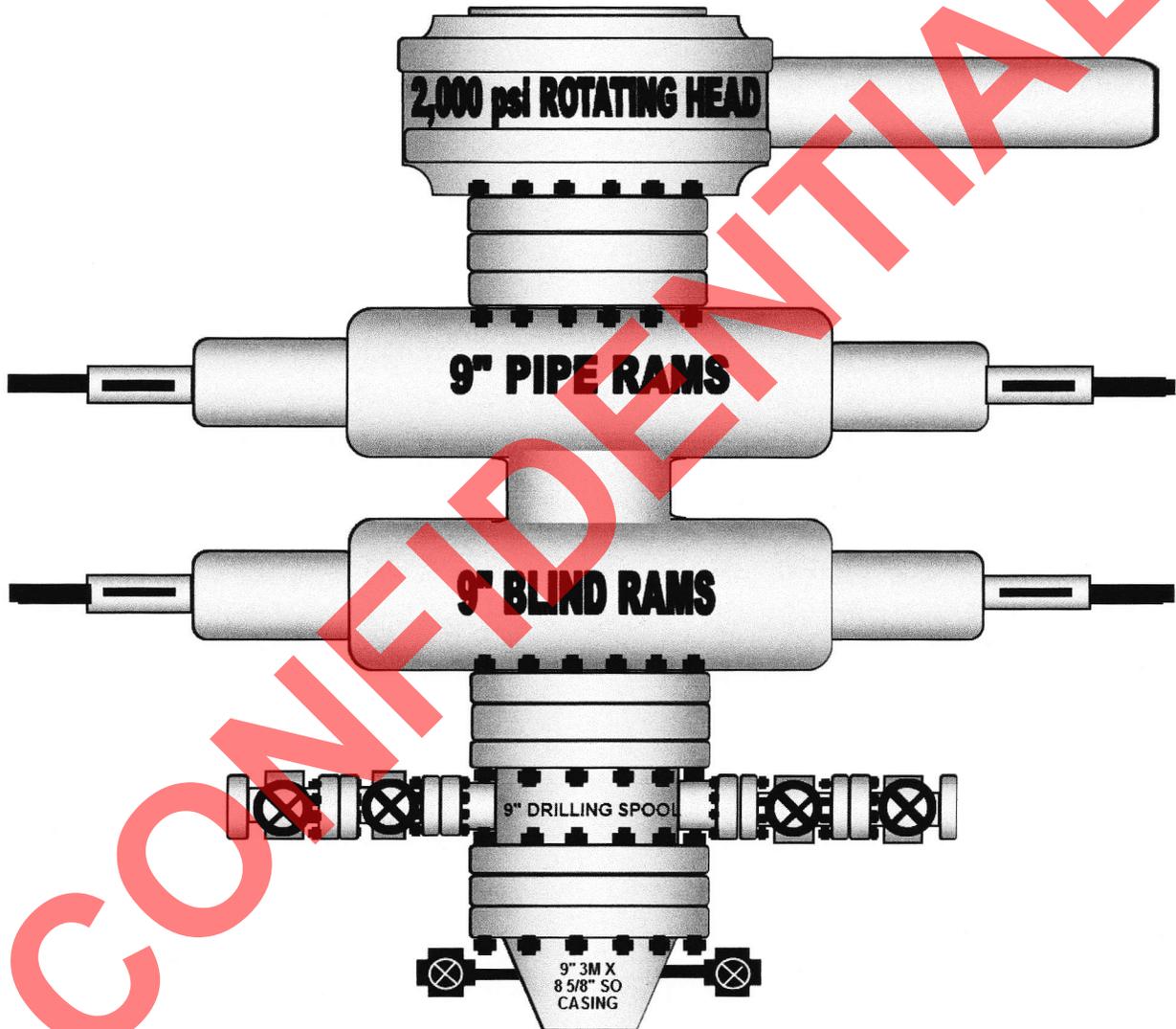
The 5 <sup>1</sup>/<sub>2</sub>" production casing will be set and cemented full length using 394 sx of 0-1-0 "G" Light Weight cement incorporating 42% "SuperBall" centrospheres to lighten the cement density + 3% NaCl, 0.3% Air-out, 1.5% SFI-300, 0.2% SCR-2. The cement will be mixed at 10.7 ppg (yield = 2.69 ft<sup>3</sup>/sk); volume based on nominal hole size + 35% excess. The cement will be circulated back to surface.

**THE FOLLOWING SHALL BE ENTERED INTO THE DRILLER'S LOG:**

- I. Blowout preventer pressure tests, including test pressures and results;
- II. Blowout preventer tests for proper functioning;
- III. Blowout prevention drills conducted;
- IV. Casing run, including size, grade, weight, and depth set;
- V. How the pipe was cemented, including amount of cement, type, whether cement was circulated back to surface, location of the cementing tools, etc.;
- VI. Waiting on cement time for each casing string;
- VII. Casing pressure tests after cementing, including test pressures and results.

5. THE OPERATOR'S MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

Below is a schematic diagram of the blowout preventer equipment requirements for this drilling operation. A 9' X 3,000 psi double gate BOP will be used with a 2,000 psi Rotating Head utilized for air drilling operations. ALL BOPE will be pressure tested to the required operating pressures of each component. All tests will be recorded in the Driller's Report Book. The physical operation of each component of the BOP's will be checked on each trip.



**6. THE TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATING FLUIDS / MUDS**

|            |                  |  |
|------------|------------------|--|
| 0' – 450'  | 11" Surface Hole | Drill with air, will mud-up if necessary.                |
| 450' – TMD | 7 7/8" Main Hole | Drill with air, 500 psi @ 1500-2300 ft <sup>3</sup> /min |

Will "mud up" at Total Depth to run logs and casing. Will mud up sooner if hole conditions dictate. It is anticipated that drilling fluid densities of 8.3 – 8.7 #/gal will be utilized when "mudded up".

**7. THE TESTING, LOGGING AND CORING PROGRAMS**

Open hole logs consisting of a CNL-LDT-GR-CAL will be run from above the Blue Gate Shale to TMD. A DIL-GR-SP log will be run from TMD to surface casing.

**8. ANY ANTICIPATED ABNORMAL PRESSURES or TEMPURATURES**

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is approximately 1250 psi maximum. No hydrogen sulfide or other hazardous gases or fluids have been found, reported or are known to exist at these depths in the area.

**9. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS**

The well will be drilled between late September and the end of November, 2011. Verbal and/or written notifications listed below shall be submitted in accordance with instructions from the Division of Oil, Gas & Mining:

- a) prior to beginning construction;
- b) prior to spudding;
- c) prior to running any casing or BOP tests;
- d) prior to plugging the well, for verbal plugging instructions.

Spills, blowouts, fires, leaks, accidents or other unusual occurrences shall IMMEDIATELY be reported to the Division of Oil, Gas & Mining.



**THUNDERBIRD ENERGY**

**GORDON CREEK NW-32-13S-8E**

NW/4 OF NW/4, 1,260.92' FNL + 878.179' FWL

**SURFACE LEASE #:** FEE (JACOBS)

**MINERAL LEASE #:** FEE (TRACT 1)

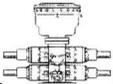
**AFE:** 11DRL003

**WORKING INTEREST:** 100%

**RIG:**

**DRILL DAYS BELOW SURFACE CASING SHOE:** 5

**DRILLED WITH AIR**

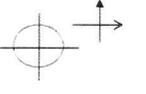


**DRILL DAYS BELOW SURFACE CASING SHOE:** 5

**Survey Grd. Ele:** 7,605.5'

**Est. KB Elev:** 7,618'

**DIRECTIONAL WELL:** 12.5' KB



8 625" Casing Set @ ~450'

**TOPS ft TVD**

**Emery Fm.** Sfc.

**SURFACE CASING** 450

**BASE OF GROUNDWATER** TBD

**MUD UP ONLY IF WATER INFLUX OCCURS OR TIGHT HOLE CONDITIONS OCCUR**

**Begin taking samples on Geologists orders**

**Blue Gate Shale Mbr \*\*** 2,164'

**Lower Bluegate Bentonite Marker** 3,933'

**FERRON SS/COAL \* (750 psi) AIR DRILL THROUGH ZONE IF POSSIBLE** 4,068'

**Tununk Shale** 4,480'

**TD** 4,538'

\* PRIMARY ZONE OF INT.  
\*\* SECONDARY ZONE

BOP'S 9" 3600 # CASING BOWL

11" Surface Hole

7 3/8" Main Hole

5 500" CASING SET AT 4,538'

**EMERGENCY PLANNING ZONE SUMMARY**

SWEET WELL: THUNDERBIRD'S CORPORATE EMERGENCY RESPONSE PLAN APPLIES

**CASING DESIGN**

|                 | Interval (ft) | O.D. (inches) | #/ft | Grade | Thread | Burst (psi) | Collapse (psi) | Opt.Torque (ft lbs) |
|-----------------|---------------|---------------|------|-------|--------|-------------|----------------|---------------------|
| <b>Surface:</b> | 0 - 450       | 8 5/8         | 24   | J-55  | ST&C   | 2,950       | 1,370          | 2,440               |
| <b>Main:</b>    | 0 - 4,538'    | 5 1/2         | 17   | N-80  | LT&C   | 7,740       | 6,280          | 3,480               |

**\*ENSURE THAT MARKER JOINTS ARE PLACED IN THE CASING STRING OPPOSITE ANY PAY ZONE**

**TARGET: FERRON SANDSTONE/COAL; CASING TO BE CUT 16" ABOVE CASING BOWL**

**CEMENTING PROGRAM - Primary - Single Stage**

|                 | Bit Size (inches) | Cement         | Additives  | Yield (ft <sup>3</sup> /sk) | Volume (sx) | % Excess | Cmt Top (ft) | Density (#/gal) |
|-----------------|-------------------|----------------|--|-----------------------------|-------------|----------|--------------|-----------------|
| <b>Surface:</b> | 11                | 0-1-0 "G"      | 2% CaCl <sub>2</sub> + Cellophane flakes                       | 1.142                       | 212.0       | 100      | SFC          | 15.84           |
| <b>Main:</b>    | 7 7/8             | Superball 10.7 | 3% NaCl, 0.3% Air-out, 42% Superball, 1.5% SFI-300, 0.2% SCR-2 | 2.69                        | 394.0       | 35       | SFC          | 10.70           |

**DRILLING FLUIDS**

|                 | Interval    | Type         |   |
|-----------------|-------------|--------------|---|
| <b>Surface:</b> | 0 - 450     | Water        | <b>Drill with water, mud up with gel chem if water influx occurs.</b> |
|                 |             | Gel Chemical | <b>Condition mud thoroughly prior to POOH to run/cement casing</b>    |
| <b>Main:</b>    | 450 - 4,000 | AIR          | <b>MUD UP ONLY if water influx occurs or if TIGHT HOLE</b>            |
|                 | 4,000-4,538 | Gel Chemical | <b>conditions become prevailant. MUD UP at ~ 4,000' to TD.</b>        |

**11" SURFACE HOLE**

- Spud with an approved water well/surface casing rig and drill to surface TD of about 450 ft. Survey every 100'. Ensure that the surface hole deviation does not exceed 3 degrees. Set surface casing at least 50' below any water influx zone.
- **NOTE:** MUD UP with Gel Chemical mud system immediately if water influx becomes problematic. Refer to the Mud Program and the Cementing Program for further information. Move rig off of location once surface casing is set.

**7 7/8" MAIN HOLE: VERTICAL HOLE**

- Move on conventional drilling rig and drill out with and AIR DRILL as far as possible with air. Survey every 300'. Ensure that deviation does not exceed 3 degrees. Notify Calgary operations immediately if a 3 degree deviation is exceeded.
- **TIGHT HOLE** is possible on connections. REAM HOLE at first indication of tight hole and attempt to continue to air drill.
- **COAL/SHALE SEAMS** can occur in the wellbore which may be faulted and unconsolidated resulting in sloughing hole conditions.
- **H<sub>2</sub>S WILL NOT** be encountered.
- **MUD UP ONLY** if water influx occurs OR if tight hole conditions become prevailant.
- **OVER PRESSURE:** Generally, all zones in the wellbore should be underpressured (below normal water gradient) or have normal pressure gradients.
- **LOST CIRCULATION** should only have the potential to occur when drilling with fluids.
- **ENSURE AN ADEQUATE AMOUNT OF LCM IS ON LOCATION AT ALL TIMES.**
- **FERRON SS/COAL PENETRATION** - ATTEMPT TO AIR DRILL THROUGH THE FERRON ZONE. WATER may be encountered upon penetration. Ensure good hole conditions are prevailant to penetrating the FERRON.
- **MUD UP** - switch to a Gel Chem drilling fluid system at ~4,000' OR if water/tight hole problems occur.
- **Mud Check** - prior to POOH for logging, condition the mud and check mud properties with mudman. **DO NOT POOH** until the wellbore is circulating free of cuttings and the mud properties are optimal for logging.
- NOTE:** Ensure the well is cemented to surface on both casing strings. Contact the Operations Supervisor if any casing string cement job does not obtain returns to surface.

**SAMPLE REQUIREMENTS/ EVALUATION**

|               |  |
|---------------|--|
| T-BIRD        | Begin taking 2 sets of samples every 10 feet at 3,360' to TD |
| GOVT:         | As per regulations   |
| Detection:    | Gas detection/ PASON Mud Log as per Geologist's request.     |
| <b>Cores:</b> | <b>No coring</b>   |
| DST:          | No DST's   |

**LOGGING PROGRAM - NUMBER OF COPIES OF EACH LOG:**

|                                  | # of copies |
|----------------------------------|-------------|
| DIL-GR-SP T.D. to surface casing | 4           |
| CNL-LDT-GR-CAL T.D. to 3,360'    | 4           |

Run a multi-arm caliper log to ensure correct calculation for cement volumes on casing or plugs.

**EXHIBIT "A"**

**CASING DESIGN**  
**GORDON CREEK ST NW-32-13-8**  
**PROJECTED TD: 4,538' KB**

**SURFACE CASING (0' – 450')**

|          |                                 |
|----------|---------------------------------|
| Diameter | 8 <sup>5</sup> / <sub>8</sub> " |
| Interval | 450' to Surface                 |
| Weight   | 24 #/ft                         |
| Grade    | J-55                            |
| Coupling | ST&C                            |

**Burst Design**

The recommended practice is to base the burst rating of the casing string in psi to be at least numerically equal to 0.225 psi/ft times the setting depth in feet of the next casing string. The rating chosen was also intended to match the BOPE pressure rating and exceed the highest possible surface pressure of approximately 936 psig.

|                                |   |             |
|--------------------------------|---|-------------|
| Burst required =               | $0.225 \times 4,538$  | 1,021 psig  |
| Burst rating of casing string: | 2,950 psi   |             |
| <b>Safety factor =</b>         | <b><math>2,950 \text{ psi} / 1,021 \text{ psi} =</math></b> | <b>2.89</b> |

**Collapse Design**

Collapse pressure is negligible on this surface string.

**Tension Design**

|                           |             |
|---------------------------|-------------|
| String weight in air      | 10,800 #    |
| Tensile strength of joint | 244,000 lbf |
| Safety factor of joint    | 22.6        |

**PRODUCTION CASING (0' – 4,538')**

|          |                   |
|----------|-------------------|
| Diameter | 5 ½"              |
| Interval | 4,161' to surface |
| Weight   | 17 #/ft           |
| Grade    | N-80              |
| Coupling | LT&C              |

**Burst Design**

An internal pressure gradient of 0.4863 psi/ft has been used as a basis for these calculations. This gradient is equivalent to the force exerted by 10 ppg drilling fluid, which is a much higher density of fluid than we anticipate being required to drill this well.

|                                |                                |                    |
|--------------------------------|--------------------------------|--------------------|
| Burst rating of casing string: | 7,740 psi                      |                    |
| Burst rating required:         | 4,538' X 0.4863 =              | 2,207 psig         |
| <b>Safety factor =</b>         | <b>7,740 psi / 2,207 psi =</b> | <b><u>3.51</u></b> |

**Tension Design**

1.6 Safety factor of top joint, neglecting buoyancy and without over pull.

|                                 |                                   |                    |
|---------------------------------|-----------------------------------|--------------------|
| Tensile rating of casing joint: | 348,000 lbf                       |                    |
| String Weight:                  | 4,538' X 17 #/ft =                | 77,146 lbf         |
| <b>Safety factor =</b>          | <b>348,000 lbf / 77,146 lbf =</b> | <b><u>4.51</u></b> |

**Collapse Design**

Maximum anticipated mud weight is 10.0 ppg based on a mud gradient of 0.53 psi/ft.

|                                |                                |                    |
|--------------------------------|--------------------------------|--------------------|
| Collapse rating of csg string: | 6,280 psi                      |                    |
| Collapse rating required:      | 4,538' X 0.53 psi/ft =         | 2,405 psi          |
| <b>Safety factor =</b>         | <b>6,280 psi / 2,405 psi =</b> | <b><u>2.61</u></b> |

**Production Casing Design**

| Interval (ft) | Weight (#/ft) | Grade | S.F. Burst | S.F. Collapse | S.F. Tension |
|---------------|---------------|-------|------------|---------------|--------------|
| 4,538' – 0'   | 17            | N-80  | 3.51       | 4.51          | 2.61         |

**MULTI-POINT SURFACE USE PLAN**

Attached to UDOGM Form 3

**GORDON CREEK, LLC.**

**NW-32-13-8**

SURFACE LOCATION: 1,260.92' FNL & 878.17' FWL

NW/4 of NW/4 of Section 32-13S-8E

Carbon County, Utah

**1. EXISTING ROADS**

- a. We do not plan to change, alter or improve upon ANY existing State or County roads.
- b. Existing roads will be maintained in the same or better condition.

**2. PLANNED ACCESS**

- a. This well will be accessed from an existing two-track trail on the Surface Owner's property that comes off of Benches County Road, therefore no new access FROM Benches Road is required.
- b. If the well is productive, the road will be maintained as necessary to prevent soil erosion and maintain year-round traffic. However, we may allow the access road to be gated and closed off during winter production operations and access the site with a snowmobile or other winter ATV.
- c. Maximum Width: 24' travel surface with 27' base.
- d. Maximum grade: 25%
- e. Road culverts may be required. Surface water will be diverted around the well pad as necessary.
- f. Any power lines and / or pipelines to/from the well will follow the proposed access route.

**3. LOCATION OF EXISTING WELLS**

- a. As shown on the Civil Location Survey Plat for the well.

**4. LOCATION OF EXISTING and/or PROPOSED FACILITIES**

- a. If the well is a producer, installation of required production facilities will follow the drilling and completion phase of well operations. Buried flow lines, water lines and electrical cable will follow the proposed access road and other existing access ROWs to the intersection with Thunderbird's main 12' pipeline corridor.
- b. Rehabilitation of all pad areas not used for production facilities will be made in accordance with landowner stipulations.

**5. LOCATION AND TYPE OF WATER SUPPLY**

- a. All water to be used for drilling operations will be obtained from area water wells drilled and owned by Gordon Creek, LLC.
- b. Water will be transported to location by truck over approved access roads.

**6. SOURCE OF CONSTRUCTION MATERIALS**

- a. Any necessary construction materials needed will be obtained locally from a private source and hauled to the location on existing roads.
- b. No construction or surfacing materials will be taken from Federal / Indian lands.

**7. METHODS FOR HANDLING WASTE DISPOSAL**

- a. Rather than utilizing a "mud pit" on each drilling location, we will be utilizing one large "remote sump" pit per approximately 4-6 wells drilled to hold the drilled solids and drilling fluids required during the drilling of those 4 wells. This remote sump will be centrally located on one of the drilling locations. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.
- b. As the majority of each well is expected to be air drilled, a small reserve "blooie" pit will be constructed with a minimum of one-half the total depth below the original ground surface on the lowest point within the pit. The pit will not be lined unless conditions encountered during construction warrant it or if deemed necessary by the DOGM Representative during pre-site inspection. Three sides of the reserve pit will be fenced within 24 hours after completion of construction and the fourth side within 24 hours after drilling operations cease with four strands of barbed wire, or woven wire topped with barbed wire to a height of not less than four feet. The fence will be kept in good repair while the pit is drying.
- b. Following drilling, the liquid waste will be evaporated from any pit and the pit backfilled and returned to natural grade. No liquid hydrocarbons will be discharged to the reserve pit or location.
- c. In the event that wellbore fluids are produced, any oil will be retained in tanks until sold and any water produced will be retained until its quality can be determined. The quality and quantity of the water will determine the method of disposal.
- d. Trash will be contained in a portable metal container and will be hauled from location periodically and disposed of at an approved disposal site. Chemical toilets will be placed on location and sewage will be disposed of at an appropriate disposal site.

**8. ANCILLARY FACILITIES**

- e. We anticipate no need for ancillary facilities with the exception of a trailer to be located on the drill site.

**9. WELLSITE LAYOUT**

- a. Gordon Creek, LLC. has reduced to surface lease size (area stripped and levelled) for this location to the smallest lease size possible to accommodate the required drilling rig and support equipment.
- b. Any available topsoil will be removed from the location and stockpiled. The location of the rig, mud tanks, reserve and berm pits and all other drilling support equipment will be located as per common oilfield rig layouts.
- a. A blooie pit will be located 100' from the drill hole. A line will be placed on the surface from the center hole to the blooie pit. The blooie pit will not be lined, but will be fenced on four sides to protect livestock/wildlife.
- b. Access to the well pad will be as shown on the Civil Location Survey Plat for the well.
- c. Natural runoff will be diverted around the well pad.

**10. PLANS FOR RESTORATION OF SURFACE**

- a. All surface areas not required for producing operations will be graded to as near original condition as possible and contoured to minimize possible erosion.
- b. Available topsoil will be stockpiled and will be evenly distributed over the disturbed areas and the area will be reseeded as prescribed by the landowner.
- c. Pits and any other area that would present a hazard to wildlife or livestock will be fenced off when the rig is released and removed.
- d. Rehabilitation will commence following completion of the well. Rat and mouse holes will be filled in immediately upon release of the drilling rig from the location. If the well site is to be abandoned, all disturbed areas will be re-contoured to the natural terrain found prior to location construction.

**11. SURFACE OWNERSHIP**

- a. The well site and access road are on and across lands owned by Mark and Jim Jacobs, with whom we have a signed surface use agreement in place. The operator shall contact the landowner and the Division of Oil, Gas and Mining 48 hours prior to beginning construction activities.

**12. OTHER INFORMATION**

- a. The primary surface use is wildlife habitat and/or cattle grazing. The nearest dwelling is approximately 13.5 miles east (Price, Utah).
- b. If there is snow on the ground when construction begins, it will be removed before the soil is disturbed and piled downhill from the topsoil stockpile location.
- c. The back-slope and fore-slope will be constructed no steeper than 4:1.
- d. All equipment and vehicles will be confined to the access road and well pad.

- e. A complete copy of the approved Application for Permit to Drill (APD,) including all conditions and stipulations shall be on the well-site during construction and drilling operations.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the Division of Oil, Gas & Mining.

**13. COMPANY REPRESENTATIVE**

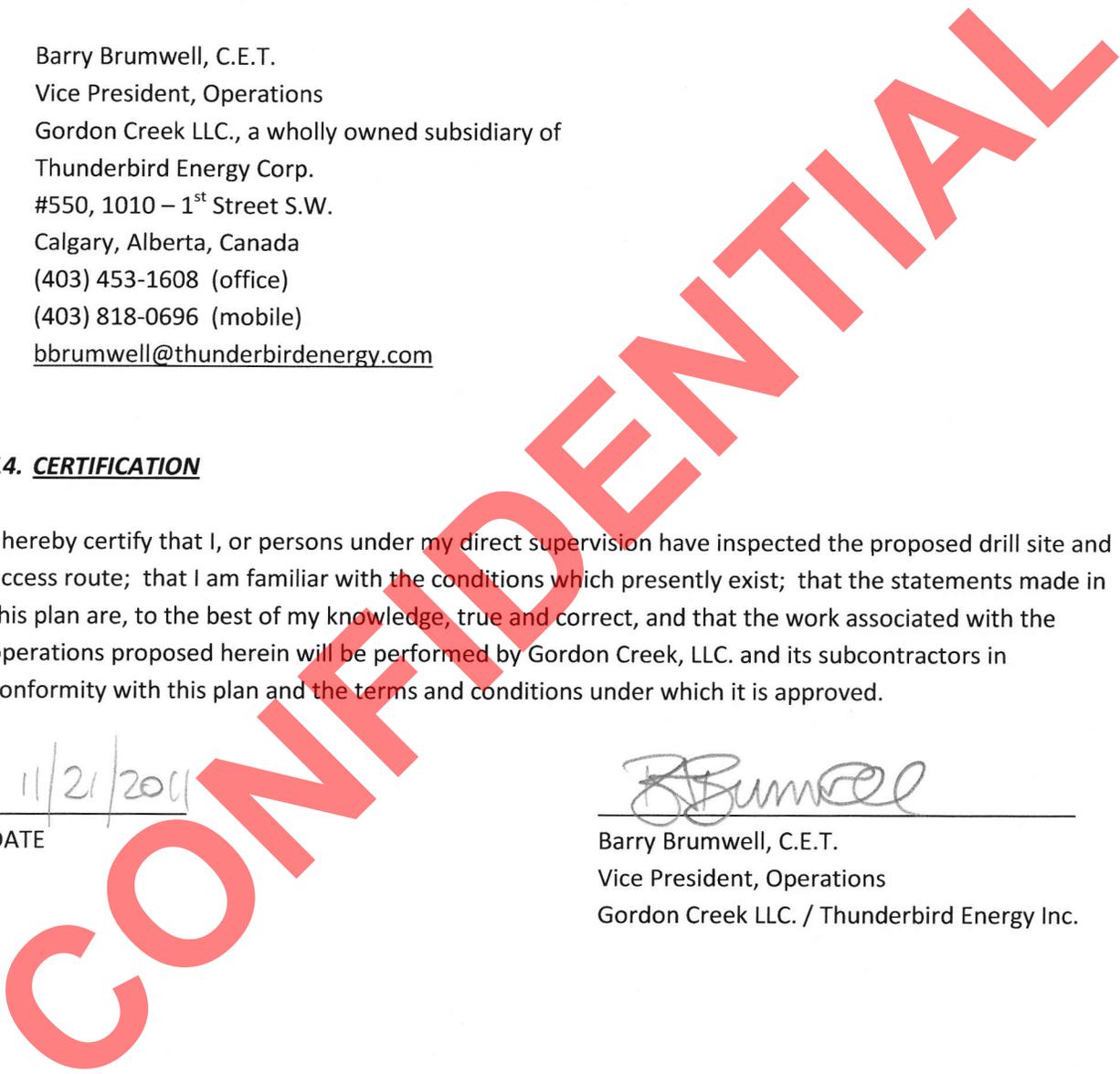
Barry Brumwell, C.E.T.  
Vice President, Operations  
Gordon Creek LLC., a wholly owned subsidiary of  
Thunderbird Energy Corp.  
#550, 1010 – 1<sup>st</sup> Street S.W.  
Calgary, Alberta, Canada  
(403) 453-1608 (office)  
(403) 818-0696 (mobile)  
[bbrumwell@thunderbirdenergy.com](mailto:bbrumwell@thunderbirdenergy.com)

**14. CERTIFICATION**

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by Gordon Creek, LLC. and its subcontractors in conformity with this plan and the terms and conditions under which it is approved.

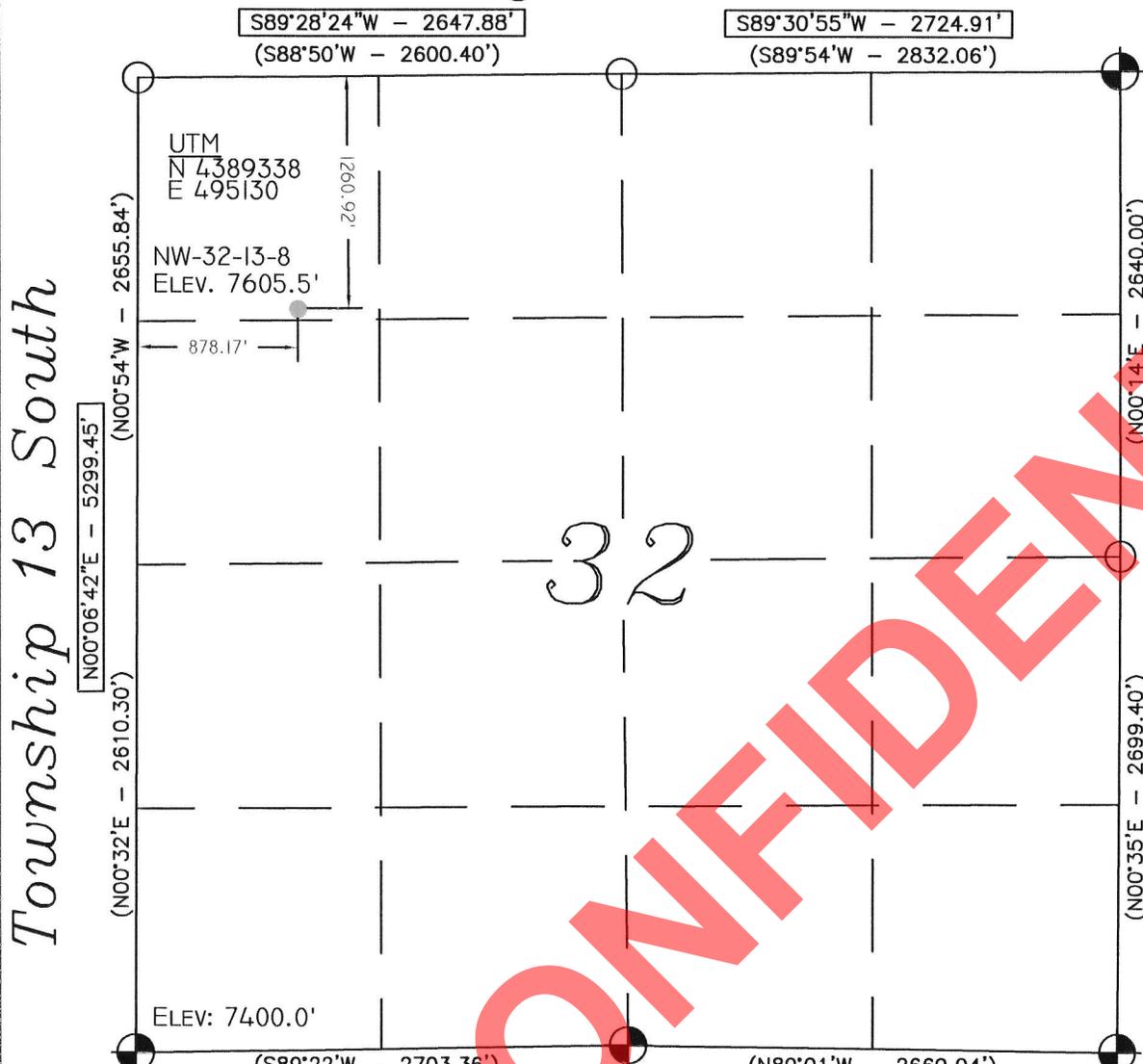
11/21/2011  
DATE

  
Barry Brumwell, C.E.T.  
Vice President, Operations  
Gordon Creek LLC. / Thunderbird Energy Inc.



# Range 8 East

Township 13 South



S89°28'24"W - 2647.88'  
(S88°50'W - 2600.40')

S89°30'55"W - 2724.91'  
(S89°54'W - 2832.06')

UTM  
N 4389338  
E 495130

NW-32-13-8  
ELEV. 7605.5'

878.17'

1260.92'

32

ELEV: 7400.0'

(S89°22'W - 2703.36')  
S89°04'38"W - 2702.45'

(N89°01'W - 2669.04')  
N89°17'34"W - 2673.25'

**Legend**

- Drill Hole Location
- ⊙ Brass Cap (Found)
- Stone (Found)
- △ Calculated Corner
- ( ) GLO
- ☐ GPS Measured

**NOTES:**

1. Dimensions are GPS measured unless noted otherwise.
2. UTM and Latitude / Longitude Coordinates are derived using a GPS Pathfinder and are shown in NAD 27 Datum.

LAT / LONG  
39°39'20.565" N  
111°03'24.362" W

**Location:**  
The well location was determined using a Trimble 5700 GPS survey grade unit.

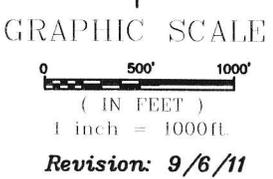
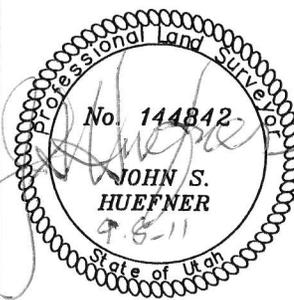
**Basis of Bearing:**  
The Basis of Bearing is GPS Measured.

**GLO Bearing:**  
The Bearings indicated are per the recorded plat obtained from the U.S. Land Office.

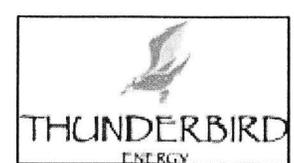
**Basis of Elevation:**  
Basis of Elevation of 7400.00' being at the Southwest Section Corner of Section 32, Township 13 South, Range 8 East, Salt Lake Base and Meridian, as shown on the Jump Creek Quadrangle 7.5 minute series map.

**Description of Location:**  
Proposed Drill Hole located in the NW/4 NW/4 of Section 32, T13S, R8E, S.L.B.&M., being South 1260.92' from North Line and East 878.17' from West Line of Section 32, T13S, R8E, Salt Lake Base and Meridian.

**Surveyor's Certificate:**  
I, John S. Huefner, a Professional Land Surveyor, holding Certificate No. 144842 State of Utah, do hereby certify that the information on this drawing is a true and accurate survey based on data of record and was conducted under my personal direction and supervision as shown hereon.



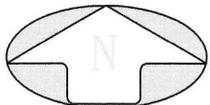
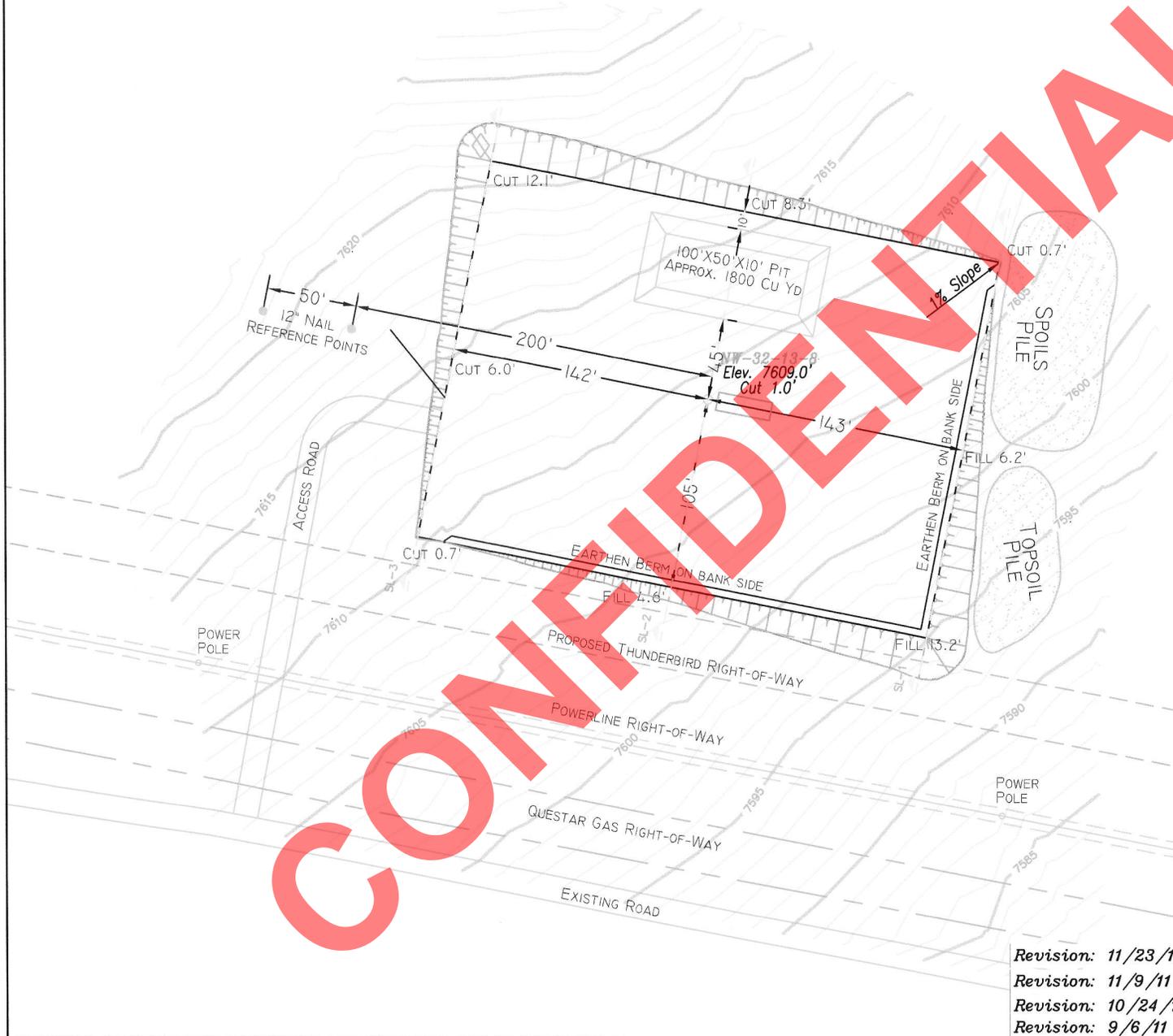
**TALON RESOURCES, INC.**  
615 North 400 East P.O. Box 1230  
Huntington, Utah 84528  
Phone (435)687-5310 Fax (435)687-5311  
E-Mail talonsetv.net

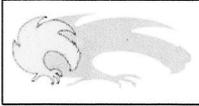


NW-32-13-8  
Section 32, T13S, R8E, S.L.B.&M.  
Carbon County, Utah

|                           |                              |
|---------------------------|------------------------------|
| Drawn By:<br>N. BUTKOVICH | Checked By:<br>A.P.C./J.S.H. |
| Drawing No.<br>A-1        | Date:<br>8/17/11             |
|                           | Scale:<br>1" = 1000'         |
| Sheet 1 of 4              | Job No.<br>4879              |

ELEVATION OF UNGRADED GROUND AT LOCATION STAKE = 7609.0'  
 ELEVATION OF GRADED GROUND AT LOCATION STAKE = 7608.0'

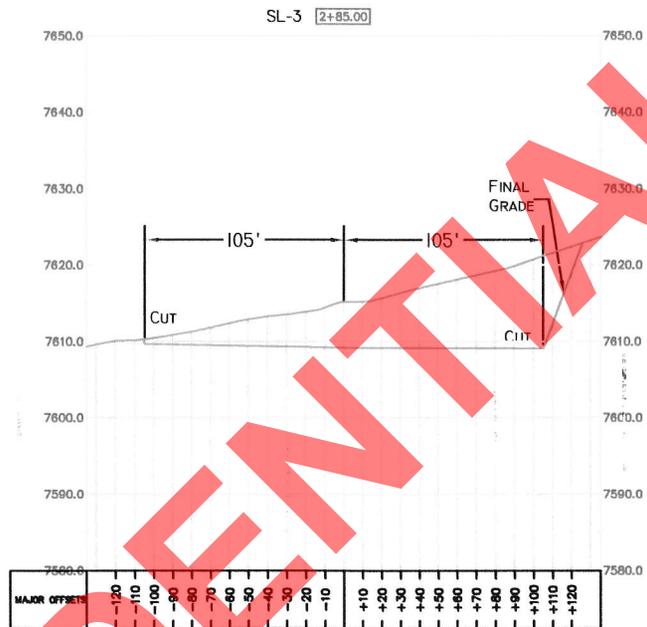
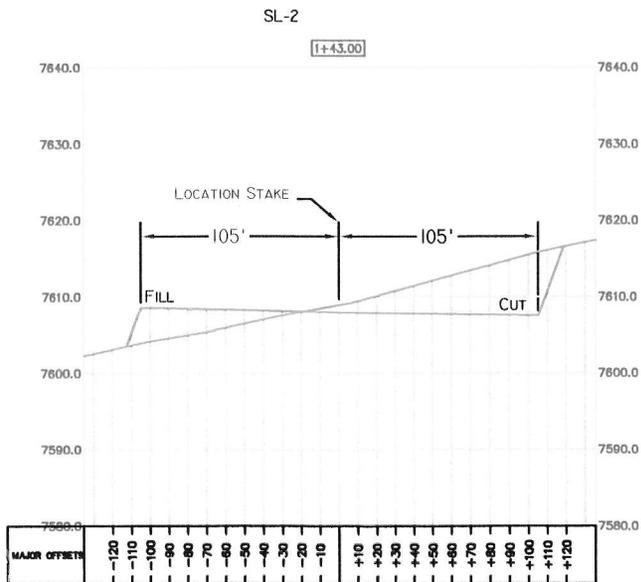


  
**TALON RESOURCES, INC.**  
 615 North 400 East P.O. Box 1230  
 Huntington, Utah 84528  
 Phone (435)687-5310 Fax (435)687-5311  
 E-Mail talon@etv.net

  
**THUNDERBIRD ENERGY**  
**LOCATION LAYOUT**  
 Section 32, T13S, R8E, S.L.B.&M.  
 NW-32-13-8

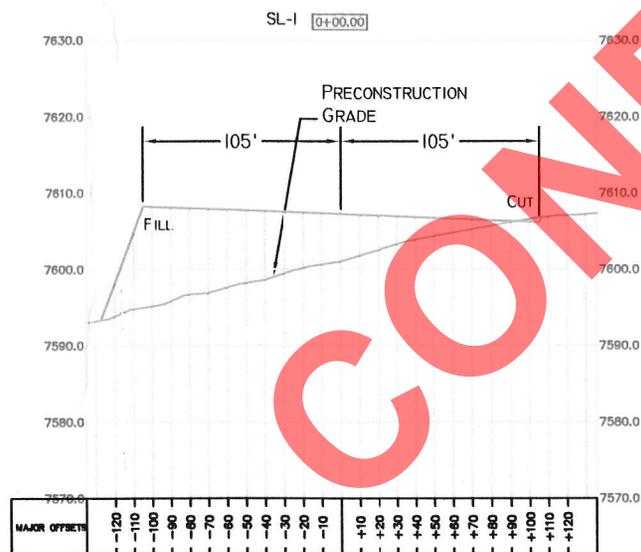
Revision: 11/23/11  
 Revision: 11/9/11  
 Revision: 10/24/11  
 Revision: 9/6/11

|                           |                       |
|---------------------------|-----------------------|
| Drawn By:<br>N. BUTKOVICH | Checked By:<br>A.P.C. |
| Drawing No.<br>A-2        | Date:<br>8/16/11      |
|                           | Scale:<br>1" = 80'    |
| Sheet 2 of 4              | Job No.<br>4879       |



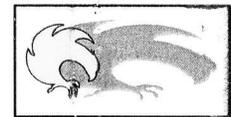
SLOPE = 1 1/2 : 1

1" = 10'  
X-Section  
Scale  
1" = 40'



APPROXIMATE YARDAGES  
 (6") TOPSOIL STRIPPING = 1,310 CU. YDS.  
 TOTAL CUT = 6,490 CU. YDS.  
 TOTAL FILL = 4,830 CU. YDS.

Revision: 9/6/11



**TALON RESOURCES, INC.**

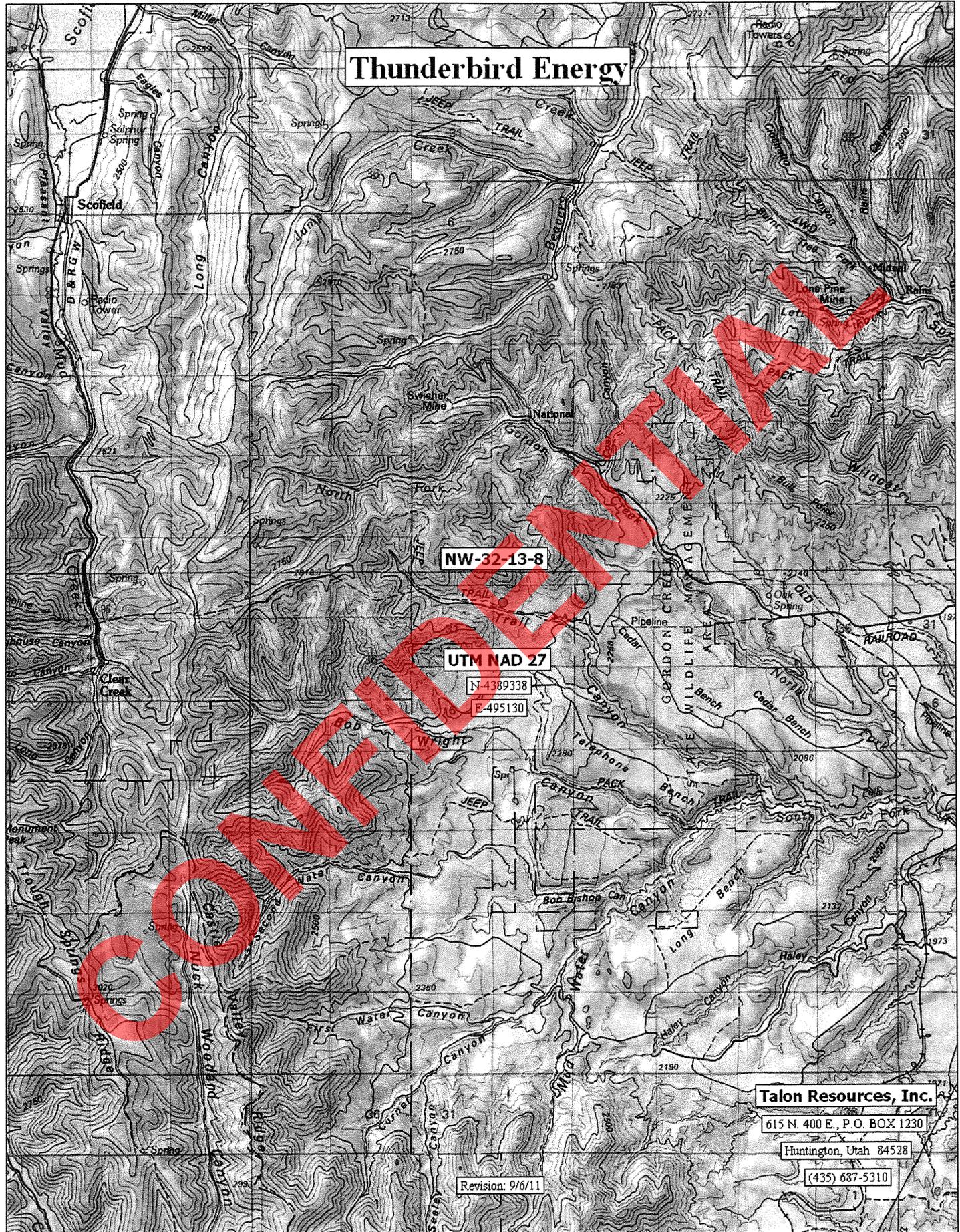
615 North 400 East P.O. Box 1330  
 Huntington, Utah 84520  
 Phone (435)687-5310 Fax (435)687-5311  
 E-Mail talon@etv.net



**TYPICAL CROSS SECTION**  
 Section 32, T13S, R8E, S.L.B.&M.  
 NW-32-13-8

|                           |                       |
|---------------------------|-----------------------|
| Drawn By:<br>N. BUTKOVICH | Checked By:<br>A.P.C. |
| Drawing No.<br>C-1        | Date:<br>8/16/11      |
|                           | Scale:<br>1" = 100'   |
| Sheet 3 of 4              | Job No.<br>4879       |

# Thunderbird Energy



TN \* /MN  
12 1/4°

0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles  
0 1 2 3 4 5 km  
Map created with TOPOI © 2003 National Geographic (www.nationalgeographic.com/topo)



October 29, 2011

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

Re: *Affidavit of status of the Jacob Family Surface Use Agreement*

*Township 13 South, Range 8 East, SLM*

*Section 31: N ½ N ½*

*Section 32: All*

*Township 14 South, Range 8 East, SLM*

*Section 5: N ½ N ½*

*All in Carbon County, Utah*

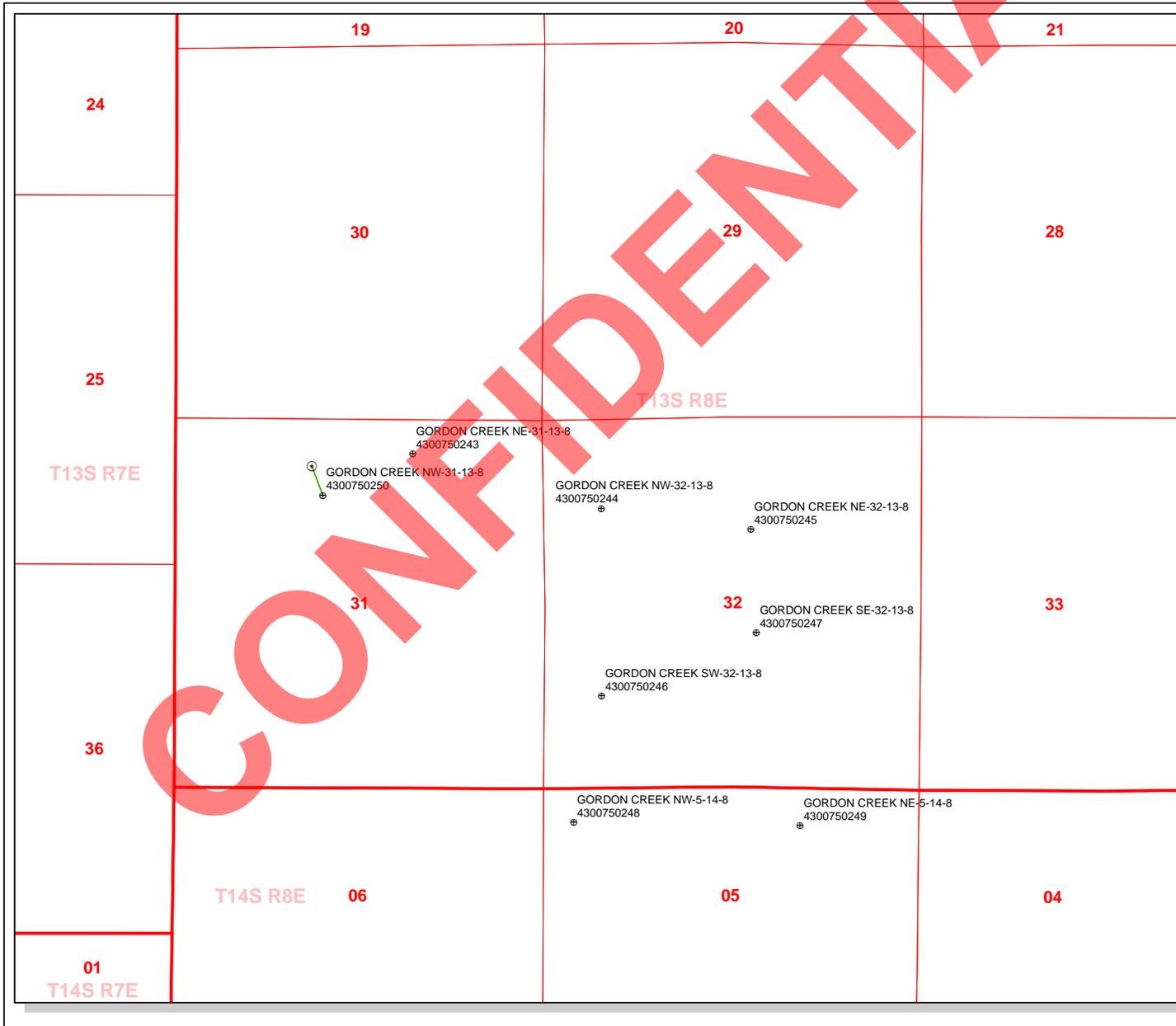
This letter may serve as notice that on the 22<sup>nd</sup> of October, 2011 we obtained a signed agreement from the Jacob Family regarding surface use fees and compensation amounts for our planned activities on their lands were agreed to. Full compensation has been paid out to the Jacobs Family, therefore we have executed the Surface Use Agreement for the above noted lands and its requirements in full.

Sincerely,

Barry Brumwell

Vice President of Operations

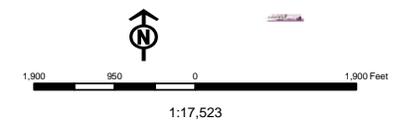
Thunderbird Energy / Gordon Creek, LLC.



**API Number: 4300750244**  
**Well Name: GORDON CREEK NW-32-13-8**  
**Township T1.3 . Range R0.8 . Section 32**  
**Meridian: SLBM**  
 Operator: GORDON CREEK, 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>STATUS</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    |                                    |





September 28<sup>th</sup>, 2011

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

To Whom It May Concern;

**Re: LOCATION EXEMPTION LETTER - Gordon Creek NW-32-13S-8E**

In reference to the State of Utah Oil & Gas Conservation Rule # R649-3-2, the proposed well GORDON CREEK NW-32-13S-8E is an exception to the rule due to the topography of the 40 acre Section that the well is located in.

There are no additional lease owners with 460' of the proposed location.

If you have any further questions regarding this matter, please don't hesitate to contact me by telephone at (403) 453-1608 or via email at [bbrumwell@thunderbirdenergy.com](mailto:bbrumwell@thunderbirdenergy.com).

Respectfully;

Barry Brumwell, C.E.T.  
Vice President of Operations  
Thunderbird Energy  
Gordon Creek, LLC.

Gordon Creek, LLC. is a wholly owned subsidiary of thunderbird Energy Inc.

---

#550, 1010 - 1<sup>st</sup> Street S.W. Calgary, Alberta, Canada T3Z 1G7

|  |   |       |  |  |
|--|---|-------|--|--|
| Well Name                                | GORDON CREEK, LLC GORDON CREEK NW-32-13-8 43007 |       |  |  |
| String                                   | SURF  | PROD  |  |  |
| Casing Size(")                           | 8.625   | 5.500 |  |  |
| Setting Depth (TVD)                      | 450   | 4538  |  |  |
| Previous Shoe Setting Depth (TVD)        | 0   | 450   |  |  |
| Max Mud Weight (ppg)                     | 8.7   | 10.0  |  |  |
| BOPE Proposed (psi)                      | 500   | 3000  |  |  |
| Casing Internal Yield (psi)              | 2950  | 7740  |  |  |
| Operators Max Anticipated Pressure (psi) | 1700  | 7.2   |  |  |

|   |  |              |   |
|---|--|--------------|---|
| Calculations                                  | <b>SURF String</b>                                 | <b>8.625</b> | <b>"</b>  |
| Max BHP (psi)                                 | .052*Setting Depth*MW=                             | 204          |   |
|   |  |              | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>  |
| MASP (Gas) (psi)                              | Max BHP-(0.12*Setting Depth)=                      | 150          | YES <input type="checkbox"/> air drill <input type="checkbox"/> |
| MASP (Gas/Mud) (psi)                          | Max BHP-(0.22*Setting Depth)=                      | 105          | YES <input type="checkbox"/> OK <input type="checkbox"/>        |
|   |  |              | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>    |
| Pressure At Previous Shoe                     | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 105          | NO <input type="checkbox"/> OK <input type="checkbox"/>         |
| Required Casing/BOPE Test Pressure=           |  | 450          | psi   |
| *Max Pressure Allowed @ Previous Casing Shoe= |  | 0            | psi *Assumes 1psi/ft frac gradient                              |

|   |  |              |   |
|---|--|--------------|---|
| Calculations                                  | <b>PROD String</b>                                 | <b>5.500</b> | <b>"</b>  |
| Max BHP (psi)                                 | .052*Setting Depth*MW=                             | 2360         |   |
|   |  |              | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>  |
| MASP (Gas) (psi)                              | Max BHP-(0.12*Setting Depth)=                      | 1815         | YES <input type="checkbox"/> air drill <input type="checkbox"/> |
| MASP (Gas/Mud) (psi)                          | Max BHP-(0.22*Setting Depth)=                      | 1362         | YES <input type="checkbox"/> OK <input type="checkbox"/>        |
|   |  |              | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>    |
| Pressure At Previous Shoe                     | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= | 1461         | NO <input type="checkbox"/> Reasonable <input type="checkbox"/> |
| Required Casing/BOPE Test Pressure=           |  | 3000         | psi   |
| *Max Pressure Allowed @ Previous Casing Shoe= |  | 450          | psi *Assumes 1psi/ft frac gradient                              |

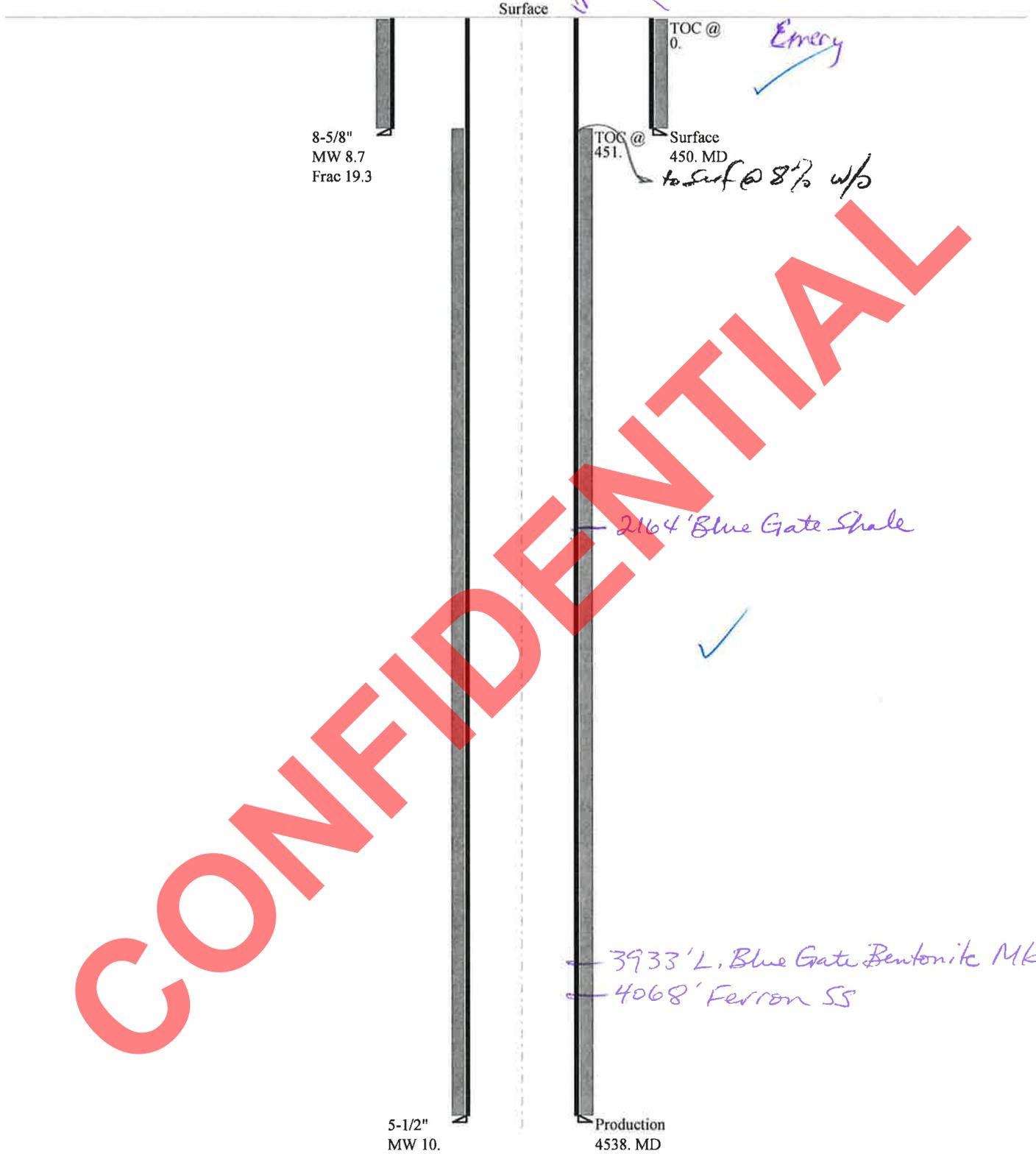
|   |  |  |  |
|---|--|--|--|
| Calculations                                  | <b>String</b>                                      |  | <b>"</b>   |
| Max BHP (psi)                                 | .052*Setting Depth*MW=                             |  |  |
|   |  |  | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b> |
| MASP (Gas) (psi)                              | Max BHP-(0.12*Setting Depth)=                      |  | NO <input type="checkbox"/>                                    |
| MASP (Gas/Mud) (psi)                          | Max BHP-(0.22*Setting Depth)=                      |  | NO <input type="checkbox"/>                                    |
|   |  |  | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>   |
| Pressure At Previous Shoe                     | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= |  | NO <input type="checkbox"/>                                    |
| Required Casing/BOPE Test Pressure=           |  |  | psi  |
| *Max Pressure Allowed @ Previous Casing Shoe= |  |  | psi *Assumes 1psi/ft frac gradient                             |

|                                     |  |  |  |
|-------------------------------------|--|--|--|
| Calculations                        | <b>String</b>                                      |  | <b>"</b>   |
| Max BHP (psi)                       | .052*Setting Depth*MW=                             |  |  |
|                                     |  |  | <b>BOPE Adequate For Drilling And Setting Casing at Depth?</b> |
| MASP (Gas) (psi)                    | Max BHP-(0.12*Setting Depth)=                      |  | NO <input type="checkbox"/>                                    |
| MASP (Gas/Mud) (psi)                | Max BHP-(0.22*Setting Depth)=                      |  | NO <input type="checkbox"/>                                    |
|                                     |  |  | <b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>   |
| Pressure At Previous Shoe           | Max BHP-.22*(Setting Depth - Previous Shoe Depth)= |  | NO <input type="checkbox"/>                                    |
| Required Casing/BOPE Test Pressure= |  |  | psi  |

**CONFIDENTIAL**

43007502440000 GORDON CREEK NW-32-13-8

Casing Schematic



**CONFIDENTIAL**

|              |   |             |              |
|--------------|---|-------------|--------------|
| Well name:   | <b>43007502440000 GORDON CREEK NW-32-13-8</b> |             |              |
| Operator:    | <b>GORDON CREEK, LLC</b>                      |             |              |
| String type: | Surface                                       | Project ID: | 43-007-50244 |
| Location:    | CARBON COUNTY                                 |             |              |

**Design parameters:**

**Collapse**

Mud weight: 8.700 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 80 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft

Cement top: Surface

**Burst**

Max anticipated surface pressure: 396 psi  
 Internal gradient: 0.120 psi/ft  
 Calculated BHP 450 psi

No backup mud specified.

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.70 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on air weight.  
 Neutral point: 391 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 4,538 ft  
 Next mud weight: 10.000 ppg  
 Next setting BHP: 2,357 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 450 ft  
 Injection pressure: 450 psi

| Run Seq | Segment Length (ft) | Size (in) | Nominal Weight (lbs/ft) | Grade | End Finish | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in) | Est. Cost (\$) |
|---------|---------------------|-----------|-------------------------|-------|------------|----------------------|---------------------|---------------------|----------------|
| 1       | 450                 | 8.625     | 24.00                   | J-55  | ST&C       | 450                  | 450                 | 7.972               | 2317           |

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (kips) | Tension Strength (kips) | Tension Design Factor |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 1       | 203                 | 1370                    | 6.736                  | 450              | 2950                 | 6.56                | 10.8                | 244                     | 22.59 J               |

COMPLETED

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801-538-5357  
 FAX: 801-359-3940

Date: October 5, 2011  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 450 ft, a mud weight of 8.7 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

|              |   |              |
|--------------|---|--------------|
| Well name:   | <b>43007502440000 GORDON CREEK NW-32-13-8</b> |              |
| Operator:    | <b>GORDON CREEK, LLC</b>                      | Project ID:  |
| String type: | Production                                    | 43-007-50244 |
| Location:    | <b>CARBON COUNTY</b>                          |              |

**Design parameters:**

**Collapse**

Mud weight: 10.000 ppg  
 Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 1,359 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 2,357 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.60 (B)

Tension is based on air weight.  
 Neutral point: 3,850 ft

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 138 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft  
 Cement top: 451 ft

**Non-directional string.**

| Run Seq | Segment Length (ft) | Size (in)               | Nominal Weight (lbs/ft) | Grade            | End Finish           | True Vert Depth (ft) | Measured Depth (ft) | Drift Diameter (in)     | Est. Cost (\$)        |
|---------|---------------------|-------------------------|-------------------------|------------------|----------------------|----------------------|---------------------|-------------------------|-----------------------|
| 1       | 4538                | 5.5                     | 17.00                   | N-80             | LT&C                 | 4538                 | 4538                | 4.767                   | 25578                 |
| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor  | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor  | Tension Load (kips) | Tension Strength (kips) | Tension Design Factor |
| 1       | 2357                | 6290                    | 2.668                   | 2357             | 7740                 | 3.28                 | 77.1                | 348                     | 4.51 J                |

Prepared by: Helen Sadik-Macdonald  
 Div of Oil, Gas & Mining

Phone: 801 538-5357  
 FAX: 801-359-3940

Date: October 5, 2011  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 4538 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



State of Utah

GARY R. HERBERT  
*Governor*

GREG BELL  
*Lieutenant  
Governor*

Office of the Governor  
PUBLIC LANDS POLICY COORDINATION

JOHN HARJA  
*Director*

October 17, 2011

Diana Mason  
Petroleum Specialist  
Department of Natural Resources, Division of Oil Gas and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, UT 84114-5801

Subject: Application for Permit to Drill; Gordon Creek  
Carbon County; Section 32, Township 13.0S, Range 8.0E  
RDCC Project Number 28900

Dear Ms. Mason:

The State of Utah, through the Public Lands Policy Coordination Office (PLPCO), has reviewed this project. Utah Code (Section 63J-4-601, *et. seq.*) designates PLPCO as the entity responsible to coordinate the review of technical and policy actions that may affect the physical resources of the state, and to facilitate the exchange of information on those actions among federal, state, and local government agencies. As part of this process, PLPCO makes use of the Resource Development Coordinating Committee (RDCC). The RDCC includes representatives from the state agencies that are generally involved or impacted by public lands management.

#### Division of Air Quality

Because fugitive dust may be generated during soil disturbance, the proposed project will be subject to Air Quality rule R307-205-5 for Fugitive Dust. These rules apply to construction activities that disturb an area greater than 1/4 acre in size. A permit, known as an Approval Order, is not required from the Executive Secretary of the Air Quality Board, but steps need to be taken to minimize fugitive dust, such as watering and/or chemical stabilization, providing vegetative or synthetic cover or windbreaks. A copy of the rules can be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The state encourages the use of Best Management Processes (BMP s) in protecting air quality in Utah. The state recommends the following BMP s as standard operating procedures:

**RECEIVED: October 19, 2011**

Diana Mason  
October 17, 2011  
Page -2-

- 1) Emission Standards for Stationary Internal Combustion Engines of 2 g/bhp-hr of NOx for engines less than 300 HP (Tier 3) and 1 g/bhp-hr of NOx for engines over 300 HP (Tier 3).
- 2) No or low bleed controllers for Pneumatic Pumps, Actuators and other Pneumatic devices.
- 3) Green completion or controlled VOC emissions methods with 90% efficiency for Oil or Gas Atmospheric Storage Tanks, VOC Venting controls or flaring. Glycol Dehydration and Amine Units Units, VOC Venting controls or flaring, Well Completion, Re-Completion, Venting, and Planned Blowdown Emissions.

If compressors or pump stations are constructed at the site a permit application, known as a Notice of Intent (NOI), should be submitted to the Executive Secretary at the Utah Division of Air Quality at 150 N. 1950 West, Salt Lake City, Utah, 84116 for review according to R307-401: Permit: Notice of Intent and Approval Order, of the Utah Air Quality Rules. A copy of the rules may be found at [www.rules.utah.gov/publicat/code/r307/r307.htm](http://www.rules.utah.gov/publicat/code/r307/r307.htm).

The State of Utah appreciates the opportunity to review this proposal and we look forward to working with you on future projects. Please direct any other written questions regarding this correspondence to the Public Lands Policy Coordination Office at the address below, or call Judy Edwards at (801) 537-9023.

Sincerely,



John Harja  
Director

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** GORDON CREEK, LLC  
**Well Name** GORDON CREEK NW-32-13-8  
**API Number** 43007502440000      **APD No** 4693      **Field/Unit** WILDCAT  
**Location: 1/4,1/4** NWNW      **Sec** 32      **Tw** 13.0S      **Rng** 8.0E      1261 FNL 878 FWL  
**GPS Coord (UTM)**      **Surface Owner** Mark Jacobs

### Participants

M. Jones (UDOGM), B. Brumwell, S. Lessar, L. Williams, (Thunderbird), A. Childs, M. Childs (Talon), Jim Jacobs (surface ownership).

### Regional/Local Setting & Topography

This proposed well is staked west of the Consumers area in Carbon County, Utah. The site is in the Trail Canyon drainage north and west of the Gordon Creek Compressor site approximately .75 miles, owned and operated by Gordon Creek, LLC or Thunderbird Energy. The immediate setting is relatively flat, slightly sloped to the southeast and dominated by sagebrush with pinion juniper trees in the surrounding environment. To the direct west the Wasatch Plateau rises dramatically.

### Surface Use Plan

#### **Current Surface Use**

Grazing  
Wildlife Habitat

**New Road Miles**  
0.05

**Well Pad**  
**Width** 210      **Length** 285

**Src Const Material**  
Onsite

**Surface Formation**

**Ancillary Facilities** N

### Waste Management Plan Adequate?

### Environmental Parameters

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

sagebrush, grasses, pinion juniper.

#### **Soil Type and Characteristics**

clay loam

**Erosion Issues** N

**Sedimentation Issues** N

**Site Stability Issues** N

**Drainage Diversion Required?** Y

Divert drainages around and away from location and access road.

**Berm Required?** Y

Berm location to prevent spills from leaving location.

Erosion Sedimentation Control Required? N

Paleo Survey Run? N Paleo Potential Observed? N Cultural Survey Run? N Cultural Resources? N

**Reserve Pit**

**Site-Specific Factors**

**Site Ranking**

|  |                    |    |                     |
|--|--------------------|----|---------------------|
| <b>Distance to Groundwater (feet)</b>    | >200               | 0  |                     |
| <b>Distance to Surface Water (feet)</b>  | >1000              | 0  |                     |
| <b>Dist. Nearest Municipal Well (ft)</b> | >5280              | 0  |                     |
| <b>Distance to Other Wells (feet)</b>    | >1320              | 0  |                     |
| <b>Native Soil Type</b>                  | Mod permeability   | 10 |                     |
| <b>Fluid Type</b>                        | Fresh Water        | 5  |                     |
| <b>Drill Cuttings</b>                    | Normal Rock        | 0  |                     |
| <b>Annual Precipitation (inches)</b>     | 10 to 20           | 5  |                     |
| <b>Affected Populations</b>              |                    |    |                     |
| <b>Presence Nearby Utility Conduits</b>  | Present            | 15 |                     |
|  | <b>Final Score</b> | 35 | 1 Sensitivity Level |

**Characteristics / Requirements**

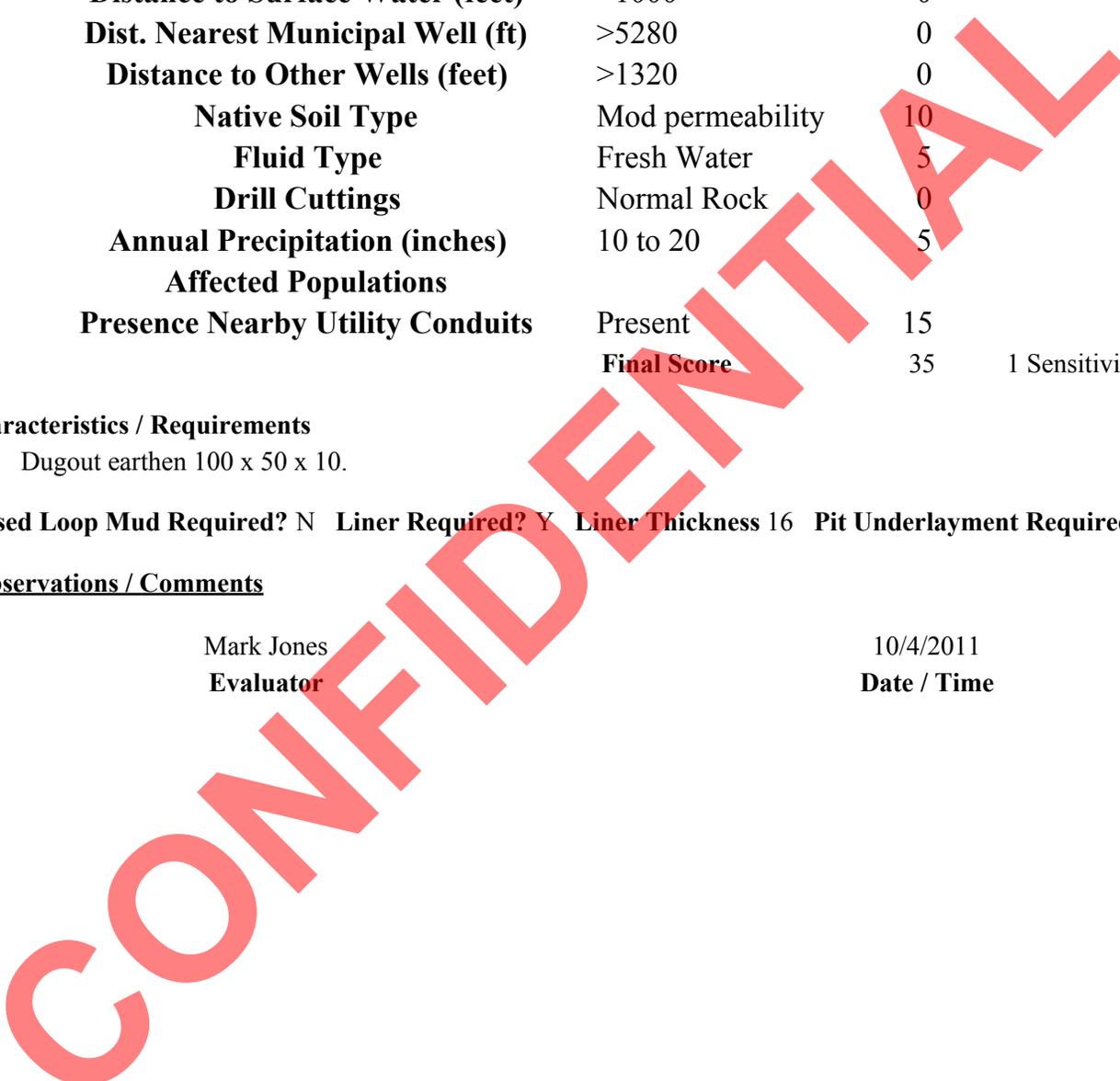
Dugout earthen 100 x 50 x 10.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? N

**Other Observations / Comments**

Mark Jones  
**Evaluator**

10/4/2011  
**Date / Time**



# Application for Permit to Drill

## Statement of Basis

11/30/2011

Utah Division of Oil, Gas and Mining

Page 1

|                  |   |               |                          |                   |            |
|------------------|---|---------------|--------------------------|-------------------|------------|
| <b>APD No</b>    | <b>API WellNo</b>                                 | <b>Status</b> | <b>Well Type</b>         | <b>Surf Owner</b> | <b>CBM</b> |
| 4693             | 43007502440000                                    | LOCKED        | GW                       | P                 | No         |
| <b>Operator</b>  | GORDON CREEK, LLC                                 |               | <b>Surface Owner-APD</b> | Mark Jacobs       |            |
| <b>Well Name</b> | GORDON CREEK NW-32-13-8                           |               | <b>Unit</b>              |                   |            |
| <b>Field</b>     | WILDCAT   |               | <b>Type of Work</b>      | DRILL             |            |
| <b>Location</b>  | NWNW 32 13S 8E S 1261 FNL 878 FWL GPS Coord (UTM) |               | 495049E                  | 4389534N          |            |

### Geologic Statement of Basis

Tunderbird Energy proposes to drill the well to a total depth of 4,538' and plans to set surface casing from 0'-450'. The surface string will be drilled using air unless hole conditions require the need to "mud-up" with water and gel chem. Within a 10,000 foot radius of the center of section 32, there are 44 filed water rights, however, only one is a subsurface groundwater right. Gordon Creek, LLC, has applied to drill a water-well to produce 4 acre-feet of water for oil & gas field operations. This location is within a small north-south trending graben valley. The poorly permeable silty soil has been formed from the erosion of the Upper Blue Gate Member of the Mancos Shale. Several units of the Emery Sandstone Member of the Mancos Shale are present at the near surface or within the subsurface, these strata should be included within the interval to be protected by the surface casing string. The operator should be informed of the likelihood of these units being water saturated and to respond to protecting these zones by extending the surface casing as necessary. Proposed surface casing and cement should adequately isolate any shallow zones containing water.

Ammon McDonald  
APD Evaluator

10/13/2011  
Date / Time

### Surface Statement of Basis

This proposed well is staked west of the Consumers area in Carbon County, Utah. The site is in the Trail Canyon drainage north and west of the Gordon Creek Compressor site approximately .75 miles, owned and operated by Gordon Creek, LLC or Thunderbird Energy. The immediate setting is relatively flat, slightly sloped to the southeast and dominated by sagebrush with pinion juniper trees in the surrounding environment. To the direct west the Wasatch Plateau rises dramatically. The location should be bermed to prevent spills from leaving the confines of the pad. Fencing around the reserve pit will be necessary once the well is drilled to prevent wildlife and livestock from becoming a problem. Drainages should be diverted around and away from wellpad and access road. A synthetic liner of 16 mils (minimum) should be utilized in the reserve pit. The access was discussed during the pre-site. It is recommended by the Division that the access should take off of the main access trunk at 90 degree angle to allow traffic to utilize the main access to the westerly wells better. It is also noted that a large Questar distribution line and a Rocky Mountain Power distribution line will both be crossed with the access onto this proposed pad. It was also recommended by the Division that these two utility ROW's be crossed perpendicular to the ROW. The access point onto the pad was also discussed as to rig and equipment accessing the pad at the optimum point. There may be some disturbance during construction activities that are outside of the permitted pad boundaries to create cut and fill slopes, to create diversion ditches as discussed during the pre-site meetings, and to store topsoil and spoils as indicated on the drawings. Any of this activity should be kept to a very minimum. All other surface operations must remain within permitted pad boundaries.

Mark Jones  
Onsite Evaluator

10/4/2011  
Date / Time

### Conditions of Approval / Application for Permit to Drill

|          |           |
|----------|-----------|
| Category | Condition |
|----------|-----------|

**RECEIVED: November 30, 2011**

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**Application for Permit to Drill  
Statement of Basis**

11/30/2011

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

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|         |  |
|---------|--|
| Pits    | A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit. |
| Surface | The well site shall be bermed to prevent fluids from leaving the pad.  |
| Surface | Drainages adjacent to the proposed pad shall be diverted around the location.  |
| Surface | The reserve pit shall be fenced upon completion of drilling operations.  |
| Surface | Surface operations must remain within permitted pad boundaries.  |

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## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 9/26/2011

**API NO. ASSIGNED:** 43007502440000

**WELL NAME:** GORDON CREEK NW-32-13-8

**OPERATOR:** GORDON CREEK, LLC (N3245)

**PHONE NUMBER:** 403 453-1608

**CONTACT:** Barry Brumwell

**PROPOSED LOCATION:** NWNW 32 130S 080E

**Permit Tech Review:**

**SURFACE:** 1261 FNL 0878 FWL

**Engineering Review:**

**BOTTOM:** 1261 FNL 0878 FWL

**Geology Review:**

**COUNTY:** CARBON

**LATITUDE:** 39.65559

**LONGITUDE:** -111.05771

**UTM SURF EASTINGS:** 495049.00

**NORTHINGS:** 4389534.00

**FIELD NAME:** WILDCAT

**LEASE TYPE:** 4 - Fee

**LEASE NUMBER:** Sec 31+32 Fee Lease

**PROPOSED PRODUCING FORMATION(S):** FERRON SANDSTONE

**SURFACE OWNER:** 4 - Fee

**COALBED METHANE:** NO

**RECEIVED AND/OR REVIEWED:**

- PLAT
- Bond: STATE - RLB0010790
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 91-5193
- RDCC Review: 2011-11-23 00:00:00.0
- Fee Surface Agreement
- Intent to Commingle

**Commingling Approved**

**LOCATION AND SITING:**

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

**Comments:** Presite Completed

**Stipulations:**

- 1 - Exception Location - dmason
- 5 - Statement of Basis - bhll
- 21 - RDCC - dmason
- 23 - Spacing - dmason
- 27 - Other - bhll

**RECEIVED: November 30, 2011**



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:** GORDON CREEK NW-32-13-8  
**API Well Number:** 43007502440000  
**Lease Number:** Sec 31+32 Fee Lease  
**Surface Owner:** FEE (PRIVATE)  
**Approval Date:** 11/30/2011

**Issued to:**

GORDON CREEK, LLC, 1179 E Main #345, Price, UT 84501

**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 R649-3-3. The expected producing formation or pool is the FERRON SANDSTONE 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

**Exception Location:**

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

**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:**

The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review. (See attached)

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.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be extended to a sufficient depth in order to contain water flows as seen in the Gordon Creek ST SE-7-14-8 well.

**Additional Approvals:**

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

**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  
OR  
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

**Contact Information:**

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**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:

**Approved by:**

A handwritten signature in black ink, appearing to read "J. Rogers", written in a cursive style.

For John Rogers  
Associate Director, Oil & Gas

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**DIVISION OF OIL, GAS AND MINING**

**SPUDDING INFORMATION**

Name of Company; GORDON CREEK, LLC

Well Name: GORDON CREEK NW 32-13-8

Api No: 43-007-50244 Lease Type FEE

Section 32 Township 13S Range 08E County CARBON

Drilling Contractor TRIPLE A DRILLING RIG #

**SPUDED:**

Date 01/12/2012

Time NOON

How DRY

**Drilling will  
Commence:**

Reported by BOZE STINSON

Telephone # (435) 630-6394

Date 01/12 /2012 Signed CHD

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

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

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.

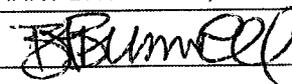
|   |  |   |
|---|--|---|
| 1. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER _____ |  | 5. LEASE DESIGNATION AND SERIAL NUMBER<br>SEC 31 + 32 FEE LEASE |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC.  |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                            |
| 3. ADDRESS OF OPERATOR:<br>1179 E. MAIN #345 PRICE UT 84501   |  | 7. UNIT or CA AGREEMENT NAME                                    |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE: 1261' FNL, 878' FWL   |  | 8. WELL NAME and NUMBER<br>GORDON CREEK NW-32-13-8              |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NWNW 32 13 8 S   |  | 9. API NUMBER<br>4300750244                                     |
| COUNTY CARBON   |  | 10. FIELD AND POOL OR WILDCAT<br>WILDCAT                        |
| STATE: 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>(Submit in Duplicate)<br>Approximate date work will start:<br>_____              | <input type="checkbox"/> ACIDIZE                        | <input type="checkbox"/> DEEPEN                           | <input type="checkbox"/> REPERFORATE CURRENT FORMATION       |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT<br>(Submit Original Form Only)<br>Date of work completion:<br>1/12/2012 | <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 type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE         | <input checked="" type="checkbox"/> OTHER <u>SPUD NOTICE</u> |
|   | <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.

17" HOLE SPUDDED AT 11:30 HRS 1/13/2012 AND DRILLED TO 44'. 12 3/4" PIPE WAS SET AT 44' AND CEMENTED FULL LENGTH.

|   |   |
|---|---|
| NAME (PLEASE PRINT) <u>BARRY BRUMWELL, C.E.T.</u>   | TITLE <u>VICE PRESIDENT of OPERATIONS</u> |
| SIGNATURE  | DATE <u>1/19/2012</u>                     |

(This space for State use only)

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

FORM 6

**ENTITY ACTION FORM**

Operator: GORDON CREEK, LLC. Operator Account Number: N 3245  
Address: 1179 EAST MAIN, #345  
city PRICE  
state UT zip 84501 Phone Number: (435) 820-1489

**Well 1**

| API Number  | Well Name               |                   | QQ        | Sec | Twp                              | Rng            | County |
|---|-------------------------|-------------------|-----------|-----|----------------------------------|----------------|--------|
| 4300750247  | GORDON CREEK SE-32-13-8 |                   | NWSE      | 32  | 13 <sub>s</sub>                  | 8 <sub>e</sub> | CARBON |
| Action Code   | Current Entity Number   | New Entity Number | Spud Date |     | Entity Assignment Effective Date |                |        |
| A   | 999999                  | 18388             | 1/13/2012 |     | 1/31/12                          |                |        |
| <b>Comments:</b> 17" HOLE SPUDDED AT 09:00 HRS 1/13/2012 AND DRILLED TO 44'. 12 3/4" PIPE SET AT 44' AND CEMENTED FULL LENGTH.<br><i>FRSD</i> |                         |                   |           |     |                                  |                |        |

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**Well 2**

| API Number  | Well Name               |                   | QQ        | Sec | Twp                              | Rng            | County |
|---|-------------------------|-------------------|-----------|-----|----------------------------------|----------------|--------|
| 4300750244  | GORDON CREEK NW-32-13-8 |                   | NWNW      | 32  | 13 <sub>s</sub>                  | 8 <sub>e</sub> | CARBON |
| Action Code   | Current Entity Number   | New Entity Number | Spud Date |     | Entity Assignment Effective Date |                |        |
| A   | 999999                  | 18389             | 1/13/2012 |     | 1/31/12                          |                |        |
| <b>Comments:</b> 17" HOLE SPUDDED AT 11:30 HRS 1/13/2012 AND DRILLED TO 44'. 12 3/4" PIPE SET AT 44' AND CEMENTED FULL LENGTH.<br><i>FRSD</i> |                         |                   |           |     |                                  |                |        |

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**Well 3**

| API Number  | Well Name               |                   | QQ        | Sec | Twp                              | Rng            | County |
|---|-------------------------|-------------------|-----------|-----|----------------------------------|----------------|--------|
| 4300750245  | GORDON CREEK NE-32-13-8 |                   | SWNE      | 32  | 13 <sub>s</sub>                  | 8 <sub>e</sub> | CARBON |
| Action Code   | Current Entity Number   | New Entity Number | Spud Date |     | Entity Assignment Effective Date |                |        |
| A   | 999999                  | 18390             | 1/13/2012 |     | 1/31/12                          |                |        |
| <b>Comments:</b> 17" HOLE SPUDDED AT 13:00 HRS 1/13/2012 AND DRILLED TO 41'. 12 3/4" PIPE SET AT 41' AND CEMENTED FULL LENGTH.<br><i>FRSD</i> |                         |                   |           |     |                                  |                |        |

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**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)

BARRY BRUMWELL, C.E.T.

Name (Please Print)

Signature

VP of OPERATIONS

Title

1/19/2012

Date

**RECEIVED**

JAN 19 2012

DIV. OF OIL, GAS & MINING

| STATE OF UTAH<br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  |   | FORM 9   |   |
|---|---|--|---|
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  |   | <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>FEE  |   |
| 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>   |   |
|   |   | <b>7. UNIT or CA AGREEMENT NAME:</b>   |   |
| <b>1. TYPE OF WELL</b><br>Gas Well  | <b>8. WELL NAME and NUMBER:</b><br>GORDON CREEK NW-32-13-8  |  |   |
| <b>2. NAME OF OPERATOR:</b><br>GORDON CREEK, LLC  | <b>9. API NUMBER:</b><br>43007502440000   |  |   |
| <b>3. ADDRESS OF OPERATOR:</b><br>1179 E Main #345 , Price, UT, 84501   | <b>PHONE NUMBER:</b><br>403 453-1608 Ext  | <b>9. FIELD and POOL or WILDCAT:</b><br>WILDCAT  |   |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>1261 FNL 0878 FWL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | <b>COUNTY:</b><br>CARBON  |  |   |
|   |   | <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>3/11/2012<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 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 checked="" 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 type="text" value="Change Cement Blend"/> |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  |   |  |   |
| <p>Our cementing contractor is unable to source Centrospheres required for the prod csg cement blend approved for this well. We are therefore requesting approval to use a different cement blend. Its a combination of a high early cement w/ Gypsum-60 &amp; Sodium Metasilicate to tie up free water &amp; give a better comp strength. Its a 10.5#/gal Lead &amp; 11.5#/gal tail. The previously approved 10.7#/gal Centrosphere slurry gave 906psi comp strength in 72 hours, the newly proposed blend lead is 350psi in 72 hours; the tail slurry (which covers the Ferron productive zone) is 1085psi in 72 hours. The new proposed slurry would add ~170 psi diff pressure over currently pumping pressures (calc using 1000' Tail cmt &amp; Lead cmt to sfc). We propose 100% excess on the lead cement &amp; 50% on the tail cement. This newly proposed blend is very similar to what other Operators have run in the area with great success.</p> |   |  |   |
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell  |   | <b>PHONE NUMBER</b><br>403 453-1608  | <b>TITLE</b><br>Vice President-Operations   |
| <b>SIGNATURE</b><br>N/A   |   | <b>DATE</b><br>2/21/2012   |   |



# Superior Well Services

1453 E 335 S  
Vernal, Utah 84078

Office: 435 781 0270

Fax: 435 781 0270

[www.swsi.com](http://www.swsi.com)

**BREAK THROUGH**

## Primary Cementing Proposal

### Thunderbird

**Gordon Creek Productions**

**5 1/2 IN PRODUCTION CASING**

#### Well Location

Field: *Gordon Creek*  
County: *Carbon*  
State: *Utah*

#### Well Information

Casing Size: 5 1/2 [in]  
Casing Depth: 4400 [ft]  
TVD: 4400 [ft]  
O.H. Size: 7 7/8 [in]  
O.H. Depth: 4400 [ft]



#### Water Estimates

Spacer: 20.0 [bbls]  
Total Mix Water: 179.7 [bbls]  
Displacement: 104.1 [bbls]  
Wash up: 30.0 [bbls]

Pvs.Casing Size: 8 5/8 [in]  
Pvs. Casing Depth: 800 [ft]  
BHST: 128.4 [°F]  
BHCT: 103 [°F]

Total Water Estimate: 333.9 [bbls]

**BREAK THROUGH**

**Prepared For:** *Barry Brumwell*  
*Bo Stinson*

Date Prepared: 2/15/12

**Prepared By:** *Don Hardinger*

Phone: 435 790 2550

Fax: 435 781 0270

Email: [dhardinger@swsi.com](mailto:dhardinger@swsi.com)

DISCLAIMER OF LIABILITY: With respect to this report, neither Superior Well Services nor any of their employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.



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## BREAK THROUGH

### Well Bore Information

Thunderbird

Gordon Creek Productions

5 1/2 IN PRODUCTION CASING

Drilling Fluid

8.4 ppg Water Based Drilling Fluid

Spacers

**Previous Casing Depth:**

800 [ft]

**Casing in Casing Factor:**

0.1931 [cuft/ft]

**Differential Pressure**

539 [psi]

[assumes vertical hole]

**Total Annular Excess**

86 %

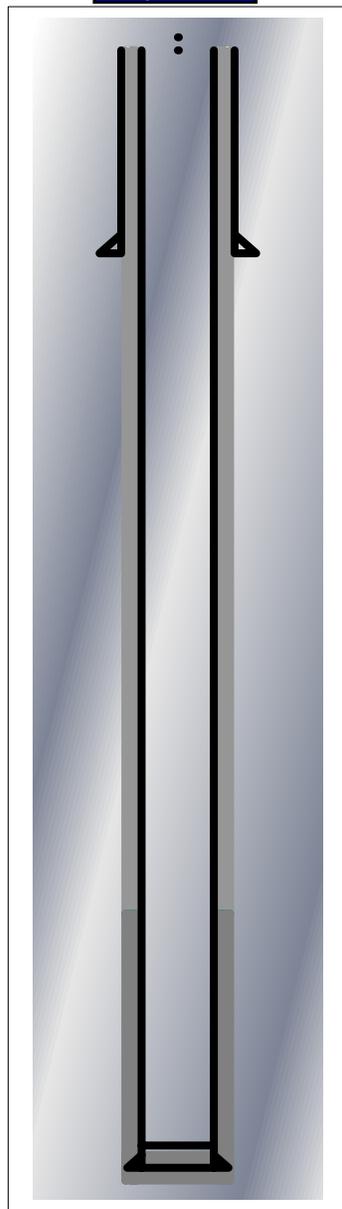
**Casing in OH1 Factor:**

0.1733 [cuft/ft]

(Without Excess)

**Casing Capacity Factor:**

0.1342 [cuft/ft]



#### Lead Cement

Top: Cement to Surface

Fill: 3400 [ft]

Excess: 100 %

Vol: 1055 [cuft]

#### Tail Cement

Top: 3400 [ft]

Fill: 1000 [ft]

Excess: 50 %

Vol: 265 [cuft]

**Shoe Track Length**

44 [ft]

**Measured Depth**

4,400 [ft]

Note: Drawing may not be 100%  
Accurate with different situations.

**Displacement Volume: 104 [bbls]**



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**BREAK THROUGH**

Thunderbird

Gordon Creek Productions

5 1/2 IN PRODUCTION CASING

## Mud / Cement Spacer System:

20 bbls Water @ 8.33 [lb/gal]

## 20 BBLS of Gelled water W/Superflake

### Lead System

256 sks

2% Gypsum-60 + 0.25LB/SK Super Flake + 2% Super Sil-SP

Mix Weight: 10.50 [lb/gal]

Yield: 4.12 [cuft/sk]

Mix Water: 25.89 [gal/sk]

### Tail System

111 sks

High Early Compressive + 2% Gypsum - 60 + 0.25 LB/SK Super Flake + 2% Super Sil - SP

Mix Weight: 11.50 [lb/gal]

Yield: 2.39 [cuft/sk]

Mix Water: 8.23 [gal/sk]

### Displacement Fluid

104 bbls of Water

*Always refigure on location!!!!*





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**BREAK THROUGH**

| Price Code  | Description   |  | Amount | Units of Sale | Unit Cost   | Total Cost  |
|-------------|---|---|--------|---------------|-------------|-------------|
| 20-200-0001 | Mileage DOT Units - Cmt - per unit, per mile, one way   |   | 150    | ut-mi         | \$ 7.60     | \$ 456.00   |
| 20-200-0002 | Mileage non-DOT Units -Cmt - per unit, per job          |   | 150    | ut-mi         | \$ 4.30     | \$ 258.00   |
| 20-200-0008 | Bulk Cement Delivery - per sack, per one way mile       |   | 55091  | sk-mi         | \$ 0.18     | \$ 3,966.55 |
| 20-215-0001 | Bulk Blending Service - per sack                        |   | 367    | sk            | \$ 3.20     | \$ 469.76   |
| 20-220-0045 | Depth Pumped 4,001' to 4,500' - first 4 hours, per unit |   | 1      | unit          | \$ 3,800.00 | \$ 1,520.00 |
| 20-299-0007 | Plug Container HP or Double - each, per job             |   | 1      | ea            | \$ 710.00   | \$ 284.00   |
| 20-299-0008 | AccuDat Recording System- each, per job                 |   | 1      | ea            | \$ 1,230.00 | \$ 492.00   |
| 20-299-0010 | High Energy Mix System (HEMS) - each, per job           |   | 1      | ea            | \$ 746.00   | \$ 298.40   |
| 25-305-1020 | Cement 'C' - per Sack                                   |   | 367    | sk            | \$ 36.80    | \$ 5,402.24 |
| 25-335-0003 | Gilsonite - per pound                                   |   | 2564   | lb            | \$ 1.50     | \$ 1,538.40 |
| 25-300-0001 | Gypsum Cement 60 - per pound                            |   | 690    | lb            | \$ 1.69     | \$ 466.44   |
| 25-335-0001 | Super Flake - per pound                                 |   | 92     | lb            | \$ 6.40     | \$ 235.52   |
| 25-330-0100 | Super Sil - SP - per pound                              |   | 690    | lb            | \$ 10.10    | \$ 2,787.60 |
| 35-485-0030 | Super Gel 30 - per pound                                |   | 40     | lb            | \$ 21.10    | \$ 337.60   |
| 20-220-1000 | Depth Add Hrs - Stand-by - per unit, per hour           |   | 1      | ut-hr         | \$ 514.00   | \$ 514.00   |
| 20-200-9998 | Fuel Surcharge - as applied                             |   | 1      | ea            | \$ 525.00   | \$ 525.00   |

**Gross Price \$ 47,320.28**

**Discounted Price \$ 19,551.51**

DISCLAIMER OF LIABILITY: With respect to this report, neither Superior Well Services nor any of their employees, makes any warranty, express or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.



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**BREAK THROUGH**

## Superior Chemical Descriptions

| Chemical                      | Description   |
|-------------------------------|---|
| <i>High Early Compressive</i> | <i>API Class "C" Portland Cement [94 lbs/sk]</i>  |
| <i>Gilsonite</i>              | <i>Low density (SG=1.07) asphaltite mineral extender made up of black angular solids used to prepare lower density cements.</i> |
| <i>Gypsum - 60</i>            | <i>Gypsum cement additive used for thixotropic cements or its expansive properties.</i>   |
| <i>Super Flake</i>            | <i>Cellophane or Polyester flakes used as a loss circulation additive.</i>  |
| <i>Super Sil - SP</i>         | <i>Sodium Metasilicate extender and accelerator.</i>  |



## Superior Equipment and Personnel Requested



# Superior Well Services

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**BREAK THROUGH**

|                      |   |   |
|----------------------|---|---|
| Well Head Connection | <b>5 1/2" Cement Head</b>   | <i>Single Plug Pull Pin Style with Quick Latch Bowl type connection</i> |
| Cement Pump Truck    | <i>1 Superior tractor trailer mounted cement double pump. Superiors tractor trailer cement pumps consist of a recirculating jet mixer, non-radioactive densiometer, 2 high pressure triplex pumps, and data ports to record pressures, rates and densities with Superior's AccuDat software.</i>    |   |
|                      | <i>This quote is for 4 hours on location, after that time any down hole pump will be charged at \$575.00 (0% discount) per hour and any standby pump at \$514.00 per hour .</i>   |   |
| Cement Bulk Units    | <i>Superior Tractor Trailer style bulk trucks with 2 330 cuft bulk material bottles.</i>  |   |
|                      | <i>Superior Tractor Trailer style bulk trucks with 2 330 cuft bulk material bottles.</i>  |   |
|                      | <i>This quote is for 4 hours on location for the mobile bulk equipment, additional hours will be charged at \$196.00 (0% discount) per hour per truck on mobile bulk units only.</i>  |   |
| AccuDat Software     | <i>Superior records all jobs with our AccuDat acquisition software. It is capable of recording pressures, rates, and densities simultaneously. AccuDat shows graphs and digital displays as the job is happening. After the job a post job report can be printed out and given to the customer.</i> |   |
| Wellsite Services    | <i>A derrick charge of \$886 can be applied when the plug container is more than 10 ft off the rig floor, a \$2220 charge for circulating equipment requested before the crew arrives, and a \$123 charge for a plug container left on the well. All are subject to the appropriate discount.</i>   |   |
| Technical Services   | <i>Superior Provides many other services at no charge. Included in that are pressurized mud scales, Cement Job Simulation (requested), Wet and Dry Samples, and Cementing Lab testing when applicable.</i>  |   |
| Personnel Services   | <i>Superior's personnel are provided at no charge for the first 4 hours on location. After that we may charge \$147 per hour (0% discount) for Supervisors or Engineers and \$136 per hour for any operators on location.</i>   |   |

February 15, 2012



# Superior Well Services

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Vernal, Utah 84078

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**BREAK THROUGH**

Barry Brumwell  
Bo Stinson

The services and materials quoted are based on the best information available at the time that this quotation was prepared. When the actual work is performed the amounts and types of services and materials may require adjustments from this quotation. Actual amounts and types of services and materials will be charged at the time the work is performed. Unit prices from Superior's current price list and discounts quoted are applied as per this quotation, unless otherwise noted.

This quotation is for the materials and services presented under this cover letter. The prices and discounts are based on Superior being awarded the work on a first call basis. Prices may be adjusted if the work is not on a first call basis. Prices are valid for a period of 3 months following this quotation. Taxes, if any, will be applied to the actual invoice.

All services and materials sold and provided by Superior are subject are General Terms and Conditions, which includes warranty and limited liability provisions. It is agreed between both parties that all materials and services are furnished within the Superiors' General Terms and Conditions and customary Work Order Agreement.

Sincerely



Don Hardinger



|  |   |
|--|---|
| <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>   | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>FEE      |
| 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>Gas Well  | 7. UNIT or CA AGREEMENT NAME:                       |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC  | 8. WELL NAME and NUMBER:<br>GORDON CREEK NW-32-13-8 |
| 3. ADDRESS OF OPERATOR:<br>1179 E Main #345 , Price, UT, 84501   | 9. API NUMBER:<br>43007502440000                    |
| PHONE NUMBER:<br>403 453-1608 Ext  | 9. FIELD and POOL or WILDCAT:<br>WILDCAT            |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1261 FNL 0878 FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | COUNTY:<br>CARBON                                   |
|  | 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>4/8/2012 | <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 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 checked="" 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 checked="" 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.

The 7 7/8" hole was drilled to 4726'. The BHA became stuck in the well: PDC Bit, Bit Sub, 10 - 6 1/4" Drill Collars, 6 1/4" OD Jars and 5 Jts of 4" Drill Pipe. Top of fish is at 4,183'. Received verbal approval from Dustin Doucet of DOGM to place a cement plug from the top of the fish at 4,183' to 3,995'. Ran the 5 1/2" Production Casing in to 3,990' (5' above the top of the cement plug) and cemented the casing full length with 20 bbls of cement returns at surface. We will lay out our sidetrack plan on a separate Sundry Notice of Intent.

Approved by the  
Utah Division of  
Oil, Gas and Mining

Date: March 29, 2012

By: *Dustin Doucet*

|                                       |                              |                                    |
|---------------------------------------|------------------------------|------------------------------------|
| NAME (PLEASE PRINT)<br>Barry Brumwell | PHONE NUMBER<br>403 453-1608 | TITLE<br>Vice President-Operations |
| SIGNATURE<br>N/A                      | DATE<br>3/27/2012            |                                    |



**CURRENT WELLBORE CONFIGURATION**

**GORDON CREEK NW-32-13S-8E  
NW/4 OF NW/4, 1,260.92' FNL + 878.17' FWL  
CARBON COUNTY, UTAH**

KB Elevation: 7,618'  
Surveyed Ground Elevation: 7,605.5'

**8 5/8" , 24 #/ft, J-55, ST&C SURFACE CASING**  
Circulated 20 bbls of high visc sweep followed by 10 bbls of H2O ahead of cement.  
**CEMENTED CASING WITH:**  
440 sks of Premium Class "G" Oilwell Cement. No returns to surface while mixing/pumping/displacing cement. Ran 1" pipe down the casing annulus to 93'. Pumped a 150 sks "top cement job" - cement topped out and held.

8 5/8" CASING SHOE: 813'

11" SURFACE HOLE TOTAL DEPTH: 820'

**5 1/2" , 17 #/ft, N-80, LT&C "INTERMEDIATE" CASING**  
Circulated 5 bbls of water followed by 20 bbls of high visc sweep followed by 5.0 bbls of water PREFLUSH.  
**CEMENTED CASING WITH:**  
**LEAD CEMENT:** 313 sks of 2% Gypsum-60 + 2% Super Sil-SP + 0.25 #/sk Superflake + 3 #/sk Super GR + 10 #/sk Gilsonite mixed at 10.5 #/gal  
**TAIL CEMENT:** 50 sks of High Early Compressive + 2% Gypsum + 2% Super Sil-SP + 0.25 #/sk Superflake + 3 #/sk Super GR + 10 #/sk Gilsonite mixed at 11.5 #/gal  
Had good returns throughout the cement job, had got back 20 bbls of good cement back to surface when plugs bumped.

7 7/8" OPEN HOLE

5 1/2" CASING SHOE: 3,990'

TOP OF CEMENT PLUG: 3,995'

BOTTOM OF CEMENT PLUG + TOP OF FISH: 4,183'

DRILLED SOLIDS THAT STUCK BHA

FISH LEFT IN HOLE: 7 7/8" PDC BIT, 10 - 6 1/4" DRILL COLLARS, 6 1/4" OD JARS, 5 - JTS OF 4" DRILL PIPE

BOTTOM OF FISH: 4,675'

END OF DRILLED HOLE: 4,726'

|  |  |  |
|--|--|--|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  |  | FORM 9   |
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|  |  | <b>STATE:</b><br>UTAH                                      |

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

| TYPE OF SUBMISSION  | TYPE OF ACTION   |  |   |
|---|--|--|---|
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|   | <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 checked="" 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 type="text"/>                             |

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

We plan to move the drilling rig back onto the well and RIH with a 4 3/4" bit & drill out the 5 1/2" casing shoe joint & then polish off the cement plug below the casing shoe. Then RIH with directional tools and sidetrack off of the cement plug on an azimuth opposite to the direction of the original wellbore with tools LIH. Then flip the well back over to AIR/MIST and drill the well to a planned final TD of 4800'. Then run open hole logs from 4800' up to the 5 1/2" casing shoe. Then run a Pulsed Neutron logging run + GR/CCL/CBL inside the 5 1/2" casing from the 5 1/2" casing shoe up to the sfc csg shoe. Then run and cement a 4.000" 11 #/ft N-80 flush jointed liner into the well from +/- 3990' - 4800'. Then complete the well as previously planned.

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

**Date:** April 04, 2012

**By:** *Dark Quist*

|  |                                     |   |
|--|-------------------------------------|---|
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell | <b>PHONE NUMBER</b><br>403 453-1608 | <b>TITLE</b><br>Vice President-Operations |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>3/30/2012            |   |



**PROPOSED WELLBORE CONFIGURATION**

**GORDON CREEK NW-32-13S-8E  
NW/4 OF NW/4, 1,260.92' FNL + 878.17' FWL  
CARBON COUNTY, UTAH**

KB Elevation: 7,618'  
Surveyed Ground Elevation: 7,605.5'

**8 5/8" , 24 #/ft, J-55, ST&C SURFACE CASING**  
Circulated 20 bbls of high visc sweep followed by 10 bbls of H2O ahead of cement.  
**CEMENTED CASING WITH:**  
440 sks of Premium Class "G" Oilwell Cement. No returns to surface while mixing/pumping/displacing cement. Ran 1" pipe down the casing annulus to 93'. Pumped a 150 sks "top cement job" - cement topped out and held.

**5 1/2" , 17 #/ft, N-80, LT&C "INTERMEDIATE" CASING**  
Circulated 5 bbls of water followed by 20 bbls of high visc sweep followed by 5.0 bbls of water PREFLUSH.  
**CEMENTED CASING WITH:**  
**LEAD CEMENT:** 313 sks of 2% Gypsum-60 + 2% Super Sil-SP + 0.25 #/sk Superflake + 3 #/sk Super GR + 10 #/sk Gilsonite mixed at 10.5 #/gal  
**TAIL CEMENT:** 50 sks of High Early Compressive + 2% Gypsum + 2% Super Sil-SP + 0.25 #/sk Superflake + 3 #/sk Super GR + 10 #/sk Gilsonite mixed at 11.5 #/gal  
Had good returns throughout the cement job, had got back 20 bbls of good cement back to surface when plugs bumped.

5 1/2" CASING SHOE: 3,990'  
TOP OF CEMENT PLUG: 3,995'

8 5/8" CASING SHOE: 813'  
11" SURFACE HOLE TOTAL DEPTH: 820'

7 7/8" OPEN HOLE

4 1/4" SIDERTACKED WELLBORE - PROPOSED TO BUILD AT 3" / 100'

BOTTOM OF CEMENT PLUG + TOP OF FISH: 4,183

DRILLED SOLIDS THAT STUCK BHA

FISH LEFT IN HOLE: 7 7/8" PDC BIT, 10 - 6 1/4" DRILL COLLARS, 6 1/4" OD JARS, 5 - JTS OF 4" DRILL PIPE

BOTTOM OF FISH: 4,675'  
END OF DRILLED HOLE: 4,726'

END OF 4 3/4" DRILLED HOLE: 4,800'

PROPOSED 4" FLUSH JOINT PRODUCTION LINER  
CEMENTED FULL LENGTH

4 3/4" OPEN HOLE

|  |   |
|--|---|
| <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. | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>FEE      |
| 1. TYPE OF WELL<br>Gas Well  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:               |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC  | 7. UNIT or CA AGREEMENT NAME:                       |
| 3. ADDRESS OF OPERATOR:<br>1179 E Main #345 , Price, UT, 84501   | 8. WELL NAME and NUMBER:<br>GORDON CREEK NW-32-13-8 |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1261 FNL 0878 FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | 9. API NUMBER:<br>43007502440000                    |
| 5. PHONE NUMBER:<br>403 453-1608 Ext   | 9. FIELD and POOL or WILDCAT:<br>WILDCAT            |
| 6. COUNTY:<br>CARBON   | 9. 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>4/19/2012 | <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 checked="" 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 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 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.

We respectfully request a change to the Sundry Approval granted by DOGM on April 4, 2012. We request the step of running a Pulsed Neutron logging run from 3990' - surface casing shoe be dropped from the requested operation, as this logging run will provide no real useful information since the bottom of this logging run at 3990' (at the 5 1/2" intermediate casing shoe) is well above the top of the Ferron zone of interest. A complete suite of Open Hole logs would still be run from 4800' up to the production casing shoe at 3990'.

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

**Date:** April 24, 2012

**By:** 

|  |                                     |   |
|--|-------------------------------------|---|
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell | <b>PHONE NUMBER</b><br>403 453-1608 | <b>TITLE</b><br>Vice President-Operations |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>4/10/2012            |   |

|  |  |   |
|--|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  |  | FORM 9  |
| <b>SUNDRY NOTICES AND REPORTS ON WELLS</b>   |  | <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b><br>FEE |
| 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>          |
|  |  | <b>7. UNIT or CA AGREEMENT NAME:</b>                  |
| <b>1. TYPE OF WELL</b><br>Gas Well   | <b>8. WELL NAME and NUMBER:</b><br>GORDON CREEK NW-32-13-8 |   |
| <b>2. NAME OF OPERATOR:</b><br>GORDON CREEK, LLC   | <b>9. API NUMBER:</b><br>43007502440000                    |   |
| <b>3. ADDRESS OF OPERATOR:</b><br>1179 E Main #345 , Price, UT, 84501  | <b>PHONE NUMBER:</b><br>403 453-1608 Ext                   | <b>9. FIELD and POOL or WILDCAT:</b><br>WILDCAT       |
| <b>4. LOCATION OF WELL</b><br><b>FOOTAGES AT SURFACE:</b><br>1261 FNL 0878 FWL<br><b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b><br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S                                      | <b>COUNTY:</b><br>CARBON                                   |   |
|  |  | <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>7/5/2012 | <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 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 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="RUN CASED HOLE LOGS"/> |

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

ONCE THE AREA FOREST FIRES HAVE SUBSIDED AND WE ARE ALLOWED ONTO LOCATION, THE INTENT OF THIS SUNDRY NOTICE IS TO MOVE AN ELECTRIC WIRELINE UNIT ONTO THE WELL AND RUN A CASED HOLE PULSED NEUTRON LOG OVER THE FERRON INTERVAL, AS WE WERE UNABLE TO RUN OPEN HOLE LOGS WHEN DRILLING THE WELL DUE TO HOLE CONDITIONS. WE WOULD THEN ALSO RUN A CASED HOLE GE-CBL-CCL LOG FROM TOTAL DEPTH TO SURFACE CASING, AND ALSO PRESSURE TEST THE 5 1/2" PRODUCTION CASING TO 3,000 psi. WE WOULD THEN SUSPEND OPERATIONS TO ALLOW HEAD OFFICE TO EVALUATE THE LOGS RUN TO CHOOSE FERRON PERFORATION INTERVALS. ALL PERFORATING OR STIMULATION OPERATIONS WOULD BE DONE UNDER THE COVER OF A SEPARATE SUNDRY NOTICE.

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

Date: July 12, 2012

By: *Barry Brumwell*

|  |                                     |   |
|--|-------------------------------------|---|
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell | <b>PHONE NUMBER</b><br>403 453-1608 | <b>TITLE</b><br>Vice President-Operations |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>6/29/2012            |   |

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9  |
| <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. | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>FEE      |
|  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:               |
|  | 7. UNIT or CA AGREEMENT NAME:                       |
| 1. TYPE OF WELL<br>Gas Well  | 8. WELL NAME and NUMBER:<br>GORDON CREEK NW-32-13-8 |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC  | 9. API NUMBER:<br>43007502440000                    |
| 3. ADDRESS OF OPERATOR:<br>1179 E Main #345 , Price, UT, 84501   | PHONE NUMBER:<br>403 453-1608 Ext                   |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1261 FNL 0878 FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | 9. FIELD and POOL or WILDCAT:<br>WILDCAT            |
|  | COUNTY:<br>CARBON                                   |
|  | 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 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 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 checked="" type="checkbox"/> DRILLING REPORT<br>Report Date:<br>4/29/2012 | <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.

Executive Summary and Drilling Reports attached.

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

**FOR RECORD ONLY**

August 21, 2012

|  |                                     |   |
|--|-------------------------------------|---|
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell | <b>PHONE NUMBER</b><br>403 453-1608 | <b>TITLE</b><br>Vice President-Operations |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>8/21/2012            |   |

**EXECUTIVE SUMMARY REPORT**

**WELL:** GORDON CREEK NW-32-13-8 **API #:** 4300750244  
**COUNTY:** CARBON COUNTY, UTAH **SPUD:** 19:00 HRS, 01/26/2012  
**OBJECTIVE:** To drill & complete a Ferron Gas well **R.R.:** 06:000 HRS, 04/29/2012  
**RIG CONTRACTOR:** CapStar Drilling

**BIT INFORMATION:**

| TYPE    | SIZE<br>(inches) | DEPTH<br>IN (ft) | DEPTH<br>OUT (ft) | ROT.<br>HOURS | TOTAL<br>HOURS                      |
|---------|------------------|------------------|-------------------|---------------|-------------------------------------|
| UNKNOWN | 14 3/4           | 0                | 44                | UNKNOWN       | UNKNOWN                             |
| PDC     | 11               | 44               | 820               | 10.5          | 10.5                                |
| PDC     | 7 7/8            | 820              | 4726              | 112           | 122.5                               |
| TRICONE | 7 7/8            | 4726             | 4726              | 0             | REAMING<br>POLISH<br>CEMENT<br>PLUG |
| TRICONE | 7 7/8            | 3985             | 3995              | 0             | POLISH<br>CEMENT<br>PLUG            |
| TRICONE | 4 3/4            | 3990             | 4060              |               | 144.5                               |
| TRICONE | 4 3/4            | 4060             | 4260              | 22            | 165                                 |
| PDC     | 4 3/4            | 4260             | 4745              | 20.5          |                                     |

**CONDUCTOR CASING:**

**HOLE SIZE:** 14 3/4" **CONDUCTOR SET FROM:** 0' to 44'

The 12 3/4" conductor pipe was run to 44' and cemented full length.

**SURFACE CASING:**

**HOLE SIZE:** 11" **SURFACE CASING FROM:** 0' to 819'

Ran a total of 19 joints of 8 5/8", 24 #/ft, J-55, ST&C casing landed at 813' KB. Cemented with 440 sks Class G cement mixed at 15.8 ppg. Bump plug, did not hold, top off with 1" pipe to 61' with 90 sks of Glass G mixed at 15.8 PPG.

**HOLE SIZE:** 7 7/8" **INTERMEDIATE CASING FROM:** 0' to 3,990'

Ran a total of 93 joints of 5 1/2", 17.0 #/ft, N-80, LT&C casing landed at 3,990' KB. Cemented with 313 sks of 2% Gypsum-60 fill cement mixed at 10.5 ppg + 2% Super SIL-SP + 0.25 #/sk Superflake + 3 #/sk Super GR + 10 #/sk Gilsonite tailed in with 50 sks of High Early Compressive 2% Gypsum cement mixed at 11/5 ppg + 2% Super SIL-SP + 0.25 #/sk Superflake + 3 #/sk Super GR + 10#/sk Gilsonite. Plug down, float held, no returns.

**HOLE SIZE:** 4 3/4" **PRODUCTION LINER FROM:** 3810' to 4740'

Ran a total of 23 joints of 4", 11.0 #/ft, J-55, DTS-4 (ABFL-4S equivalent) liner casing. Liner overall length: 930'. Liner top packer set @ 3810' landed at 3,990' KB. Liner shoe landed at 4740' KB. Cemented with 70 sks of Class III cement + 16% gel + 2% Cal-Seal + 2% Super Sil-SP + 0.25 #/sk Superflake + 3 #/sk Super GR + 10 #/sk Gilsonite. Bumped plug, stung out of hanger and reverse circulated 100 bbls of fresh water to displace cement from liner top. Received 3-4 bbls of preflush back.

PLEASE REFER TO THE ATTACHED DRILLING REPORTS FOR SPECIFIC DAILY WELL INFORMATION



# GORDON CREEK, LLC

DAILY DRILLING REPORT



|  |  |
|--|--|
| WELL NAME: <u>Thunderbird</u><br><br>COMPANY MAN: <u>Bo Stinson</u><br>CELLULAR #: <u>435-630-6344</u><br>SPUD DATE: <u>40921.47917</u><br>R.R. DATE: _____<br>RIG COMPANY: <u>Capstar</u><br>EST. T.D.: <u>4538</u> | LOCATION: <u>NW, 32-13-8</u><br>WELL API #: <u>43007502440000</u><br><br>REPORTING TO: <u>Barry Brumwell</u><br>PHONE #: <u>403-818-0696</u><br>A.F.E. #: <u>11DRL003</u><br>DAILY COST: <u>\$42.391</u><br>CUM. COST: <u>\$62.195</u><br>AFE EST (D&A): _____ (D&C): <u>\$458,000</u> |
|--|--|

|            |          |              |           |         |       |                            |       |           |            |     |       |
|------------|----------|--------------|-----------|---------|-------|----------------------------|-------|-----------|------------|-----|-------|
| DAY:       | 2        | REPORT DATE: | 26 Jan-12 | STATUS: | 06:00 | TOOH, to run 8 5/8" casing |       |           |            |     |       |
| DEPTH:     | 820      | PROG:        | KB:       | 7609.00 | GL:   | 7609.00                    |       |           |            |     |       |
| SURVEYS:   |          |              |           |         |       |                            |       |           |            |     |       |
| MUD TYPE:  | WT:      |              | VISC:     |         | WL:   |                            | PH:   |           | FC:        |     |       |
| ADDITIVES: |          |              |           |         |       |                            |       |           |            |     |       |
| BIT #      | SERIAL # | SIZE         | MFG       | TYPE    | JETS  | WOB                        | RPM   | FEET DRLD | HOURS      | ROP | GRADE |
|            |          |              |           |         |       |                            |       |           |            |     |       |
| PUMP       | DESCR.   | LINER        | STK       | SPM     | RATE  | PRESS                      | AV DC | AV DP     | NOZZLE VEL |     |       |
|            |          |              |           |         |       |                            |       |           |            |     |       |

**DRILLING ASSEMBLY**

| TOOL  | OD | ID | LENGTH |
|-------|----|----|--------|
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
|       |    |    |        |
| TOTAL |    |    |        |

**TIME DISTRIBUTION**

|                 |            |      |
|-----------------|------------|------|
| MOVE RIG:       | L.D.D.S.:  |      |
| RIG TO SPUD:    | LOGGING:   |      |
| WELD ON BBL:    | CEMENT:    | 5.00 |
| RIG SERVICE:    | WAIT MOVE: |      |
| SURVEY:         | WOC:       | 4.00 |
| PRESSURE TEST:  | RUN CSG:   | 4.50 |
| DRILL:          | DST:       |      |
| HANDLE TOOLS:   | TRIP:      |      |
| CIRCULATE:      | WAIT ON:   |      |
| NIPPLE DN BOP:  | WELD BOWL: |      |
| DRILL OUT:      | DIR. WORK: |      |
| REAM:           | PASON:     |      |
| SAFETY MEETING: | SLIP LINE: |      |
| STUCK & FISH:   | WORK CON:  |      |
| RIG DOWN TIME   | Other:     | 0.50 |
| Rig Out         | Nipple Up: |      |

**LAST CASING SUMMARY**

|               |  |              |             |      |       |                    |     |       |
|---------------|--|--------------|-------------|------|-------|--------------------|-----|-------|
| RAN           | 18 JTS   | 8 5/8" in    | 24 #/ft     | J-55 | GRADE | 14.00              | STC | CONN. |
| LANDED AT     | 813' ft KB.                                      | TOTAL LENGTH | 808.00 feet |      |       |                    |     |       |
| CEMENTED WITH | 440 sks premium G, top out with 90 sks of cement |              |             |      |       |                    |     |       |
| PLUG DOWN AT  | 5:18pm   | HRS. ON      |             | WITH |       | #3 CEMENT RETURNS. |     |       |
| LOGS RUN      |  |              |             |      |       |                    |     |       |

**REMARKS**

6:00 7:30 TOO H, laid out DC & BHA

7:30 8:30 transfer DP & collrs out to casing, prep to RIH

8:30 10:30 Rin with 18 jts. Of 8 5/8" casing landed shoe @ 813', baffle plate @ 767.90'

10:30 14:30 WOC to arrive.

14:30 15:30 rigged up cementers, safety meeting, tested lines to 2000K.

15:30 19:30 started job pumped 20 bbl high visc sweep, 10 bbl water spacer then 440 sks of premium G cement @ 15.8 density, displaced with 48.5 bbls of fresh water, plug down pressure at 575#, bleed back to 200#, SI cement head, lift pressure max @ 415#, no returns to surface, shut down 30 minutes, top filled casing with sks of cement, rig down cement crew and released.

19:30 20:30 prep rig to rig down, released crew for days off, will return on Jan. 31st

Weather: \_\_\_\_\_







# GORDON CREEK, LLC

DAILY DRILLING REPORT



|                     |              |                           |                  |
|---------------------|--------------|---------------------------|------------------|
| <b>WELL NAME:</b>   | Thunderbird  | <b>LOCATION:</b>          | NW, 32-13-8      |
|                     |              | <b>WELL API #:</b>        | 43007502440000   |
| <b>COMPANY MAN:</b> | Bo Stinson   | <b>REPORTING TO:</b>      | Barry Brumwell   |
| <b>CELLULAR #:</b>  | 435-630-6344 | <b>PHONE #:</b>           | 403-818-0696     |
| <b>SPUD DATE:</b>   | 40921.47917  | <b>A.F.E. #:</b>          | 11DRL003         |
| <b>R.R. DATE:</b>   |              | <b>DAILY COST:</b>        | \$30,930         |
| <b>RIG COMPANY:</b> | Capstar      | <b>CUM. COST:</b>         | \$226,868        |
| <b>EST. T.D.:</b>   | 4480         | <b>AFE EST (D&amp;A):</b> | (D&C): \$458,000 |

|                 |           |                    |           |               |         |            |         |  |  |  |  |          |
|-----------------|-----------|--------------------|-----------|---------------|---------|------------|---------|--|--|--|--|----------|
| <b>DAY:</b>     | 6         | <b>REPORT DATE</b> | 18-Mar-12 | <b>STATUS</b> | 06:00   |            |         |  |  |  |  |          |
| <b>DEPTH:</b>   | 3745      | <b>PROG:</b>       | 1141      | <b>KB:</b>    | 7609.00 | <b>GL:</b> | 7609.00 |  |  |  |  | drilling |
| <b>SURVEYS:</b> | 2757/3.54 | 3039/4.25          | 3319/3.73 | 3627/4.92     |         |            |         |  |  |  |  |          |

|                   |           |            |            |              |  |            |  |            |  |            |  |
|-------------------|-----------|------------|------------|--------------|--|------------|--|------------|--|------------|--|
| <b>MUD TYPE:</b>  | air/water | <b>WT:</b> |            | <b>VISC:</b> |  | <b>WL:</b> |  | <b>PH:</b> |  | <b>FC:</b> |  |
| <b>ADDITIVES:</b> | poly plus | inhibitor  | clay treat | KCL          |  |            |  |            |  |            |  |

| BIT # | SERIAL # | SIZE  | MFG   | TYPE  | JETS | WOB  | RPM   | FEET DRLD | HOURS | ROP  | GRADE |
|-------|----------|-------|-------|-------|------|------|-------|-----------|-------|------|-------|
| 2     | TJ0904   | 7.875 | Shear | SM616 | 6-20 | 7-10 | 65-80 | 2925      | 57    | 51.3 |       |

| PUMP | DESCR. | LINER | STK | SPM | RATE | PRESS | AV DC | AV DP | NOZZLE VEL |
|------|--------|-------|-----|-----|------|-------|-------|-------|------------|
| 1    | G/D    | 6"    |     | 126 | 392  | 500   |       |       |            |

**DRILLING ASSEMBLY**

| TOOL         | OD    | ID    | LENGTH        |
|--------------|-------|-------|---------------|
| PDC          | 7.875 | 2"    | 1.00          |
| Bit sub      | 7.75  | 2.25" | 2.68          |
| 10-DC        | 6.25  | 2.25  | 300.32        |
| Drill jars   | 6.5   | 2.75  | 30.74         |
| <b>TOTAL</b> |       |       | <b>334.74</b> |

**TIME DISTRIBUTION**

|                     |              |            |  |
|---------------------|--------------|------------|--|
| MOVE RIG:           |              | L.D.D.S.:  |  |
| RIG TO SPUD:        |              | LOGGING:   |  |
| WELD ON BBL:        |              | CEMENT:    |  |
| RIG SERVICE:        | 0.50         | WAIT MOVE  |  |
| SURVEY:             | 2.00         | WOC:       |  |
| PRESSURE TEST:      |              | RUN CSG:   |  |
| DRILL:              | 21.50        | DST:       |  |
| HANDLE TOOLS:       |              | TRIP:      |  |
| CIRCULATE:          |              | WAIT ON:   |  |
| NIPPLE DN BOP:      |              | WELD BOWL  |  |
| DRILL OUT:          |              | DIR. WORK: |  |
| REAM:               |              | PASON:     |  |
| SAFETY MEETING:     |              | SLIP LINE: |  |
| STUCK & FISH:       |              | WORK CON:  |  |
| RIG DOWN TIME       |              | Other      |  |
| Rig Out             |              | Nipple Up  |  |
| <b>TOTAL HOURS:</b> | <b>24.00</b> |            |  |

**LAST CASING SUMMARY**

|               |                    |                     |                     |      |       |     |       |
|---------------|--------------------|---------------------|---------------------|------|-------|-----|-------|
| RAN           | 19 JTS             | 8.625 in            | 24 #/ft             | J-55 | GRADE | STC | CONN. |
| LANDED AT     | 813.00 ft KB.      | <b>TOTAL LENGTH</b> | 807.00 feet         |      |       |     |       |
| CEMENTED WITH | 440sk of premium G |                     |                     |      |       |     |       |
| PLUG DOWN AT  | 7.00 HRS. ON       | WITH                | ft3 CEMENT RETURNS. |      |       |     |       |
| LOGS RUN      |                    |                     |                     |      |       |     |       |

**REMARKS**

6:00 10:30 drilled from 2604' to 2788'  
 10:30 11:00 survey @ 2757', 3.54 degree  
 11:00 14:00 Drilled from 2788' to 2945'  
 14:00 14:30 rig service  
 14:30 16:30 drilled from 2945' to 3067'  
 16:30 17:00 survey @ 3039', 4.25 degree  
 17:00 22:00 drilled from 3067' to 3351'  
 22:00 22:30 survey @ 3319', 3.73 degree  
 22:30 3:30 drilled from 3351' to 3659'  
 3:30 4:00 survey @ 3627', 4.92 degree  
 4:00 6:00 drilled from 3659' to 3745'

samples from 3300' to 3730' shale (Mancos)

**Weather:** windy and coll, snowy



































|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9  |
| <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. | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>FEE      |
|  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:               |
|  | 7. UNIT or CA AGREEMENT NAME:                       |
| 1. TYPE OF WELL<br>Gas Well  | 8. WELL NAME and NUMBER:<br>GORDON CREEK NW-32-13-8 |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC  | 9. API NUMBER:<br>43007502440000                    |
| 3. ADDRESS OF OPERATOR:<br>1179 E Main #345 , Price, UT, 84501   | PHONE NUMBER:<br>403 453-1608 Ext                   |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1261 FNL 0878 FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | 9. FIELD and POOL or WILDCAT:<br>WILDCAT            |
|  | COUNTY:<br>CARBON                                   |
|  | 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>8/20/2012 | <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 style="width: 100px;" type="text" value="Pressure Test Liner Top"/> |

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

In order to pressure test the 4" liner top for pressure integrity, the well was topped up with fresh water, then the wellhead was nipped down and a bell nipple was rigged up onto the 5 1/2" production casing. A pressure testing unit was rigged up onto the bell nipple and pressure was slowly brought up to 4,700 psi for 15 mins, when the pressure began to slowly leak off down to 1,500 psi. A feed rate was NOT established as the testing unit was a low volume unit incapable of any significant rate. Released pressure, rigged out equipment and re-installed wellhead.

**Accepted by the  
Utah Division of  
Oil, Gas and Mining**  
**FOR RECORD ONLY**  
 August 23, 2012

|  |                                     |   |
|--|-------------------------------------|---|
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell | <b>PHONE NUMBER</b><br>403 453-1608 | <b>TITLE</b><br>Vice President-Operations |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>8/23/2012            |   |

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9  |
| <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. | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>FEE      |
| 1. TYPE OF WELL<br>Gas Well  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:               |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC  | 7. UNIT or CA AGREEMENT NAME:                       |
| 3. ADDRESS OF OPERATOR:<br>1179 E Main #345 , Price, UT, 84501   | 8. WELL NAME and NUMBER:<br>GORDON CREEK NW-32-13-8 |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1261 FNL 0878 FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | 9. API NUMBER:<br>43007502440000                    |
| 5. PHONE NUMBER:<br>403 453-1608 Ext   | 9. FIELD and POOL or WILDCAT:<br>WILDCAT            |
|  | COUNTY:<br>CARBON                                   |
|  | 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>8/29/2012 | <input checked="" type="checkbox"/> ACIDIZE                    | <input type="checkbox"/> ALTER CASING                   | <input checked="" 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 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 checked="" 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 checked="" 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="Perforate Ferron Formation"/> |

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

Perf the Lower Ferron 4606-4612, 4587-4590, 4582-4584, 4559-4565, 4542-4548, 4535-4537 & 4524-4529, then MO rig, run tbg & pressure test for cement integrity, pull tubing, then acidize/frac with a 46.3 T treatment. Then set WR plug at +/- 4515'. Then perf the Middle Ferron 4491-4493, 4474-4478, 4459-4463, 4442-4444, 4433-4437 & 4425-4428, then MO rig, run tbg & pressure test for cement integrity, pull tbg, then acidize/frac with a 29.3 T treatment. Then set a WR plug at +/- 4415'. Then perf the Upper Ferron 4397-4399, 4387-4389, 4380-4384, 4366-4368, 4356-4360, 4342-4344, 4335-4339, 4286-4292 & 4270-4276, then MO rig, run tbg & pressure test for cement integrity, pull tbg, then acidize/frac with a 49.4 T treatment (if pressure leak-oof at liner top occurs at any time, run repair liner top packer). Flow well bac on cleanup, RIH & pull plugs, run tbg, pump & rods, inst pumpjack.

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

Date: August 27, 2012  
 By: *Derek Duff*

|                                       |                              |                                    |
|---------------------------------------|------------------------------|------------------------------------|
| NAME (PLEASE PRINT)<br>Barry Brumwell | PHONE NUMBER<br>403 453-1608 | TITLE<br>Vice President-Operations |
| SIGNATURE<br>N/A                      | DATE<br>8/23/2012            |                                    |

|  |   |
|--|---|
| <b>STATE OF UTAH</b><br>DEPARTMENT OF NATURAL RESOURCES<br>DIVISION OF OIL, GAS, AND MINING  | FORM 9  |
| <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. | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>FEE      |
|  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:               |
|  | 7. UNIT or CA AGREEMENT NAME:                       |
| 1. TYPE OF WELL<br>Gas Well  | 8. WELL NAME and NUMBER:<br>GORDON CREEK NW-32-13-8 |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC  | 9. API NUMBER:<br>43007502440000                    |
| 3. ADDRESS OF OPERATOR:<br>1179 E Main #345 , Price, UT, 84501   | PHONE NUMBER:<br>403 453-1608 Ext                   |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1261 FNL 0878 FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | 9. FIELD and POOL or WILDCAT:<br>WILDCAT            |
|  | COUNTY:<br>CARBON                                   |
|  | 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>6/30/2012 | <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="No Activity"/>         |

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

There was NO activity on this well from Drilling Rig Release Date (06:00 04/29/2012) until June 30, 2012. The well was cased with 5 1/2" intermediate casing to 3,990' KB and a 4" liner from 3,810' - 4,740' KB and is sitting as a cased Potential Ferron Gas Well.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 August 28, 2012**

|  |                                     |   |
|--|-------------------------------------|---|
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell | <b>PHONE NUMBER</b><br>403 453-1608 | <b>TITLE</b><br>Vice President-Operations |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>8/27/2012            |   |

# CONFIDENTIAL

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

AMENDED REPORT  FORM 8  
(highlight change)

## 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:  
**GORDON CREEK, LLC.**

3. ADDRESS OF OPERATOR: **1179 E. MAIN, #345** CITY **PRICE** STATE **UT** ZIP **84501**

PHONE NUMBER: **(403) 453-1608**

4. LOCATION OF WELL (FOOTAGES)

AT SURFACE: **1261 FNL & 878.17 FWL**

AT TOP PRODUCING INTERVAL REPORTED BELOW: **1554.74' FNL & 884.34' FWL**

AT TOTAL DEPTH: **1540 FNL & 894 FWL** **SWNW BHL by HSM**

5. LEASE DESIGNATION AND SERIAL NUMBER:  
**FEE**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:  
**GORDON CREEK NW-32-13-8**

9. API NUMBER:  
**4300750244**

10. FIELD AND POOL, OR WILDCAT  
**WILDCAT**

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:  
**NWNW 32 13S 8E**

12. COUNTY  
**CARBON**

13. STATE  
**UTAH**

14. DATE SPUNDED: **1/13/2012**

15. DATE T.D. REACHED: **4/25/2012**

16. DATE COMPLETED: **10/23/2012** ABANDONED  READY TO PRODUCE

17. ELEVATIONS (DF, RKB, RT, GL):  
**RKB = 7617'**

18. TOTAL DEPTH: MD **4,745**  
TVD **4,731**

19. PLUG BACK T.D.: MD **4,700**  
TVD **4,685.6**

20. IF MULTIPLE COMPLETIONS, HOW MANY? \*

21. DEPTH BRIDGE MD  
PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

**PULSED NEUTRON, CBL/CCL/GR**

**RECEIVED**  
**NOV 13 2012**

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 |
|-----------|------------|----------------|----------|-------------|----------------------|----------------------------|---------------------|---------------|---------------|
| 14.75"    | 12.75      |                | 0        | 44          |                      |                            |                     | 0 CIR         |               |
| 11"       | 8.625 J55  | 24             | 0        | 819         |                      | G 530                      |                     | 0 CIR         |               |
| 7.875"    | 5.500 N80  | 17             | 0        | 3,990       |                      | CL III 318                 |                     | 600 CBL       |               |
| 4.750"    | 4.000 J-55 | 11             | 3,810    | 4,740       |                      | CL III 370                 |                     | 3840 CIR      |               |

### 25. TUBING RECORD

| SIZE   | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|--------|----------------|-----------------|------|----------------|-----------------|------|----------------|-----------------|
| 2.375" | 4,630          |                 |      |                |                 |      |                |                 |

### 26. PRODUCING INTERVALS

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) |
|----------------|----------|-------------|-----------|--------------|
| (A) FERRON     | 4,267    | 4,740       | 4,253     | 4,731        |
| (B)            |          |             |           |              |
| (C)            |          |             |           |              |
| (D)            |          |             |           |              |

### 27. PERFORATION RECORD

| INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS   |
|-------------------------|------|-----------|--|
| 4,271 4,612             | 0.56 | 378       | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
|                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |
|                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |
|                         |      |           | Open <input type="checkbox"/> Squeezed <input type="checkbox"/>            |

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

| DEPTH INTERVAL         | AMOUNT AND TYPE OF MATERIAL   |
|------------------------|---|
| 4271-4399 (MULTI INTS) | SLICKWATER BORATE FRAC w/ 34,078 # OF 20/40 WHITE & 94,311 # OF 16/30 WHITE |
| 4426-4493 (MULTI INTS) | SLICKWATER BORATE FRAC w/ 23,665 # OF 20/40 WHITE & 26,208 # OF 16/30 WHITE |
| 4526-4612 (MULTI INTS) | SLICKWATER BORATE FRAC w/ 40,677 # OF 20/40 WHITE & 61,141 # OF 16/30 WHITE |

29. ENCLOSED ATTACHMENTS:

ELECTRICAL/MECHANICAL LOGS  GEOLOGIC REPORT  DST REPORT  DIRECTIONAL SURVEY

SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION  CORE ANALYSIS  OTHER: **COMP RPTS/PERFS**

30. WELL STATUS:  
**SHUT IN**

**31. INITIAL PRODUCTION**

**INTERVAL A (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 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.)**

**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.

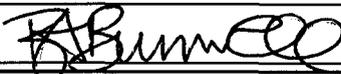
**34. FORMATION (Log) MARKERS:**

| Formation | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. | Name   | Top (Measured Depth)             |
|-----------|----------|-------------|------------------------------|--|----------------------------------|
| FERRON    | 4,267    | 4,740       | SANDSTONES AND COALS         | Lower Bluegate Bentonite Mkr<br>Upper Ferron Marine SS<br>Ferron SS<br>Ferron Basal Marine | 4,186<br>4,267<br>4,330<br>4,595 |

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

PLEASE SEE ATTACHMENT FOR COMPLETE PERF. INTERVALS, UNABLE TO FIT ALL INTERVALS ON THIS FORM.

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

NAME (PLEASE PRINT) BARRY BRUMWELL, C.E.T. TITLE VICE PRESIDENT of OPERATIONS  
 SIGNATURE  DATE 11/6/2012

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- 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 Phone: 801-538-5340  
 1594 West North Temple, Suite 1210  
 Box 145801 Fax: 801-359-3940  
 Salt Lake City, Utah 84114-5801

**To Whom It May Concern;**

**The well GORDON CREEK NW-32-13-8 was perforated and stimulated with the following intervals:**

|                 |             |   |
|-----------------|-------------|---|
| <b>STAGE #3</b> | 4271 - 4274 | FRACTURE STIMULATED WITH A SLICKWATER BORATE FRAC with 34,078 # OF 20/40 WHITE SAND and 94,311 # OF 16/30 WHITE SAND. |
|                 | 4286 - 4289 |   |
|                 | 4335 - 4339 |   |
|                 | 4342 - 4344 |   |
|                 | 4356 - 4360 |   |
|                 | 4366 - 4368 |   |
|                 | 4380 - 4384 |   |
|                 | 4387 - 4389 |   |
| 4397 - 4399     |             |   |

|                 |             |   |
|-----------------|-------------|---|
| <b>STAGE #2</b> | 4426 - 4428 | FRACTURE STIMULATED WITH A SLICKWATER BORATE FRAC with 23,665 # OF 20/40 WHITE SAND and 26,208 # OF 16/30 WHITE SAND. |
|                 | 4433 - 4437 |   |
|                 | 4442 - 4444 |   |
|                 | 4459 - 4463 |   |
|                 | 4474 - 4478 |   |
|                 | 4491 - 4493 |   |

|                 |             |   |
|-----------------|-------------|---|
| <b>Stage #1</b> | 4526 - 4529 | FRACTURE STIMULATED WITH A SLICKWATER BORATE FRAC with 40,677 # OF 20/40 WHITE SAND and 61,141 # OF 16/30 WHITE SAND. |
|                 | 4535 - 4537 |   |
|                 | 4545 - 4548 |   |
|                 | 4561 - 4565 |   |
|                 | 4587 - 4590 |   |
|                 | 4608 - 4612 |   |

**IT WAS NOT POSSIBLE TO FIT ALL OF THIS INFORMATION ON FORM 8.**



**THUNDERBIRD**  
ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

Well Name: Gordon Creek LLC. NW 32-13-8 Today's Date: September 18, 2012  
 Objective: Completion Day #: 1  
 AFE #: 11CMP003 Daily Cost: \$5,067 Prev. Cost: \$21,174 Cumulative Cost: \$26,241

Zones of Interest: Name: \_\_\_\_\_ Perf Int.'s \_\_\_\_\_  
 Name: \_\_\_\_\_ Perf Int.'s \_\_\_\_\_  
 Name: \_\_\_\_\_ Perf Int.'s \_\_\_\_\_

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|------|--------|----------|-----------|-------------------|
| #1      |      |        |          |           |                   |
| #2      |      |        |          |           |                   |

Depths: TD: 4745 PBDT: 4740 KOP: \_\_\_\_\_ TD (TVD): \_\_\_\_\_

Elevations: KB: 7617 GL: 7605.5 KB-GL: 11.00 API #: 4300750244

AM Pressures: Tubing: \_\_\_\_\_ Casing: \_\_\_\_\_ SCV: \_\_\_\_\_

### 24 Hour Summary:

#### Operation at 0800 Hours:

| Time  | Detailed Description of Previous Days Operations  | Daily Cost Summary     |         |
|-------|---|------------------------|---------|
|       |   | Item                   | Amount  |
| 12:30 | spot rig, tubing trailer, & equipment   | rig                    | \$2,357 |
| 13:30 | rig up  | waste log              | \$210   |
| 14:30 | nipple up bop, prep to TIH, (CP 0 )   | Mill                   | \$2,000 |
| 15:30 | RIH with tubing and 3.351" mill, changed out 16 collars to tapered                                      | Consulting             | \$500   |
| 17:00 | tagged liner top @ 3818', stacked 4K picked up circulated, worked thru several times couldn't slid thru |                        |         |
| 19:00 | picked up swivel and worked liner top passing thru, with rotation, pulled up one jt.                    |                        |         |
| 19:30 | Circulated hole clean, SWIFN & SD   |                        |         |
|       |   | Daily Cost:            | \$5,067 |
|       |   | Personnel On Location: |         |
|       |   | Rig:                   | 4       |
|       |   | Services:              |         |
|       |   | G.C.L.L.C.:            | 1       |
|       |   | Total:                 | 5       |

| Fluid Record:         | Oil | Water | AM Weather & Roads:         | Contact Information:                                 |
|-----------------------|-----|-------|-----------------------------|--|
| Hauled in             |     |       | Weather: <u>clear</u>       | Supervisor: <u>Bo Stinson</u>                        |
| Total Fluid :         |     |       | Temp: <u>83</u>             | Cell #: <u>435-630-6344</u>                          |
| Fluid Pumped In:      |     |       | Lease: <u>ok</u>            | Alt #: <u>435-637-8570</u>                           |
| Left to Recover       |     |       | Roads: <u>ok</u>            | Report to: <u>Barry Brumwell - Calgary Head Ofc.</u> |
| Fluid Hauled Out      |     |       | Rig Co: <u>Pro well ser</u> | Email to: <u>bbrumwell@thunderbirdenergy.com</u>     |
| Load Left to Recover: |     |       | Rig #: <u>#5</u>            |  |



**THUNDERBIRD**  
ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

**Well Name:** Gordon Creek LLC. NW 32-13-8 **Today's Date:** September 19, 2012  
**Objective:** Completion **Day #:** 2  
**AFE #:** 11CMP003 **Daily Cost:** \$15,340 **Prev. Cost:** \$26,241 **Cummulative Cost:** \$41,581

**Zones of Interest:** Name: Ferron Sandstone Perf Int.'s: 4559-4565, 4524-4529  
 Name: \_\_\_\_\_ Perf Int.'s: \_\_\_\_\_  
 Name: \_\_\_\_\_ Perf Int.'s: \_\_\_\_\_

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|------|--------|----------|-----------|-------------------|
| #1      |      |        |          |           |                   |
| #2      |      |        |          |           |                   |

**Depths:** TD: 4745 PBDT: 4740 KOP: \_\_\_\_\_ TD (TVD): \_\_\_\_\_

**Elevations:** KB: 7617 GL: 7605.5 KB-GL: 11.00 API #: 4300750244

**AM Pressures:** Tubing: 0 Casing: 0 SCV: 0

**24 Hour Summary:** Dicplace caing with 2% KCL, and perf 4" liner

**Operation at 0800 Hours:** TIH with 3.351 mill (used) to pump KCL from TD

| Time  | Detailed Description of Previous Days Operations  | Daily Cost Summary            |          |
|-------|---|-------------------------------|----------|
|       |   | Item                          | Amount   |
| 7:00  | Travel to location  |                               |          |
| 7:30  | Service rig, Check CP @ 0, TP @ 0   | Rig:                          | \$4,565  |
| 8:00  | RIH with 145 jts. tagged plug @ 4714', Laid down 1 jt.  | water truck                   | \$1,260  |
| 9:00  | filled flat tank, treated 80 bbls. With KCL to 2%, pumped 80 bbls, add 40 more bbls treated with KCL to 2%, pumped a total of 98 bbls.(displ)   | B&C Testers                   | \$1,920  |
| 10:30 | POOH  | RMWL                          | \$4,560  |
| 11:30 | loaded flat tank and treated another 80 bbls to 2% KCL  | waste log                     | \$35     |
| 12:30 | spotted in wire line crew waiting on BOP tester   | RBS/ mill                     | \$2,000  |
| 15:30 | lunch while testing BOP, pipe and blinds to 3000# high, 200 low, TIW 3000#, 10 minute test each, all tested & charted   | SWS                           | \$1,000  |
| 16:30 | Rigged up wire line crew to RIH with 1-6' gun, 1-5' gun, (6spf, 11 gram EH 5.6") shot zones @ 4559-4565, & 4524-4529, Pressure increase 0 no fluid level detected coming out of hole, RD wireline crew & released |                               |          |
| 17:30 | RIH with double grip Packer from weatherford to 4546'   |                               |          |
| 19:00 | Pulled above liner @ 3818, SWIFN & SD   |                               |          |
|       |   | Daily Cost:                   | \$15,340 |
|       |   | <b>Personnel On Location:</b> |          |
|       |   | Rig:                          | 4        |
|       |   | Services:                     | 3        |
|       |   | G.C.L.L.C.:                   | 1        |
|       |   | Total:                        | 8        |

| Fluid Record:         | Oil | Water | AM Weather & Roads:         | Contact Information:                                 |
|-----------------------|-----|-------|-----------------------------|--|
| Hauled in             |     | 160   | Weather: <u>clear</u>       | Supervisor: <u>Bo Stinson</u>                        |
| Total Fluid :         |     | 160   | Temp: <u>85</u>             | Cell #: <u>435-630-6344</u>                          |
| Fluid Pumped In:      |     | 0     | Lease: <u>ok</u>            | Alt #: <u>435-637-8570</u>                           |
| Left to Recover       |     |       | Roads: <u>ok</u>            | Report to: <u>Barry Brumwell - Calgary Head Ofc.</u> |
| Fluid Hauled Out      |     |       | Rig Co: <u>Pro well Ser</u> | Email to: <u>bbrumwell@thunderbirdenergy.com</u>     |
| Load Left to Recover: |     |       | Rig #: <u>#5</u>            |  |



**THUNDERBIRD**  
ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

**Well Name:** Gordon Creek LLC. NW 32-13-8 **Today's Date:** September 20, 2012  
**Objective:** Completion **Day #:** 3  
**AFE #:** 11CMP003 **Daily Cost:** \$10,999 **Prev. Cost:** \$41,581 **Cummulative Cost:** \$52,580

**Zones of Interest:**  
 Name: Ferron Sand stone Perf Int.'s 4559-4565, 4524-4529  
 Name: Upper liner Perf Int.'s 3840-3843  
 Name: Perf Int.'s

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|------|--------|----------|-----------|-------------------|
| #1      |      |        |          |           |                   |
| #2      |      |        |          |           |                   |

**Depths:** TD: 4745 PBD: 4740 KOP: TD (TVD):

**Elevations:** KB: 7617 GL: 7605.5 KB-GL: 11.00 **API #:** 4300750244

**AM Pressures:** Tubing: 0 Casing: 0 SCV: 0

**24 Hour Summary:** Test circulation thru perfs and perf below liner top, & set retainer

**Operation at 0800 Hours:** set packer to test perfs to circulate

| Time  | Detailed Description of Previous Days Operations  | Daily Cost Summary            |          |
|-------|---|-------------------------------|----------|
|       |   | Item                          | Amount   |
| 7:00  | Travel to location  |                               |          |
| 7:30  | service rig, check CP & TP 0#   | Rig                           | \$3,930  |
| 8:00  | RIH from liner top to 4546, set packer and injection test,  | Waste log                     | \$35     |
| 8:30  | Pumping at 350#, 2.5 BPM, 5 min. circulation 50%, reset packer in tension and recirculated again 8 minutes at 2.5 BPM @ 350#, loss 9 BBLs. Released packer and pulled above liner | nielson                       | \$1,260  |
| 9:30  | POOH with packer  | RMWL                          | \$3,514  |
| 10:30 | waiting on wireline crew to arrive, PM on rig pump  | SWS                           | \$1,000  |
| 12:00 | rig up wireline, RIH with casing puncher, 4spf-3' gun, 3.2 gram, EH .56 Pent. @ 5.76", Shot @ 3840-3843, shot below liner 22' +/-, POOH   | nielson                       | \$1,260  |
| 14:00 | Rih with weatherford Cement Retainer, Length 1.3', set retainer @ 4505 top of retainer, fluid level going in hole @ 750' POOH rig down wireline and released crew                 |                               |          |
| 16:30 | RIH with stinger for retainer, SD EOT at 3762'  |                               |          |
| 17:00 | SWIFN & SD  |                               |          |
|       |   | <b>Daily Cost:</b>            | \$10,999 |
|       |   | <b>Personnel On Location:</b> |          |
|       |   | Rig:                          | 4        |
|       |   | Services:                     | 4        |
|       |   | G.C.L.L.C.:                   | 1        |
|       |   | Total:                        | 9        |

| Fluid Record:         | Oil | Water | AM Weather & Roads:         | Contact Information:                          |
|-----------------------|-----|-------|-----------------------------|---|
| Hauled in             |     | 130   | Weather: clear              | Supervisor: Bo Stinson                        |
| Total Fluid :         |     | 390   | Temp: 83                    | Cell #: 435-630-6344                          |
| Fluid Pumped In:      |     | 9     | Lease: OK                   | Alt #: 435-637-8570                           |
| Left to Recover       |     | 9     | Roads: OK                   | Report to: Barry Brumwell - Calgary Head Ofc. |
| Fluid Hauled Out      |     |       | <b>Rig Co:</b> Pro well ser | Email to: bbrumwell@thunderbirdenergy.com     |
| Load Left to Recover: |     |       | Rig #: #5                   |   |



**THUNDERBIRD**  
ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

**Well Name:** Gordon Creek LLC. NW 32-13-8 **Today's Date:** September 21, 2012  
**Objective:** Completion **Day #:** 4  
**AFE #:** 11CMP003 **Daily Cost:** \$30,833 **Prev. Cost:** \$52,580 **Cummulative Cost:** \$83,413

**Zones of Interest:**  
 Name: Ferron Sandstone Perf Int.'s: 4559-4565, 4524-4529  
 Name: upper liner Perf Int.'s: 3840-3843  
 Name: \_\_\_\_\_ Perf Int.'s: \_\_\_\_\_

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|------|--------|----------|-----------|-------------------|
| #1      |      |        |          |           |                   |
| #2      |      |        |          |           |                   |

**Depths:** TD: 4745 PBDT: 4740 KOP: \_\_\_\_\_ TD (TVD): \_\_\_\_\_

**Elevations:** KB: 7617 GL: 7605.5 KB-GL: 11.00 **API #:** 4300750244

**AM Pressures:** Tubing: 0 Casing: 0 SCV: 0

**24 Hour Summary:** pumped cement for squeeze on perms to fill void at 4" liner

**Operation at 0800 Hours:** RIH to Retainer

| Time  | Detailed Description of Previous Days Operations  | Daily Cost Summary            |          |
|-------|---|-------------------------------|----------|
|       |   | Item                          | Amount   |
| 7:00  | Travel to location  | Rig:                          | \$4,050  |
| 7:30  | Service rig Checked CP & TP 0   | Nabors                        | \$17,368 |
| 8:00  | RIH to retainer 5' above  | weatherford                   | \$7,117  |
| 8:30  | spot in cement crew & prep for cement job   | Neilson                       | \$1,558  |
| 9:00  | Safety meeting with all service personel, rigged up and tested lines to 3K, mixing cement 12.5 ppg, pumped 3 bbls fresh water leed and 17 bbls cement, good circulation, stung into liner, lost cir pumped 83 total bbls cement, slight cirulation to 50 bbls left, slowed rate from 1.5 BPM to 1 bpm, tubing on vaccum increased rate back to 1.5 bpm, started Displacing did not use pump let vaccum pull from tank @ .7 bpm for 8 bbl. Pressure at 10 # started to displace with pump pressure increase to 710# at end of displacement, pulled out of retainer, & broke loose cement lines | RMB                           | \$740    |
| 11:30 | PooH laying down 20 jts. to 3871'   |                               |          |
| 12:00 | pumped balanced plug of 42 bbls. Of 12.5 ppg, started stag pressure @ 200#, pressure dropping during stag ( good circulation), started displ. 8 bbls pressures equilized, shut down   | Daily Cost:                   | \$30,833 |
| 13:30 | POOH slowly, laid out stinger shut in for 4 hrs.  | <b>Personnel On Location:</b> |          |
| 14:30 | Rih with 4.750 tri cone bit & sub, rih with 71 jts 2300' +/-, pumped 6 bbl water no cir pressure @ 250# sd  | Rig:                          | 4        |
| 15:30 | pooH, SWIFn & SD  | Services:                     | 5        |
|       |   | G.C.L.L.C.:                   | 2        |
|       |   | Total:                        | 11       |

| Fluid Record:         | Oil | Water | AM Weather & Roads:                | Contact Information:                                 |
|-----------------------|-----|-------|------------------------------------|--|
| Hauled in             |     | 210   | Weather: <u>clear/windy</u>        | Supervisor: <u>Bo Stinson</u>                        |
| Total Fluid :         |     |       | Temp: <u>80</u>                    | Cell #: <u>435-630-6344</u>                          |
| Fluid Pumped In:      |     |       | Lease: <u>dusty</u>                | Alt #: <u>435-637-8570</u>                           |
| Left to Recover       |     |       | Roads: <u>dusty</u>                | Report to: <u>Barry Brumwell - Calgary Head Ofc.</u> |
| Fluid Hauled Out      |     |       | <b>Rig Co:</b> <u>Pro well ser</u> | Email to: <u>bbrumwell@thunderbirdenergy.com</u>     |
| Load Left to Recover: |     |       | Rig #: <u>#5</u>                   |  |

















**THUNDERBIRD**  
ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

Well Name: Gordon Creek LLC. NW 32-13-8 Today's Date: September 29, 2012  
 Objective: Completion Day #: 12  
 AFE #: 11CMP003 Daily Cost: \$7,560 Prev. Cost: \$133,326 Cumulative Cost: \$140,886

Zones of Interest: Name: Ferron Sandstone Perf Int.'s 4559-4565, 4524-4529  
 Name: Upper liner Perf Int.'s 3840-3843  
 Name: \_\_\_\_\_ Perf Int.'s \_\_\_\_\_

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|------|--------|----------|-----------|-------------------|
| #1      |      |        |          |           |                   |
| #2      |      |        |          |           |                   |

Depths: TD: 4745 PBD: 4740 KOP: \_\_\_\_\_ TD (TVD): \_\_\_\_\_

Elevations: KB: 7617 GL: 7605.5 KB-GL: 11.00 API #: 4300750244

AM Pressures: Tubing: 0 Casing: 0 SCV: 0

24 Hour Summary: drilled out rest of retainer debree, cleaned to 4671', pressure test to 2000# fail

Operation at 0800 Hours: drilling on retainer debree

| Time  | Detailed Description of Previous Days Operations  | Daily Cost Summary            |         |
|-------|---|-------------------------------|---------|
|       |   | Item                          | Amount  |
| 7:00  | Travel to location  |                               |         |
| 7:30  | service rig, check CP & TP, rih with 21 jts, and swivel up  | Rig                           | \$5,300 |
| 8:30  | drilled up debree, and back into cement, drilled out of cement @ 4570   | Nielson                       | \$1,260 |
| 13:30 | circulated hole, and lunch  | SWS                           | \$1,000 |
| 14:00 | rih to 4686' stacked out, 145 jt in hole, 3.5' on last jt. 12' of fill cleaned out fill to 4671', circulated 15 minutes @ 2.5 BPM |                               |         |
| 16:00 | pressure test casing / lower perf zones to 2000#  |                               |         |
| 16:30 | prep to TOOH  |                               |         |
| 17:30 | Pooh  |                               |         |
| 18:00 | SWIFN & SD  |                               |         |
|       |   | Daily Cost:                   | \$7,560 |
|       |   | <b>Personnel On Location:</b> |         |
|       |   | Rig:                          | 5       |
|       |   | Services:                     | 2       |
|       |   | G.C.L.L.C.:                   | 1       |
|       |   | Total:                        | 8       |

| Fluid Record:         | Oil | Water | AM Weather & Roads:         | Contact Information:                                 |
|-----------------------|-----|-------|-----------------------------|--|
| Hauled in             |     | 130   | Weather: <u>Rainy Day</u>   | Supervisor: <u>Bo Stinson</u>                        |
| Total Fluid :         |     |       | Temp: <u>52</u>             | Cell #: <u>435-630-6344</u>                          |
| Fluid Pumped In:      |     |       | Lease: <u>ok</u>            | Alt #: <u>435-637-8570</u>                           |
| Left to Recover       |     |       | Roads: <u>ok</u>            | Report to: <u>Barry Brumwell - Calgary Head Ofc.</u> |
| Fluid Hauled Out      |     | 130   | Rig Co: <u>Pro well ser</u> | Email to: <u>bbrumwell@thunderbirdenergy.com</u>     |
| Load Left to Recover: |     |       | Rig #: <u>#5</u>            |  |



**THUNDERBIRD**  
ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

Well Name: Gordon Creek LLC. NW 32-13-8 Today's Date: September 30, 2012  
 Objective: Completion Day #: 13  
 AFE #: 11CMP003 Daily Cost: \$10,399 Prev. Cost: \$140,886 Cumulative Cost: \$151,285

Zones of Interest: Name: Ferron Sandstone Perf Int.'s: 4559-4565, 4524-4529  
 Name: Upper liner Perf Int.'s: 3840-3843  
 Name: \_\_\_\_\_ Perf Int.'s: \_\_\_\_\_

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|------|--------|----------|-----------|-------------------|
| #1      |      |        |          |           |                   |
| #2      |      |        |          |           |                   |

Depths: TD: 4745 PBDT: 4740 KOP: \_\_\_\_\_ TD (TVD): \_\_\_\_\_

Elevations: KB: 7617 GL: 7605.5 KB-GL: 11.00 API #: 4300750244

AM Pressures: Tubing: 0 Casing: 0 SCV: 0

24 Hour Summary: Run CBL, displace casing with 2% KCL, laid out tubing & rigged down

Operation at 0800 Hours: rigging up wire line to CBL

| Time  | Detailed Description of Previous Days Operations                        | Daily Cost Summary            |          |
|-------|---|-------------------------------|----------|
|       |   | Item                          | Amount   |
| 7:00  | Travel to location  |                               |          |
| 7:30  | service rig   | Rig                           | \$4,340  |
| 8:00  | rig up wire line, run CBL through liner, POOH and rigged down wire line | Neilson WT                    | \$525    |
| 10:00 | rih with tubing   | RMWS                          | \$2,513  |
| 11:00 | pumped out rig tank, cleaned out cement in tank                         | SWS                           | \$1,000  |
| 12:30 | mixed 100 bbls of KCL   | Neilson BT                    | \$1,000  |
| 13:30 | Displaced Kcl in casing,  | Hardy Ser                     | \$180    |
| 14:00 | mixed 20 more bbls of KCL   | howa KCL                      | \$841    |
| 14:30 | Displaced Kcl in casing ( with additional fluid + 12 bbls over)         |                               |          |
| 15:00 | rack out pump and tank, start moving equipment to next location         |                               |          |
| 17:00 | TOOH laying down tubing   |                               |          |
| 18:00 | rig down floor & nipple down Bop, nipple up well head                   |                               |          |
| 19:00 | rig down, & SDFN  |                               |          |
|       |   | Daily Cost:                   | \$10,399 |
|       |   | <b>Personnel On Location:</b> |          |
|       |   | Rig:                          | 4        |
|       |   | Services:                     | 4        |
|       |   | G.C.L.L.C.:                   | 1        |
|       |   | Total:                        | 9        |

| Fluid Record:         | Oil | Water | AM Weather & Roads:         | Contact Information:                                 |
|-----------------------|-----|-------|-----------------------------|--|
| Hauled in             |     | 130   | Weather: <u>windy</u>       | Supervisor: <u>Bo Stinson</u>                        |
| Total Fluid :         |     |       | Temp: <u>62</u>             | Cell #: <u>435-630-6344</u>                          |
| Fluid Pumped In:      |     |       | Lease: <u>dusty</u>         | Alt #: <u>435-637-8570</u>                           |
| Left to Recover       |     |       | Roads: <u>dusty</u>         | Report to: <u>Barry Brumwell - Calgary Head Ofc.</u> |
| Fluid Hauled Out      |     |       | Rig Co: <u>Pro well ser</u> | Email to: <u>bbrumwell@thunderbirdenergy.com</u>     |
| Load Left to Recover: |     |       | Rig #: <u>#5</u>            |  |



**THUNDERBIRD**  
ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

**Well Name:** Gordon Creek LLC. NW 32-13-8 **Todays Date:** October 2, 2012

**Objective:** Completion **Day #:** 14

**AFE #:** 11CMP003 **Daily Cost:** \$154,344 **Prev. Cost:** \$151,285 **Cummulative Cost:** \$305,629

**Zones of Interest:**  
Name: Ferron Sandstone Perf Int.'s 4559-4565, 4524-4529  
Name: Upper liner Perf Int.'s 3840-3843  
Name: Perf Int.'s

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|------|--------|----------|-----------|-------------------|
| #1      |      |        |          |           |                   |
| #2      |      |        |          |           |                   |

**Depths:** TD: 4745 PBD: 4740 KOP: TD (TVD):

**Elevations:** KB: 7617 GL: 7605.5 KB-GL: 11.00 **API #:** 4300750244

**AM Pressures:** **Tubing:** **Casing:** **SCV:**

**24 Hour Summary:** Frac 2 stages, perforate 2 zones, set one 5 1/2" Benoit Flow Thru WR Plug

**Operation at 0800 Hours:**

| Time                          | Detailed Description of Previous Days Operations   | Daily Cost Summary |           |
|-------------------------------|--|--------------------|-----------|
|                               |  | Item               | Amount    |
| 5:15                          | Travel to location   |                    |           |
| 5:45                          | MIRU RMWS & RIH with Select Fire perf guns on 1 run and perforate lower Ferron 4083'-4086', 4061'-4064', 4049'-4052', 4033'-4034', & 4027'-4028', with 25 gram charges(0.56" EH) loaded @ 6 shots/ft. on 60° phasing. RD RMWS  | RFR - tank rent    | \$245     |
|                               |  | RNI - water haul   | \$4,290   |
|                               |  | RMWS - perfling    | \$11,961  |
|                               |  | HOWA - Potash      | \$15,780  |
| 7:10                          | MIRU Nabors, prime up and pressure test to 7,079 psi, holding steady   | Seaboard - BOP     | \$875     |
| 7:35                          | PJSM with all personnel on location  | Seaboard - BOP     | \$1,772   |
| 7:42                          | Open well with 0 psi, 22 bbls to load, BD 3,034 psi at 69.8 bpm<br>Flushed 20.2 bbls over bottom perf, pump operator couldn't hear the treater telling him to SD, reached 5.94 ppg   | PEMI               | \$1,310   |
|                               |  | Nabors             | \$113,220 |
| 8:01                          | ISIP - 828 psi, FG - 0.644 psi/ft, 5 min - 369 psi, 10 min - 165 psi<br>15 min - 29 psi, BLTR - 1,291 bbls   | Benoit             | \$2,757   |
|                               |  | G3 - Trash bin     | \$400     |
| 8:05                          | MIRU RMWS & RIH with Select Fire perf guns on 2 runs and perforate upper Ferron 4003'-4009', 3990'-3993', 3982'-3986', 3976'-3978', 3970'-3972', 3963'-3965', 3917'-3920', 3904'-3907', & 3896'-3898' with 25 gram charges(0.56" EH) loaded @ 6 shots/ft on 60° phasing. RIH with 5 1/2" Benoit Flow Thru WR Plug and set plug at 4,015' COE. RD | Nielson            | \$743     |
|                               |  | Nielson            | \$578     |
|                               |  | Nielson            | \$413     |
| 10:00                         | MIRU Nabors  |                    |           |
| 10:19                         | Open well with 0 psi, 32 bbls to load, BD 2,233 psi at 80 bpm<br>Flushed 3.1 bbls over bottom perf, reached 5.89 ppg   |                    |           |
| 10:36                         | ISIP - 1,097 psi, FG - 0.720 psi/ft, 5 min - 210 psi, 7 min - 0 psi<br>BLTR - 1,170 bbls   |                    |           |
|                               | RD Nabors  |                    |           |
|                               |  | <b>Daily Cost:</b> | \$154,344 |
| <b>Personnel On Location:</b> |  |                    |           |
|                               |  | Rig:               | 32        |
|                               |  | Services:          | 7         |
|                               |  | G.C.L.L.C.:        | 1         |
|                               |  | <b>Total:</b>      | 41        |

| Fluid Record:         | Oil | Water | AM Weather & Roads: | Contact Information:                          |
|-----------------------|-----|-------|---------------------|---|
| Hauled in             |     |       | Weather:            | Supervisor: Brad Pottebaum                    |
| Total Fluid :         |     |       | Temp:               | Cell #: 303-218-8278                          |
| Fluid Pumped in:      |     |       | Lease:              | Alt #: 0                                      |
| Left to Recover       |     |       | Roads:              | Report to: Barry Brumwell - Calgary Head Ofc. |
| Fluid Hauled Out      |     |       | <b>Rig Co:</b>      | Email to: bbrumwell@thunderbirdenergy.com     |
| Load Left to Recover: |     |       | <b>Rig #:</b>       |   |

















THUNDERBIRD ENERGY

# Gordon Creek, LLC.

## Well Completion/Workover Report

Well Name: Gordon Creek LLC. NW 32-13-8 Today's Date: OCTOBER 23, 2012  
 Objective: Completion Day #: 22  
 AFE #: 11CMP003 Daily Cost: \$25,000 Prev. Cost: \$372,040 Cumulative Cost: \$397,040

Zones of Interest: Name: Ferron Sandstone Perf Int.'s: 4559-4565, 4524-4529  
 Name: Upper liner Perf Int.'s: 3840-3843  
 Name: \_\_\_\_\_ Perf Int.'s: \_\_\_\_\_

| Casing:      | Size  | Weight | Grade | Landed @ | Rod String: | No. of | Size | Type |
|--------------|-------|--------|-------|----------|-------------|--------|------|------|
| Surface:     | 8.625 | 24     | J-55  | 820      |             |        |      |      |
| Production:  | 5.5   | 17     | N-80  | 3995     |             |        |      |      |
| Inter/Liner: | 4     | 11     | J-55  | 4740     |             |        |      |      |

| Tubing: | Size  | Weight | Landed @ | PSN Depth | Pump Description: |
|---------|-------|--------|----------|-----------|-------------------|
| #1      | 2.375 | 4.7    | 4629.66  | 4620.89   |                   |
| #2      |       |        |          |           |                   |

Depths: TD: 4745 PBDT: 4740 KOP: \_\_\_\_\_ TD (TVD): \_\_\_\_\_

Elevations: KB: 7617 GL: 7605.5 KB-GL: 11.00 API #: 4300750244

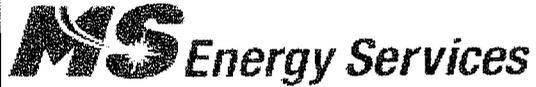
AM Pressures: Tubing: \_\_\_\_\_ Casing: \_\_\_\_\_ SCV: \_\_\_\_\_

### 24 Hour Summary:

#### Operation at 0800 Hours:

| Time  | Detailed Description of Previous Days Operations  | Daily Cost Summary            |                 |
|-------|---|-------------------------------|-----------------|
|       |   | Item                          | Amount          |
| 6:00  | Travel from Price to location   |                               |                 |
| 7:00  | S.I.C.P = 0 psi. Blew down casing.  | SWS                           | \$1,000         |
| 7:15  | MU and RIH wih 2 3/8" production tubing string as follows:  | PROF WELL SER                 | \$4,000         |
|       |   | Tubing + Acces                | \$20,000        |
|       | <b>KB:</b>  |                               |                 |
|       |   | <b>LENGTH</b>                 | <b>DEPTH KB</b> |
|       | KB - GND  | 11.00'                        | 11.00'          |
|       | 1 - Tubing Hanger   | 0.80'                         | 11.80'          |
|       | 1 - jt of 2 3/8", 4.7#, J-55, EUE TBG   | 32.42'                        | 44.22'          |
|       | 1 - 2 3/8", 4.7#, J-55, EUE X 6' Pup Jt   | 6.02'                         | 50.24'          |
|       | 141 - jts of 2 3/8", 4.7#, J-55, EUE TBG  | 4569.55'                      | 4619.79'        |
|       | 1 - API - PSN   | 1.10'                         | 4620.89'        |
|       | 1 - 2 3/8", 4.7#, J-55, EUE X 4' perfed Pup Jt  | 4.05'                         | 4624.94'        |
|       | 1 - 2 3/8", 4.7#, J-55, EUE X 4' Pup Jt   | 4.02'                         | 4628.96'        |
|       | 1 - 2 3/8" Notched Collar   | 0.70'                         | 4629.66'        |
| 9:30  | Land tubing with Tubing Hanger, tighten down lock screws. ND BOP's and install wellhead. Install pumping tee w/ 2.375" tapped bull plug 1/2" needle valve. Shut well in | Daily Cost:                   | \$25,000        |
| 10:30 | Rig down service rig and prepare to move.   | <b>Personnel On Location:</b> |                 |
| 11:30 | Move rig and equipment to SW-7-14-8   | Rig:                          |                 |
|       |   | Services:                     |                 |
|       |   | G.C.L.L.C.:                   |                 |
|       |   | Total:                        |                 |

| Fluid Record:         | Oil | Water | AM Weather & Roads:  | Contact Information:                                 |
|-----------------------|-----|-------|----------------------|--|
| Hauled in             |     |       | Weather: _____       | Supervisor: <u>Bo Stinson</u>                        |
| Total Fluid :         |     |       | Temp: _____          | Cell #: <u>435-630-6344</u>                          |
| Fluid Pumped In:      |     |       | Lease: _____         | Alt #: <u>435-637-8570</u>                           |
| Left to Recover       |     |       | Roads: _____         | Report to: <u>Barry Brumwell - Calgary Head Ofc.</u> |
| Fluid Hauled Out      |     |       | <b>Rig Co:</b> _____ | Email to: <u>bbrumwell@thunderbirdenergy.com</u>     |
| Load Left to Recover: |     |       | <b>Rig #:</b> _____  |  |



Job Number: SVGJ-120750  
 Company: Gordon Creek, LLC  
 Lease/Well: Gordon Creek State NW-32-13-8  
 Location: Carbon County, UT  
 Rig Name: MS Wireline  
 RKB: 0'  
 G.L. or M.S.L.: GL

State/Country: Utah/USA  
 Declination: 11.50°  
 Grid: East To True North  
 File name: F:\SURVEY\2012SU~1\GORDON~1\LORENZ\GORDON~1\NW32138.SV  
 Date/Time: 26-Jul-12 / 15:51  
 Curve Name: Surface - 4700' M.D. (Rate Gyro)

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane .00  
 Vertical Section Referenced to Wellhead  
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from  
 Surface MD to 4,700' MD is, to the best of  
 our knowledge a true and accurate account of the  
 well bore.  
Scott Elias 7/26/12  
 MS Energy Services Date

| 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 | CLOSURE        |                  | Dogleg<br>Severity<br>Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
|                         |                      |                           |                           |           |           |                           | Distance<br>FT | Direction<br>Deg |                               |
| .00                     | .00                  | .00                       | .00                       | .00       | .00       | .00                       | .00            | .00              | .00                           |
| 100.00                  | .40                  | 131.83                    | 100.00                    | -.23      | .26       | -.23                      | .35            | 131.83           | .40                           |
| 200.00                  | 1.15                 | 169.95                    | 199.99                    | -1.45     | .70       | -1.45                     | 1.61           | 154.44           | .87                           |
| 300.00                  | 2.09                 | 169.82                    | 299.95                    | -4.24     | 1.19      | -4.24                     | 4.40           | 164.28           | .94                           |
| 400.00                  | 3.57                 | 178.90                    | 399.82                    | -9.14     | 1.57      | -9.14                     | 9.28           | 170.23           | 1.54                          |
| 500.00                  | 4.54                 | 191.73                    | 499.57                    | -16.13    | .83       | -16.13                    | 16.15          | 177.06           | 1.32                          |
| 600.00                  | 5.65                 | 195.03                    | 599.18                    | -24.76    | -1.25     | -24.76                    | 24.79          | 182.89           | 1.15                          |
| 700.00                  | 6.28                 | 200.58                    | 698.64                    | -34.64    | -4.45     | -34.64                    | 34.92          | 187.32           | .85                           |
| 800.00                  | 6.61                 | 200.30                    | 798.01                    | -45.16    | -8.37     | -45.16                    | 45.92          | 190.50           | .33                           |
| 900.00                  | 7.02                 | 200.41                    | 897.30                    | -56.28    | -12.50    | -56.28                    | 57.65          | 192.52           | .41                           |

| 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 |                               |
| 1000.00                 | 6.63                 | 194.45                    | 996.59                    | -67.60    | -16.07    | -67.60                    | 69.48          | 193.37           | .81                           |
| 1100.00                 | 6.42                 | 190.26                    | 1095.94                   | -78.69    | -18.51    | -78.69                    | 80.84          | 193.23           | .52                           |
| 1200.00                 | 5.92                 | 184.25                    | 1195.37                   | -89.33    | -19.88    | -89.33                    | 91.52          | 192.55           | .82                           |
| 1300.00                 | 6.13                 | 187.03                    | 1294.81                   | -99.78    | -20.92    | -99.78                    | 101.95         | 191.84           | .36                           |
| 1400.00                 | 6.25                 | 189.78                    | 1394.23                   | -110.44   | -22.50    | -110.44                   | 112.71         | 191.51           | .32                           |
| 1500.00                 | 5.82                 | 189.13                    | 1493.68                   | -120.81   | -24.23    | -120.81                   | 123.22         | 191.34           | .44                           |
| 1600.00                 | 5.94                 | 184.35                    | 1593.15                   | -130.98   | -25.42    | -130.98                   | 133.42         | 190.99           | .50                           |
| 1700.00                 | 5.57                 | 187.41                    | 1692.65                   | -140.95   | -26.44    | -140.95                   | 143.41         | 190.63           | .48                           |
| 1800.00                 | 5.24                 | 184.46                    | 1792.20                   | -150.31   | -27.42    | -150.31                   | 152.79         | 190.34           | .43                           |
| 1900.00                 | 4.66                 | 187.37                    | 1891.83                   | -158.89   | -28.30    | -158.89                   | 161.39         | 190.10           | .63                           |
| 2000.00                 | 4.57                 | 188.03                    | 1991.50                   | -166.87   | -29.38    | -166.87                   | 169.43         | 189.98           | .10                           |
| 2100.00                 | 4.50                 | 183.12                    | 2091.19                   | -174.73   | -30.15    | -174.73                   | 177.31         | 189.79           | .39                           |
| 2200.00                 | 4.44                 | 184.91                    | 2190.89                   | -182.50   | -30.69    | -182.50                   | 185.07         | 189.55           | .15                           |
| 2300.00                 | 4.28                 | 182.09                    | 2290.60                   | -190.09   | -31.16    | -190.09                   | 192.63         | 189.31           | .27                           |
| 2400.00                 | 4.11                 | 179.78                    | 2390.33                   | -197.40   | -31.28    | -197.40                   | 199.86         | 189.00           | .24                           |
| 2500.00                 | 3.96                 | 177.76                    | 2490.08                   | -204.43   | -31.13    | -204.43                   | 206.79         | 188.66           | .21                           |
| 2600.00                 | 3.51                 | 172.73                    | 2589.87                   | -210.92   | -30.61    | -210.92                   | 213.13         | 188.26           | .56                           |
| 2700.00                 | 3.39                 | 169.49                    | 2689.69                   | -216.87   | -29.68    | -216.87                   | 218.89         | 187.79           | .23                           |
| 2800.00                 | 3.13                 | 166.79                    | 2789.53                   | -222.43   | -28.52    | -222.43                   | 224.25         | 187.31           | .30                           |
| 2900.00                 | 3.11                 | 166.43                    | 2889.38                   | -227.73   | -27.26    | -227.73                   | 229.35         | 186.83           | .03                           |
| 3000.00                 | 3.71                 | 163.08                    | 2989.20                   | -233.46   | -25.68    | -233.46                   | 234.87         | 186.28           | .63                           |
| 3100.00                 | 3.84                 | 163.51                    | 3088.98                   | -239.76   | -23.79    | -239.76                   | 240.94         | 185.67           | .13                           |
| 3200.00                 | 3.62                 | 157.64                    | 3188.77                   | -245.89   | -21.64    | -245.89                   | 246.84         | 185.03           | .44                           |
| 3300.00                 | 3.38                 | 156.75                    | 3288.59                   | -251.52   | -19.27    | -251.52                   | 252.26         | 184.38           | .25                           |
| 3400.00                 | 3.24                 | 157.62                    | 3388.42                   | -256.84   | -17.03    | -256.84                   | 257.41         | 183.79           | .15                           |
| 3500.00                 | 3.88                 | 157.84                    | 3488.23                   | -262.59   | -14.68    | -262.59                   | 263.00         | 183.20           | .64                           |
| 3600.00                 | 4.22                 | 157.11                    | 3587.98                   | -269.11   | -11.97    | -269.11                   | 269.38         | 182.55           | .34                           |
| 3700.00                 | 4.22                 | 157.02                    | 3687.70                   | -275.89   | -9.11     | -275.89                   | 276.04         | 181.89           | .01                           |
| 3800.00                 | 4.06                 | 160.13                    | 3787.44                   | -282.61   | -6.47     | -282.61                   | 282.68         | 181.31           | .28                           |

| 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 |                               |
| 3900.00                           | 3.86                 | 163.83                    | 3887.21                   | -289.17   | -4.33     | -289.17                   | 289.20         | 180.86           | .32                           |
| 4000.00                           | 3.94                 | 169.53                    | 3986.97                   | -295.78   | -2.77     | -295.78                   | 295.79         | 180.54           | .40                           |
| 4100.00                           | 1.53                 | 138.52                    | 4086.86                   | -300.16   | -1.26     | -300.16                   | 300.16         | 180.24           | 2.74                          |
| 4200.00                           | 4.53                 | 41.92                     | 4186.75                   | -298.22   | 2.27      | -298.22                   | 298.23         | 179.56           | 4.94                          |
| 4300.00                           | 2.21                 | 40.72                     | 4286.57                   | -293.82   | 6.17      | -293.82                   | 293.88         | 178.80           | 2.32                          |
| 4400.00                           | 3.07                 | 40.22                     | 4386.46                   | -290.31   | 9.15      | -290.31                   | 290.46         | 178.19           | .86                           |
| 4500.00                           | 4.58                 | 36.08                     | 4486.23                   | -285.04   | 13.23     | -285.04                   | 285.35         | 177.34           | 1.53                          |
| 4600.00                           | 3.24                 | 1.73                      | 4586.01                   | -278.99   | 15.67     | -278.99                   | 279.43         | 176.79           | 2.64                          |
| <b>Last Survey Depth Recorded</b> |                      |                           |                           |           |           |                           |                |                  |                               |
| 4700.00                           | 2.81                 | 347.43                    | 4685.87                   | -273.77   | 15.22     | -273.77                   | 274.19         | 176.82           | .87                           |



January 9<sup>th</sup>, 2013

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

To Whom It May Concern;

**Re: LOCATION EXEMPTION LETTER - Gordon Creek NW-32-13S-8E**

In reference to the State of Utah Oil & Gas Conservation Rule # R649-3-2, the proposed well GORDON CREEK NW-32-13S-8E is an exception to the rule due to the topography of the 40 acre Section that the well is located in.

There are no additional lease owners within 460' of the proposed location, and we hold the mineral rights to all of Section 32.

If you have any further questions regarding this matter, please don't hesitate to contact me by telephone at (403) 453-1608 or via email at [bbrumwell@thunderbirdenergy.com](mailto:bbrumwell@thunderbirdenergy.com).

Respectfully;

Barry Brumwell, C.E.T.  
Vice President of Operations  
Thunderbird Energy  
Gordon Creek, LLC.

Gordon Creek, LLC. is a wholly owned subsidiary of thunderbird Energy Inc.

---

#550, 1010 - 1<sup>st</sup> Street S.W. Calgary, Alberta, Canada T3Z 1G7

|  |   |
|--|---|
| <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. | 5. LEASE DESIGNATION AND SERIAL NUMBER:<br>FEE      |
| 1. TYPE OF WELL<br>Gas Well  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME:               |
| 2. NAME OF OPERATOR:<br>GORDON CREEK, LLC  | 7. UNIT or CA AGREEMENT NAME:                       |
| 3. ADDRESS OF OPERATOR:<br>1179 E Main #345 , Price, UT, 84501   | 8. WELL NAME and NUMBER:<br>GORDON CREEK NW-32-13-8 |
| 4. LOCATION OF WELL<br>FOOTAGES AT SURFACE:<br>1261 FNL 0878 FWL<br>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:<br>Qtr/Qtr: NWNW Section: 32 Township: 13.0S Range: 08.0E Meridian: S   | 9. API NUMBER:<br>43007502440000                    |
| PHONE NUMBER:<br>403 453-1608 Ext  | 9. FIELD and POOL or WILDCAT:<br>WILDCAT            |
|  | COUNTY:<br>CARBON                                   |
|  | 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>2/28/2013 | <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 checked="" 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 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 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 style="width: 100px;" type="text"/>       |

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

We are experiencing low efficiency from the 1.5" insert pump in this well due to the sucker rods dragging heavily through the area where the 4.75" hole Kickoff Point was placed during the initial well drilling operations. We plan to move a workover rig onto the well and pull the existing rods and BHP out of the well. We will then hoist the tubing to place to the tubing bottom at +/- 3500' (above the 4.000" liner top). We will then re-run the BHP and rods, land the pump in the PSN and place the well back on production.

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

Date: March 05, 2013

By: *Barry Brumwell*

|  |                                     |   |
|--|-------------------------------------|---|
| <b>NAME (PLEASE PRINT)</b><br>Barry Brumwell | <b>PHONE NUMBER</b><br>403 453-1608 | <b>TITLE</b><br>Vice President-Operations |
| <b>SIGNATURE</b><br>N/A                      | <b>DATE</b><br>2/25/2013            |   |



GARY R. HERBERT  
Governor

SPENCER J. COX  
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

May 27, 2014

Via FedEx

Barry Brumwell  
Vice President of Operations  
Thunderbird Energy / Gordon Creek, LLC  
#800, 555 – 4<sup>th</sup> Avenue S.W.  
Calgary, Alberta, Canada T2P 3E7

43 007 50244  
Gordon Creek NW 32-13-8  
32 13S 8E

Subject: Oil and Gas General Conservation Rule R649-3-36 - Shut-in and Temporarily Abandoned Wells

Dear Mr. Brumwell:

The Division of Oil, Gas and Mining (the "Division") issued Gordon Creek LLC c/o Thunderbird Energy (Gordon Creek) a Shut-in and Temporary Abandonment Notice of Violation (NOV), dated November 12, 2012, for the following seven (7) wells:

|                            |                  |   |
|----------------------------|------------------|---|
| Burnside 29-14-8           | API 43-007-30725 | SI/TA approval - May 1, 2014                |
| Gordon Creek ST 1-30-14-8  | API 43-007-31235 | SI/TA approval - Feb 1, 2014                |
| Gordon Creek ST 4-18-14-8  | API 43-007-30881 | SI/TA approval - May 1, 2014                |
| Gordon Creek ST 2-20-14-8  | API 43-007-30883 | Subsequent Sundry 2/15/2013 For Record Only |
| Gordon Creek ST 3-20-14-8  | API 43-007-31233 | SI/TA approval - May 1, 2014                |
| Gordon Creek ST 2-29-14-8  | API 43-007-31234 | SI/TA approval - Feb 1, 2014                |
| Gordon Creek ST 19-14-8(B) | API 43-007-30807 | SI/TA approval - May 1, 2014                |

In response to the NOV, the Division and Gordon Creek held a December 2012 conference call. Gordon Creek stated they had capital for equipping the field with well-site separators, electrification, pumping equipment and pipelines. Gordon Creek also stated they had capital for drilling additional wells in the field and committed to meeting shut-in well requirements for the above subject wells. Gordon Creek submitted a letter dated December 18, 2012, stating that it conducted casing integrity tests on all of the subject wells between July and September of 2010. Similar tests were also conducted on five (5) of the subject wells in 2011. The integrity tests were submitted to the Division. In addition, Gordon Creek submitted a letter dated December 19, 2012, specifically outlining its 2013 field development plans to electrify parts of the field, recomplete the Gordon Creek ST 4-18-14-18, Gordon Creek ST 3-20-14-8 and Gordon Creek ST 2-29-14-8 wells and drill 20 new additional wells. The Division later granted shut-in and temporary abandonment approvals for six (6) of the seven (7) wells listed above based on submitted sundries meeting shut-in extension requirements and the field plans described in the December 2012 letters with the understanding Gordon Creek would keep the Division updated on field development and any changes to the plans.

If any of the above proposed work was accomplished last year Gordon Creek did not keep the Division informed. We reviewed the Gordon Creek ST 4-18-14-18, Gordon Creek ST 3-20-14-8 and Gordon Creek ST 2-29-14-8 well files and did not find any notices of intent for recompletion or subsequent recompletion sundries for the wells. If work was done on the wells please submit sundries



immediately for the well files. Also, the above extended shut-in approvals required periodic pressure and fluid monitoring to ensure ongoing integrity of the wells. The periodic monitoring should have also been submitted to the Division on individual well sundries for Division review and well files. Shut-in extensions for two of the above wells expired February 1, 2014 and the other four expired May 1, 2014.

As of the date of this letter Gordon Creek currently have seventeen (17) shut-in wells, the above listed seven wells and the following ten (10) new wells:

|                              |                  |                        |
|------------------------------|------------------|------------------------|
| Gordon Creek ST 1A-18-14-18  | API 43-007-30892 | Last Prod – June 2013  |
| Gordon Creek NE-31-13-8      | API 43-007-50243 | Last Prod – May 2013   |
| Gordon Creek NE-32-13-8      | API 43-007-50245 | Last Prod – March 2013 |
| Gordon Creek SW-32-13-8      | API 43-007-50246 | Last Prod – June 2013  |
| Gordon Creek NW-5-14-8       | API 43-007-50248 | Last Prod – July 2013  |
| Gordon Creek ST SW-7-14-8    | API 43-007-50242 | Last Prod – May 2013   |
| Gordon Creek ST SE-B-7-14-18 | API 43-007-50255 | Last Prod – April 2013 |
| → Gordon Creek NW-32-13-18   | API 43-007-50244 | Last Prod – Jan 2014   |
| Gordon Creek NW-31-13-8      | API 43-007-50250 | OPS – Spud Feb 2012    |
| Gordon Creek SE-32-13-8      | API 43-007-50247 | OPS – Spud Jan 2012    |

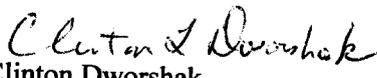
The operator is responsible to file, yearly, for extended shut-in or temporary abandonment for wells shut-in or temporarily abandoned for a period of twelve (12) consecutive months. Gordon Creek must file a Sundry Notice providing the following information for each of the above seventeen listed wells; reasons for shut-in or temporarily abandonment of the well, length of time the well is expected to be shut-in or temporarily abandoned and an explanation and supporting data showing the well has integrity (R649-3-36.1). After review the Division will either approve the continued shut-in or temporarily abandoned status or require remedial action (R649-3-36.2). After five (5) years of non-activity or non-productivity, the well shall be plugged in accordance with R649-3-24, unless approval for extended shut-in time is given by the Division upon a showing of good cause by the operator (R649-3-36.3). Please note, six (6) of the seventeen wells listed above have been shut-in over five (5) years.

Gordon Creek has until **June 30, 2014**, to submit sundries, for the subject wells, in accordance with **Oil and Gas Conservation General Rule 649-3-36 Shut-in and Temporarily Abandoned Wells**.

Should Gordon Creek not meet shut-in and temporarily abandoned well requirements, the Division is prepared to file a Notice of Agency Action (NAA) for Commencement of Informal Adjudicative Proceedings (R649-10-3) for this matter in accordance with Oil and Gas Conservation General Rule R649-10 Administrative Procedures.

If you have any questions or need further assistance, please feel free to contact me at [clintondworshak@utah.gov](mailto:clintondworshak@utah.gov) or 801-538-5280 or Dustin Doucet, Petroleum Engineer, at [dustindoucet@utah.gov](mailto:dustindoucet@utah.gov) or 801-538-5281.

Sincerely,

  
Clinton Dworshak  
Oil and Gas Compliance Manager

CLD/js  
cc: John Rogers, Oil & Gas Associate Director  
Dustin Doucet, Petroleum Engineer  
Well Files  
Compliance File

**BEATTY & WOZNIAK, P.C.**

ATTORNEYS AT LAW  
7440 CREEK ROAD, SUITE 250  
SANDY, UTAH 84093  
TELEPHONE (801) 566-8446  
FACSIMILE (801) 566-8447  
www.bweenergylaw.com

CASPER  
CHEYENNE  
DENVER  
SALT LAKE CITY  
SANTA FE

BRIAN A. TAYLOR

(801) 676-2307  
BTAYLOR@BWEENERGYLAW.COM

December 24, 2014

Clinton Dworshak  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 300  
Salt Lake City, UT 84116

Dear Clint:

The purpose of this letter is to place in writing the agreement between Gordon Creek Energy, Inc. ("Gordon Creek") and the Utah Division of Oil, Gas and Mining (the "Division"), in order to satisfy the requirements of the August 4, 2014 Division Bonding Order (the "Order") issued by the Division.

At a meeting between Gordon Creek and the Division at the offices of the Division on Wednesday October 29, 2014, the Division and Gordon Creek discussed the various issues associated with Gordon Creek's operations in Utah and the impact the Order has on those operations. As a result of those discussions, it is understood by the Division that Gordon Creek is in the process of obtaining both short term and long term financing to enhance its operations in the State of Utah and that securing this financing is essential for Gordon Creek to acquire the necessary bonding for its wells in the State of Utah. It is anticipated that Gordon Creek will obtain some of this financing in early December 2014. Based on the receipt of those funds, Gordon Creek and the Division agreed to the following terms and conditions to withhold enforcement of the Order:

1. The funds obtained in December of 2014 will be used to re-work Gordon Creeks existing shut-in wells and improve the existing infrastructure of Gordon Creeks operations in the State of Utah. It is anticipated that all re-working activities will be completed by the end of December 2014 for the following wells:

**API No.**

**Well Name**

43-007-30881  
43-007-30892  
43-007-50242

Gordon Creek 4-18-14-8  
Gordon Creek 1A-18-14-8  
Gordon Creek SW 7-14-8

**BEATTY & WOZNIAK, P.C.**

Clinton Dworshak  
Utah Division of Oil, Gas and Mining  
December 24, 2014  
Page 2

|              |                          |
|--------------|--------------------------|
| 43-007-50243 | Gordon Creek NE 31-13-8  |
| 43-007-50244 | Gordon Creek NW 32-13-8  |
| 43-007-50245 | Gordon Creek NE 32-13-8  |
| 43-007-50246 | Gordon Creek SW 32-13-8  |
| 43-007-50248 | Gordon Creek NW 5-14-8   |
| 43-007-50249 | Gordon Creek NE 5-14-8   |
| 43-007-50255 | Gordon Creek SE B 7-14-8 |

- Given the winter closure requirements of the Utah Division of Wildlife Resources, from December 1, 2014 until April 15, 2015, and the amount of surface disturbance required to rework the wells, all re-working activities will be completed by June 30, 2015 for the following wells:

| <u>API No.</u> | <u>Well Name</u>           |
|----------------|----------------------------|
| 43-007-30725   | Burnside 29-14-8           |
| 43-007-30807   | Gordon Creek ST 19-14-8(B) |
| 43-007-30883   | Gordon Creek ST 2-20-14-8  |
| 43-007-31233   | Gordon Creek ST 3-20-14-8  |
| 43-007-31234   | Gordon Creek ST 2-29-14-8  |

- Gordon Creek will provide Sundry Notices to the Division on the progress of these well and infrastructure activities as required by the Well Workover and Recompletions rule, Utah Admin. Code R649-3-23.
- The Division will not require Gordon Creek to provide bonding for all of its well locations at once, but will allow it to acquire the necessary depth bonding as described in R649-3-1(5.3) to cover the equivalent of four wells at a time at the rate of \$30,000.00 per well.
- The existing \$120,000.00 blanket bond and the future bonding or surety, provided by Gordon Creek, as outlined in Paragraph 7 below, will cover all of the wells listed on Schedule A of the Order as two separate blanket bonds. In the event it becomes necessary to use proceeds from the blanket bonds, the Division will apply the proceeds to any one or more of the wells listed on Schedule A at its discretion. As such, if the plugging of a well, or group of a wells, cost less than the estimated \$30,000.00 as outlined in R649-3-1(5.3), the Division can use the remaining amount to plug and/or reclaim any of the other wells and well sites on Schedule A.

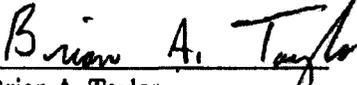
**BEATTY & WOZNAK, P.C.**

Clinton Dworshak  
Utah Division of Oil, Gas and Mining  
December 24, 2014  
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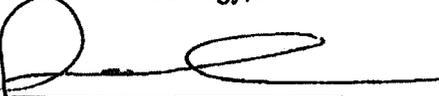
6. The first payment of \$120,000.00 covering the equivalent of four wells will be due and payable by February 27, 2015.
7. Gordon Creek will make additional \$120,000.00 payments every three months until all of the existing shut-in wells listed on Schedule A of the Order are fully covered. These additional payments will be due on or before May 29, 2015, August 31, 2015, and November 30, 2015, with a final payment covering any outstanding amounts by February 27, 2016.
8. In the event Gordon Creek obtains additional long term financing prior to February 27, 2016, it will pay any remaining amount owed to have depth bonding on all of its wells in the State of Utah within 30 days of the closing date of the additional financing.
9. The Division will conduct a surface inspection of the wells listed as "Location Abandoned" on Schedule A of the Order to determine if any reclamation work is needed. In the event no reclamation work is needed, the \$1,500.00 bond requirements listed for those lands will be removed from the total amount owed by Gordon Creek.
10. When Gordon Creek has satisfied the requirements for a blanket bond under R649-3-1 (6), the Division will release all additional bonding required by the Order upon the request of Gordon Creek.

If I have accurately stated our agreement and understanding, please sign below and return to me at your earliest opportunity.

Respectfully,

  
\_\_\_\_\_  
Brian A. Taylor  
Attorney for Gordon Creek Energy

Gordon Creek Energy, Inc.

  
\_\_\_\_\_  
Rupert Evans  
President

**BEATTY & WOZNIAK, P.C.**

Clinton Dworshak  
Utah Division of Oil, Gas and Mining  
December 24, 2014  
Page 4

The above correctly sets forth our agreement and understanding

Utah Division of Oil, Gas and Mining

Date: 12/30/14

Clinton L. Dworshak  
By: Clinton Dworshak  
Compliance Manager

BAT: dc  
5056.0002  
334073

cc: John Rogers, Associate Director  
Dustin Doucet, Petroleum Engineer  
Douglas J. Crapo, Assistant Attorney General  
John Robinson Jr., Assistant Attorney General