



LETTER OF INTRODUCTION

**LONE TREE NORTH 4-65 15-16 PHASE 2
1AH, 1BH, 1CH, 1DH, 2AH, 2BH, 2CH, 2DH, 3AH**

City File No. DA-2093-01

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1AH-1DH, 2AH-2DH & 3AH
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LONE TREE NORTH PHASE 2
1AH, 1BH, 1CH, 1DH, 2AH, 2BH, 2CH, 2DH, 3AH
OIL & GAS PERMIT
SE/4 NE/4 SEC. 15-T4S-R65W, 6TH P.M.
ARAPAHOE COUNTY, COLORADO
(CITY OF AURORA)

SUBMITTAL:



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Project Summary

Project Location

Lone Tree #4-65 15-16 is an existing oil and gas well facility that is in the SE/4 NE/4 of Section 15, Township 4 South, Range 65 West. One well (3BH) has been drilled and is producing on the existing pad. The 3BH is approximately 1,869 feet south of the north section line and 600 feet west of the east section line. The Lone Tree North 4-65 15-16 Phase 2 (Well Site) has an additional nine proposed well heads, the southernmost phase 2 wellhead (3AH) is located 150 feet north of the existing phase 1 well head 3BH. The nine wells (3AH, 2DH, 2CH, 2BH, 2AH, 1DH, 1CH, 1BH and 1AH) are spaced 25' in the north-south direction, where the northern most well is located 1,369 feet away from the northern section line. All nine well heads are in line with the phase 1 well head 3BH and are 600 feet from the eastern section line. 10.7 acres are planned to be disturbed in Phase 2. This site drains to the First Creek watershed and lies outside of the floodplain. Existing topography generally falls from the northeast to the southwest. The landscape is used for planted crops. The project site is on land classified as R2. Please refer to the Vicinity Map in Section A. Please refer to **Site Plan and Vicinity Map**.

Purpose, Well Site Construction and Access Road

Applicant intends to drill and complete an additional nine (9) oil and gas wells from one pad located in the SE/4 NE/4, Sec. 15, T4S, R65W, 6th P.M. Arapahoe County, Colorado. The proposed wells will be known as the Lone Tree 4-65 15-16 1AH, Lone Tree 4-65 15-16 1BH, Lone Tree 4-65 15-16 1CH, Lone Tree 4-65 15-16 1DH, Lone Tree 4-65 15-16 2AH, Lone Tree 4-65 15-16 2BH, Lone Tree 4-65 15-16 2CH, Lone Tree 4-65 15-16 2DH and Lone Tree 4-65 15-16 3AH. The desired outcome of this application is to permit the construction of this Well Site. The purpose of the wells is to produce hydrocarbons from underlying formations known to have commercial potential from the production of such substances.

Lone Tree North Phase 2 is proposed to be a 600 foot by 350 foot (4.8 acre) northern expansion to the Phase 1 pad, which was approved August 30, 2017 (DA-2093-00). The expansion of the drill pad will be graded flat (0%) and covered with 6" of granular material to encourage minor storm water events absorbing into the ground to minimize runoff. The drill pad is designed to locate the wellheads in a cut condition.

The Well Site will be accessed by an existing twenty-three foot (23') wide private gravel gravel roadway, paralleling and outside of the future Hayesmount Road alignment and connecting to existing Hayesmount Road (County Road) at its southern terminus point in the Southeast corner of Sec. 10, T4S, R65W. Access to the site will not use any roads within the jurisdictional boundaries of the City of Aurora.

The timing of all phases of operations are subject to change due to equipment availability, safety considerations, and weather cooperation. Construction of the Well Site will require approximately 45 days of work. Best Management Practices (BMPs) will be installed to mitigate the earthmoving activities and to stabilize the disturbed surfaces to achieve revegetation. A wildlife fence will be erected around the Well Site and a locked gate will be installed at the access road/Well Site entrance. In conjunction with the interim reclamation phase, an eight foot (8') tall opaque fence and locking gate will be installed around the pad. This fencing and gate will provide security for the life of the Well Site.

Equipment used on this site will consist of a temporary drill rig and associated support equipment, followed by a completion phase utilizing temporary hydraulic fracturing equipment, and ultimately ten (10) wellheads (1 existing with previously approved Phase 1 site plan and 9 proposed with this Oil and Gas

Permit) with minimal on-site plumbing and oil and gas equipment.

The BMP Site Specific narratives that follow summarize the BMPs listed in Exhibit C of the Operator Agreement (OA) between the City of Aurora and ConocoPhillips Company and its subsidiaries, dated June 5, 2019 with a brief explanation of how the Applicant intends to accomplish the obligation of each specific BMP for the Lone Tree North project.

Please note that the numbering does not correlate to the individual BMP Operating Agreement numbers.

1. **Definitions:** The Operator Agreement references the following defined terms that have been used throughout this application: **Residential Building Unit, High Occupancy Building, Construction Phase, Drilling Phase, Completion Phase, Production Phase, and Reclamation Phase.** *(see Operator Agreement, Exhibit C, BMP No. 1).*
2. **Access Roads:** The access road for the Lone Tree North 4-65 15-16 Phase 2 project uses the same access road as Phase 1 of the Lone Tree North 4-65 15-16 (aka the Lone Tree North Phase 1) that was approved August 30, 2017. The final access road alignment was laid out during the civil survey. The route was also based on the surface rights that were granted in road easement agreements the Surface Use Agreement along with the local topography. Because the public road is not constructed of a hard surface, the first 100 feet of the access road was not constructed of an improved hard surface. The access road was constructed in conformance with the City's 2016 Roadway Specification Manual. *(See Operator Agreement, Exhibit C, BMP No. 28; Site Plan: General Construction Notes 4&6; Fire Access Road and Pad Construction Note Nos. 1, 2 and 3; and Operations Plan.)*
3. **Air Quality:** Applicant's Environmental Group has worked with City Planning staff (Juliana Berry) to provide an Air Quality Field Wide Plan as well as a Site-Specific Plan pursuant to discussions on September 18, 2019 and submitted with this Application. This comprehensive plan addresses policies and procedures used to evaluate, eliminate, capture, or minimize all potentially harmful emissions and compliance with all applicable state and federal regulations, including regulations promulgated by Colorado Department of Public Health and Environment, Colorado Oil and Gas Conservation Commission and United States Environmental Protection Agency. Applicant will be working with APIS, Inc., a third-party vendor who manufactures and services the air quality monitoring stations within 500 feet of the Well Site. At least five days prior to oil and gas operations commencing, the background monitoring station(s) will be placed away from and upwind of the emission concern areas. The air quality monitoring stations will provide continuous monitoring throughout the life of the well(s). Vendor will also manually deploy at least one whole-air canister to collect samples for a one-week time span prior to oil and gas operations commencing. *(See Operator Agreement, Exhibit C, BMP No. 15; Air Quality Plan, and Site Plan.)*
4. **Anchoring:** During Drilling and Completion phases of the Lone Tree North Phase 2, all equipment requiring anchoring is anchored using surface anchors or removable anchoring systems, no anchors are left behind for future use. During Production Phase, tanks and separation equipment are secured to the ground using anchors engineered to resist flotation, collapse, lateral movement, or subsidence. The Lone Tree North Phase 2 location is not in a floodplain. *(See Operator Agreement, Exhibit C, BMP No. 41.)*
5. **Automatic Safety Protective Systems and Surface Safety Valves:** The Lone Tree North Phase 2 Well Site will be equipped to operate remotely via the automated safety protective system. This system monitors flowing pressures and other operating parameters which have predetermined

threshold values programmed and will remotely shut the well in should certain upset conditions be detected. All vessels and tanks are equipped with high level remote shutdowns to prevent an overflow scenario. Additionally, the automated safety system provides the ability to remotely shut-in wells on demand through operator remote intervention. *(See Operator Agreement, Exhibit C, BMP No. 45 and Operations Plan.)*

6. **Burning:** The Applicant will not allow open burning of debris to occur on the Lone Tree North Phase 2 Well Site or any oil and gas operation, as per City code. This does not include emergency flares. *(See Operator Agreement, Exhibit C, BMP No. 6 and Operations Plan.)*
7. **Chemical Disclosure and Storage:** All hydraulic fracturing chemicals will be disclosed to the Aurora Fire Rescue department. Prior to the bringing of such chemicals onto the Lone Tree North Phase 2 property, the Applicant will make available to the City the storage, containment and disposal method for such chemicals. *(See Operator Agreement, Exhibit C, BMP No. 7 and Operations Plan.)*
8. **Class II Underground Injection Control Wells:** The Applicant will not develop, use, operate, or contract with any third party for the use of any Class II underground injection control wells within the city limits or within a four-mile buffer of the City's existing or planned critical infrastructure. Notwithstanding the four-mile buffer, Applicant may use the Class II underground injection well operated by Expedition Water Solutions located in the SW/ 4 of Section 5, T5SR64W in Arapahoe County. *(See Operator Agreement, Exhibit C, BMP No. 34; and Operations Plan.)*
9. **Closed-Loop Pitless System for the Containment and/or Recycling of Drilling Fluids:** Lone Tree North Phase 2 wells will be drilled, completed and operated using closed-loop pitless systems for containment and/or reuse of all drilling, completion, flowback and produced fluids. Applicant will reuse fluids to the maximum extent practicable, with the City's understanding that Applicant is limited in its ability to reuse all fluids. All above ground storage, including tanks and separators, for use during drilling, completion, flowback and other produced fluids will have secondary containment. The secondary containment system used around the tank battery is an engineered steel panel containment wall with a full impermeable synthetic liner under all tanks and up the sides of the containment wall. This system is consistent across our operations, no difference between site specific and field wide design. *(See Operator Agreement, Exhibit C, BMP No. 5; Operations Plan and Site Plan.)*
10. **Color/Paint Color:** All permanent above ground associated production equipment, structures and stationary equipment for the Lone Tree North Phase 2 will be painted in a tan or brown matte finish unless a different color is necessary for safety per regulations. *(See Operator Agreement, Exhibit C, BMP No. 8; Operations Plan; and Site Plan Note No. 3.)*
11. **Combustion Devices:** Combustors will be available at the Lone Tree North Phase 2 Well Site during the entire production phase to eliminate fugitive emissions for maintenance or emergency use only. The device will be fired using natural gas and operate with a 98% or higher hydrocarbon destruction efficiency. The device will be designed and operated in a manner that will ensure no visible emissions during normal operation. Visible emissions do not include radiant energy or water vapor. *(See Operator Agreement, Exhibit C, BMP No. 19; Operations Plan; Air Quality Plan and Site Plan (Production page) Best Management Practices Note No. 7.)*
12. **Containment Berms:** A containment system capable of containing one and one-half times (150%) the capacity of the largest vessel, plus sufficient freeboard to prevent overflow will be constructed around all permanent tanks at the Lone Tree North Phase 2 Well Site. The containment system

will be constructed of a steel-rim berm and lined with a synthetic or engineered liner, mechanically connected to the steel-rim which will surround all primary containment vessels. When used, temporary vessels will have secondary containment constructed from lined earthen berms or pre-engineered, duck-pond style containment systems. All berms and containment devices will be inspected quarterly. *(See Operator Agreement, Exhibit C, BMP No. 40; Site Plan; Notes #2, Best Management Practices Note No. 2.)*

- 13. Cultural and Historical Resource Protection:** Applicant has not discovered any landmark buildings or sites within the disturbance area for the Lone Tree North Phase 2. Construction, alteration, removal or demolition of a building or feature or any changes that would impair the cultural or historical association of the landmark building, landmark site or historical district pursuant to those qualities depicted in the City of Aurora Municipal Code will not be made without first obtaining approval. If there is a discovery of historical artifacts at the Lone Tree North Phase 2 Well Site, the City will be notified. *(See Operator Agreement, Exhibit C, BMP No. 47 and Operations Plan.)*
- 14. Discharge Valves:** Open-ended discharge valves on all storage tanks and other containers within the Lone Tree North Phase 2 Well Site will be secured, capped, or blind-flanged, and so they will not be accessible to the general public. The Applicant will ensure that all open-ended discharge valves within the Well Site are placed within the interior of the secondary containment area. *(See Operator Agreement, Exhibit C, BMP No. 11 and Operations Plan.)*
- 15. Electric Equipment:** Pursuant to the OA, Electric Equipment is required at sites along and west of Monaghan Rd. as shown on Exhibit A-3. The Lone Tree North Phase 2 well site is located east of Monaghan Rd and is not identified on Exhibit A-3 and therefor is exempt from this BMP. *(See Operator Agreement, Exhibit C, BMP No. 13 and Operations Plan.)*
- 16. Events or Incidents:** In the event of a medical, fire or explosion incident on the Lone Tree North Phase 2 Well Site, 911 will be called and local emergency services will be dispatched. Any COGCC reportable safety events or OSHA reportable injuries at the Lone Tree North Phase 2 Well Site will be reported to the City within 24 hours. *(See Operator Agreement, Exhibit C, BMP No. 37 and Emergency Response Plan.)*
- 17. Emergency Response Plan:** A site specific Emergency Response Plan (ERP) has been submitted for this site. The Applicant's emergency response will be uniform and will be executed in the format outlined in the ERP for all emergencies. A revised Emergency Response Plan has been provided to the City. The ERP provides 24 hour contact information for persons responsible for emergency field operations, information on evacuation routes and locations of healthcare facilities anticipated to be used as well as a detailed plan for response to emergencies that may include any or all of the following: explosions, fires, gas, oil or water pipeline leaks or ruptures. The ERP also provides guidance on training and coordination and communication with City emergency personnel and departments. *(See Operator Agreement, Exhibit C, BMP No. 14, and Emergency Response Plan.)*
- 18. Fencing:** Secure, opaque fencing will be installed at the Lone Tree North Phase 2 Well Site after interim reclamation has been completed. This fencing will be eight feet tall. *(See Operator Agreement, Exhibit C, BMP No. 17 and Site Plan.)*
- 19. Flammable Material:** The Lone Tree North Phase 2 Well Site will be maintained in a manner so to ensure that all ground within twenty-five (25) feet of any tank or other structure containing

flammable or combustible materials will be kept free of dry weeds, grass, rubbish or landscaping. (See *Operations Plan and Operator Agreement, Exhibit C, BMP No. 18.*)

20. **Flowlines:** All flowlines (the pipeline connecting the wellhead to the production facility) are contained entirely within the boundary of the well pad. No off-location flowlines as defined and set forth in COGCC Rule 1101, will be utilized. (See *Operations Plan, Operator Agreement, Exhibit C, BMP No. 42 and Site Plan; Notes #11.*)
21. **Fugitive Dust Suppression:** Dust associated with Site activities and traffic on roads will be minimized throughout all phases such that there are no visible dust emissions from sites or roads to the maximum extent practicable given wind conditions. Numerous mitigation measures are in place to minimize dust emissions including (but not limited to): application of fresh water to roads and ground during earth moving activities, curtailment of work during windy conditions and re-establishment of vegetation on disturbed areas that are not graveled. (See *Operations Plan and Operator Agreement, Exhibit C, BMP No. 12, Dust Suppression Plan.*)
22. **General Maintenance:** All equipment will be operated and maintained pursuant to manufacture specifications consistent with technological limitations and reasonable and customary maintenance practices. In addition to automated shutdowns, preventative maintenance and best practices are in place to prevent leaks from vessels. These include (but are not limited to) yearly shut-downs and visual inspections of each 2-phase and 3-phase vessel on site, yearly non-destructive testing of each 2-phase and 3-phase vessel shell and head on site, internal coating to prevent corrosion, weekly environmental checks by operations personnel, non-destructive testing of all water piping, and non-destructive testing of various flowlines to monitor for thin walled piping caused by erosion or corrosion. (See *Operator Agreement, Exhibit C, BMP No. 35 and Operations Plan.*)
23. **Landscaping:** Landscaping will be performed on the Lone Tree North Phase 2 once reasonable access to a City water main is within four hundred feet (400') of the Well Site. (See *Operations Plan and Operator Agreement, Exhibit C, BMP No. 20, and Site Plan: Landscape Plan Sheet(s).*)
24. **Lighting:** Lighting is only used during the Drilling and Completion Phases of operations. No permanent lighting will be installed. All lighting used will be situated so that is downcast and does not shine beyond the boundary of the oil and gas operations area. (See *Operations Plan and Operator Agreement, Exhibit C, BMP No. 21 and Lighting Plan, Site Plan; Photometric Sheet(s).*)
25. **Low Profile Tanks:** All tanks installed on the well site will be no taller than sixteen feet (16'). (See *Operations Plan and Operator Agreement, Exhibit C, BMP No. 9, and Site Plan: Production Equipment Representative Table.*)
26. **Maintenance of Machinery:** Routine field maintenance of vehicles and mobile machinery will not be performed within 500 feet of navigable waters of the United States. All fueling will occur over impervious material. The Maintenance Supervisor and all supporting personnel will be responsible for compliance with BMP No. 22. (See *Operator Agreement, Exhibit C, BMP No. 22 and Operations Plan.*)
27. **Mud Tracking:** The Applicant will take all practicable measures to ensure that vehicles do not track mud or debris onto City streets. If mud or debris is deposited on City streets the Applicant will clean the streets in a reasonable amount of time, or within 24 hours of notice by the City. If the clean-up cannot be done or is postponed the Applicant will notify the City. Further information

may be found in the Operations Plan. This will be accomplished by the Construction Supervisor, Drilling Superintendent, Completions Supervisor and Maintenance Supervisor who understand this requirement and has the responsibility to ensure their teams will meet this requirement. (See *Operator Agreement, Exhibit C, BMP No. 23 and Operations Plan.*)

28. Noise Management Plan/Noise Mitigation: The Applicant will comply with the sound limitation regulations set forth in the COGCC 800 Series Aesthetic and Noise Control regulations. The Applicant had Behrens Engineering, a third-party engineering firm, perform an environmental noise impact assessment and will follow its mitigation recommendations to stay in compliance with the COGCC 800 series requirements. Applicant provided Behrens' Noise Modeling Report to the City.

- Per Section 2.2 of the OA, Applicant is required to conduct a baseline noise study if a New Well is planned within 2,640' of 5 Residential Building Units (RBU) or 1 High Occupancy Building (HOB). There are less than five (5) RBU's within 2,640' of the Lone Tree North Phase 2 Well Site, and there are no HOB's within 2,640' of the Lone Tree North Phase 2 Well Site, so a baseline noise study is not required.
- Per Section 2.3 of the OA, Applicant is required to use noise mitigation if a New Well is within the area identified on Exhibit A-2 to the OA or if the New Well is within 1,320' of a RBU or 1,500' of a HOB. There are no (0) RBU's within 1,320' of the Lone Tree North Phase 2 Well Site, and there are no (0) HOB's within 1,500' of the Lone Tree North Phase 2 Well Site. However, the Lone Tree North Phase 2 Well Site is located within the area identified on Exhibit A-2 to the OA, so Applicant will use noise mitigation during the Drilling and Completion Phases for the Lone Tree North Phase 2 Well Site. Applicant will use Noise mitigation berms during the Drilling Phase and sound walls and portable sound panels to mitigate noise emissions during the Completion Phase.
- Per Section 2.4 of the OA, Applicant may be required to conduct additional noise mitigation for New Wells within 1,320' of a RBU. As stated above, there are no RBU's within 1,320' of the Lone Tree North Phase 2 Well Site.
- Per Section 2.6 of the OA, Applicant is required to address C scale noise/vibration if a New Well is within 1,320' of a RBU or 1,500' of a HOB. As stated above, there are no (0) RBU's within 1,320' of the Lone Tree North Phase 2 Well Site, and there are no (0) HOB's within 1,500' of the Lone Tree North Phase 2 Well Site. However, Applicant will already be using noise mitigation during the Drilling and Completion Phases for the Lone Tree North Phase 2 Well Site pursuant to Section 2.3 of the OA.

Unmitigated noise models of the proposed drilling and fracing operations were constructed for the Lone Tree #4-65 1AH-3AH pad in Arapahoe County, Colorado. The unmitigated noise models indicate that the fracing operations will exceed the C-weighted COGCC noise limit at the modeled receptor location.

Mitigation was added to the unmitigated fracing noise model to reduce the noise levels at the residences in close proximity to the pad. With implementation of the recommended mitigation measures, the fracing operations are predicted to comply with the C-weighted noise limit at all modeled receptor locations. (See Operator Agreement, Exhibit C, BMP No. 2 and Noise Mitigation Plan.)

- 29. Notifications to the City:** *(Regarding Commencement of Operations and Phases of Operations/ Notifications to the City Regarding Commencement of Construction at CGF and Pipeline Operations/Notifications to the City)* The Applicant will notify the City, through the designated City representative, no less than 30 days prior to the commencement of the Construction for the Lone Tree North Phase 2 (unless the Construction Phase commences within 45 days of the approval of the applicable Form 2, Form 2A, or local permit), Drilling, or Completion Phases, and 30 days prior to recompleting, re-drilling, or plugging and abandonment of the well. Operator will provide all required notifications under the OA to the City by notifying Daniel Brotzman by e-mail at dbrotzman@auroragov.org as well as Stephen Rodriguez by e-mail at srodrigu@auroragov.org. *(See Operator Agreement, Exhibit C, BMP No. 4.)*
- 30. Noxious Weed Control:** All disturbed ground not needed for subsequent operations for Lone Tree North Phase 2, including stockpiles and cut and fill slopes, are seeded and mulched in accordance with the permits. Approved weed-free seed mix is used, and these areas are monitored and maintained for weed establishment for the life of the well. *(See Operator Agreement, Exhibit C, BMP No. 33, Weed Control Plan and Operations Plan.)*
- 31. Odor:** Applicant will mitigate odors by routing to closed loop systems to the maximum extent practicable. If the Applicant receives complaints from a Residential Building within 1,320 feet from the site, Applicant will take measures to mitigate the odor within 24 hours, based on the specific circumstances. Further detail may be found in the Air Quality Plan and Operations Plan provided with this application. *(See Operator Agreement, Exhibit C, BMP No. 36, Air Quality Plan and Operations Plan.)*
- 32. PHA-Hazard and Operability Study:** The Applicant has provided a letter that the engineer of record has incorporated all applicable PHA-HAZOP recommendations in the design. On January 29, 2018 a PHA-HAZOP was facilitated by Cyndee R. Clouse, a certified facilitator, and conducted by a multi-disciplined team for the Multi-Well Pad Facility with Individual Separation. While the facility design being evaluated does not fall under Process Safety Management (PSM) pursuant to OSHA 29 CFR 1910.119, the HAZOP process was similar. This study consisted of a risk assessment utilizing methodology commonly used while conducting a Process Hazard Analysis (PHA) with a Layers of Protection Analysis (LOPA). *(See Operator Agreement, Exhibit C, BMP No. 44 and PHA-HAZOP Letter.)*
- 33. Plugged and Decommissioned Well Testing:** Pursuant to COGCC regulation, an offset well evaluation for the Lone Tree North Phase 2 will be submitted to the COGCC for review. This evaluation reveals that one (1) Previously Abandoned well (the State-Smith 1-16) is located within one thousand five hundred feet (1,500') of the proposed well tract for any New Well proposed to be drilled from the Lone Tree North Phase 2 Location. Pursuant to the OA, notice was sent to the Surface Owner requesting access to the property for the purpose of testing the Previously Abandoned Well. Subsequently, the Surface owner responded to this notice by denying the request. Permission from the Operator of Record could not be obtained, this company is no longer in existence. Therefore, no plugged and decommissioned well testing is required for the Lone Tree North Phase 2. *(See Operator Agreement, Exhibit C, BMP No. 43 and Operations Plan.)*
- 34. Reclamation:** Because the Lone Tree North Phase 2 is surrounded by cropland, pursuant to COGCC rule 1003 (b.), Interim Reclamation will occur within three months of first production. The Applicant will comply with COGCC Rules 1000 series governing the reclamation of sites. An ***Interim Reclamation Plan*** has been provided within the Site Plan for this application further detailing site-specific reclamation that will take place following the well(s) being put into production. Additional

information regarding Interim reclamation may also be found in the Storm Water Management Plan (SWMP), submitted to the Public Works Department and approved by that department. A ***Final Reclamation Plan*** will be submitted to the City concurrently with the Applicant's plugging and abandonment permit submission to the COGCC. Areas reaching substantial completion of grading and topsoil placement operations will be drill seeded and crimp mulched within 14 days of substantial completion of grading and topsoil operations. If an incomplete area is to remain inactive for longer than 30 days, it will be drill seeded and crimp mulched or otherwise landscaped within 14 days from the suspension or completion of land disturbance activities. (See Operator Agreement, Exhibit C, BMP No. 39 and Operations Plan.)

- 35. Reduced Emission Completions (Commonly known as Green Completions):** The Applicant will comply with the EPA Reduced Emission Completions rules (under 40 CFR 60 Subpart OOOO and OOOOa) for oil and gas wells. Applicant will apply best management practices to safely maximize resource recovery and minimize releases to the environment. Applicant was an early adopter of reduced emissions completions (green completions), a charter member of the Natural Gas Star program, and is committed to reducing emissions from flaring and venting. For all projects in the City including the Lone Tree North Phase 2 project, we plan to have a gas pipeline installed and ready to accept natural gas production immediately after initial flowback of wells on this site. Further detail may be found in the Operations Plan and the Air Quality Plan provided with this application. (See Operator Agreement, Exhibit C, BMP No. 16, Operations Plan and Air Quality Plan.)
- 36. Removal of Debris:** The Applicant will ensure that all construction-related debris is removed from the Well Site for proper disposal in a timely manner. The Applicant will ensure that Well Site is reasonably free of debris and excess materials at all times during all phases of operations. Applicant shall not stockpile debris at the Well Sites. (See Operator Agreement, Exhibit C, BMP No. 24 and Operations Plan.)
- 37. Removal of Equipment:** At the end of the flowback stage of development (the beginning of the Production Phase), all temporary equipment will be removed from the Lone Tree North Phase 2 site (within 30 days), leaving only the wellhead(s) and the permanent production facilities, including, separators, storage tanks and emissions control equipment. No permanent storage of removable equipment will occur on any well site. (See Operator Agreement, Exhibit C, BMP No. 25 and Operations Plan.)
- 38. Road Repairs:** No roads within the jurisdictional boundaries of The City of Aurora will be used to access this site. The Applicant will coordinate with Arapahoe County for payment of traffic impact fees, if applicable. Road repairs will be addressed pursuant to the requirements of Arapahoe County. (See Operator Agreement, Exhibit C, BMP No. 29, Operations Plan.)
- 39. Spills:** The Applicant will notify the City of any spill of materials on permeable ground at Lone Tree North Phase 2 Well Site that has a reportable quantity under any applicable laws. Applicant will provide a copy of the self-reporting submissions that the Applicant provides to the COGCC due to any spill on the Well Site. Further detail may be found in the Spill Prevention, Control and Countermeasure Plan (SPCC) provided with this application. (See Operator Agreement, Exhibit C, BMP No. 38 and Operations Plan.)
- 40. Stormwater Management:** The Applicant will not begin construction of the Lone Tree North Phase 2 Well Site until a Stormwater Water Management Plan (SWMP) is approved by the City and a stormwater quality discharge permit has been acquired for the Well Site. Applicant will

perform monthly inspections of stormwater BMPs, or after a storm event. Further detail may be found in the SWMP provided with this application. *(See Operator Agreement, Exhibit C, BMP No. 30, Operations Plan and Stormwater Management Plan.)*

41. **Trailers:** The Applicant will not place any permanent trailers on the Lone Tree North Phase 2 Well Site. The Applicant will have temporary construction trailers on site during the Construction, Drilling and Completion phases of development and up to 6 months following the Completions phase of development. *(See Operator Agreement, Exhibit C, BMP No. 26, Operations Plan, and Site Plan (Drilling sheet).)*
42. **Transportation and Circulation:** The Applicant has provided the Traffic Management Plan and Traffic Letter with this application. The Lone Tree North Phase 2 haul route is depicted on the Haul Route Sheet of the site plan. No roads within the jurisdictional boundaries of The City of Aurora will be utilized to access this site. *(See Operator Agreement, Exhibit C, BMP No. 27 and Road Maintenance Agreement.)*
43. **Transportation and Storage of Fluids:** The Applicant will utilize pipelines for the transportation of hydrocarbons for the Lone Tree North Phase 2. Non-potable water used for hydraulic fracturing will be transported by above-ground water supply line, typically 12" in diameter and typically made of synthetic rubber or similar "hose" material. They are used for the transfer of water from an identified water source to support company's hydraulic fracturing operations. Permanent tanks will be used for storage and transportation of produced water, and for storage of oil under downtime due to third parties. All third-party trucking operations will be subject to the Applicant's HSE policies and procedures. *(See Operator Agreement, Exhibit C, BMP No. 3, Site Plan (Operations Plan page), and the Water Delivery Method.)*
44. **Tree Mitigation:** There are no trees required to be removed at the Lone Tree North Phase 2 Well Site.
(See Operator Agreement, Exhibit C, BMP No. 10, and Operations Plan.)
45. **Visual Mitigation:** Operator Agreement, Exhibit C, BMP No. 49 applies to four specific Well Sites, the Lone Tree North Phase 2 is not one of these Well Sites. *(See Operator Agreement, Exhibit C, BMP No. 49.)*
46. **Wastewater and Waste Management:** All fluids and waste will be contained and disposed of at licensed disposal or recycling facilities outside of the City. Applicant will provide a Spill Prevention, Control and Countermeasure Plan (SPCC) with the application. *(See Operator Agreement, Exhibit C, BMP No. 31, Waste Management Plan and the SPCC Plan attached as an appendix thereto, and Operations Plan.)*
47. **Water Protection Requirements:** Identification of sensitive water resources begins in the pre-development planning stage of the project. The proximity of wells to existing City infrastructure is depicted on the Adjacent Visible Improvements sheet of the Site Plan. BMP No. 48 describes that all new wells will be located a minimum of 500' from City Infrastructure unless vibratory studies confirm that no negative impacts occur to the City Infrastructure. *(See Operator Agreement, Exhibit C, BMP No. 48 and Operations Plan.)*
48. **Water Quality Monitoring Plan/Groundwater Pollution Mitigation:** The Applicant will sample existing water wells prior to drilling activities and will continue to sample existing or installed wells through the Production Phase, until final Reclamation Phase is completed for the well site to

ensure that groundwater has not been contaminated by the Applicant's activity. As the well is constructed, concentric layers of steel casing and cement form the barrier to protect groundwater resources from the contents that will later flow inside the well mitigating any potential pollution for groundwater pollution. The depth of the casing will extend to the deepest known depth of the freshwater aquifers. Surface casing is set at +/- 2600 ft TVD and cemented to surface. The production casing is a long string and is cemented to 200 ft inside the surface casing by design. If needed during the Drilling Phase, Applicant shall run temperature or cement log if surface casing cement is not circulated to the surface in order to ensure integrity. Completion well preparation tests production casing to 9800 psi before opening toe sleeve or perforating toe. If pressure test is unsuccessful (i.e. the toe valve leaks) a plug is deployed to test to 9800 psi as deep as the plug will go on wireline. During the production phase the Applicant will monitor casing pressures using pressure transmitters in the surface. Bradenhead testing will be performed during the completions phase with COGCC staff onsite. (See *Operator Agreement, Exhibit C, BMP No. 46, Fieldwide Water Quality Monitoring Plan, Site Specific Water Quality Monitor location on the Site Plan and Operations Plan.*)

- 49. Water Supply:** Pursuant to the terms of the Agreement for Delivery of Reusable Raw Water effective September 26, 2017 between the City of Aurora and ConocoPhillips Company the Applicant will take delivery from the City of water to be used during the Drilling, Completions, and Production Phases of development. Further details may be found within the Agreement for Delivery of Reusable Raw Water and in the Water Delivery Method. Operator has a site-specific Water Delivery Plan and Method that has been provided to the City with this application. These temporary, above-ground water supply lines ("Lay Flat Lines") are typically 12" in diameter and made of synthetic rubber or similar "hose" material. They are used for the transfer of water from an identified water source to support hydraulic fracturing operations. (See *Operator Agreement, Exhibit C, BMP No. 32, Agreement for Delivery of Reusable Raw Water effective September 26, 2017 between the City of Aurora and ConocoPhillips Company, and Operations Plan.*)

NEIGHBORHOOD MEETING RESULTS

Farkas, Scott (Veracity Land Services, LLC)

Subject: FW: ConocoPhillips Open House
Attachments: file-7.jpeg; file1-2.jpeg; file2.jpeg; file3.jpeg

From: Mead, Jayme L <Jayme.Mead@conocophillips.com>
Sent: Monday, August 12, 2019 8:55 AM
To: blegare@auroragov.org
Subject: ConocoPhillips Open

House Good morning Mayor,

I know you are aware that ConocoPhillips hosted our neighborhood meeting on August 6th for ten projects reflected in our Operator's Agreement with the City. We had a diverse team pulled together to engage and educate citizens in Aurora on our operations. We had subject matter experts present from ConocoPhillips representing the following fields: health and safety, noise mitigations, permitting, drilling and completions. We sent out 966 invitations to residents within 1 mile of our locations and had 15 residents in attendance. Although the turnout was low, citizens in attendance were very engaged and provided positive feedback on their experience with our staff and the overall flow of the open house.

Here are the only comments received from the open house:

- *"This open house was very organized! I really appreciate the individual time each ConocoPhillips Person showed to the participants. Super Job!"*
- *"All the different informational tables were staff with top notch professionalism. Will attend a follow-up session hopefully if it's planned. Thanks for the invitation."*

I've attached a few pictures from the event to give you an idea of our setup. Please let me know if you have any questions.

Best regards,

Jayme Mead | Stakeholder Relations Advisor Niobrara
ConocoPhillips | 34501 E Quincy Ave. Watkins CO, 80137
T: 303.268.3757 | M: 505.215.6615 | Jayme.Mead@conocophillips.com









TYPICAL PHOTOS



AURORA COLORADO OIL & GAS OPERATIONS
DRILLING RIG

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
DRILLING RIG WITH AUTOMATIC PIPE HANDLING

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
DIESEL FUEL AND GENERATORS WITH SECONDARY CONTAINMENT

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
MATERIALS STORAGE WITH SECONDARY CONTAINMENT

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
PIPE STORAGE RACK

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
OFFICES & TEMPORARY LIVING QUARTERS

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



SAND CASTLES AND TRUCKS

TRUCKS AND PUMPS



AURORA COLORADO OIL & GAS OPERATIONS
COMPLETION SITE

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
TEMPORARY SOUND MITIGATION WALLS

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
MOBILE TORNADO SHELTER

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773

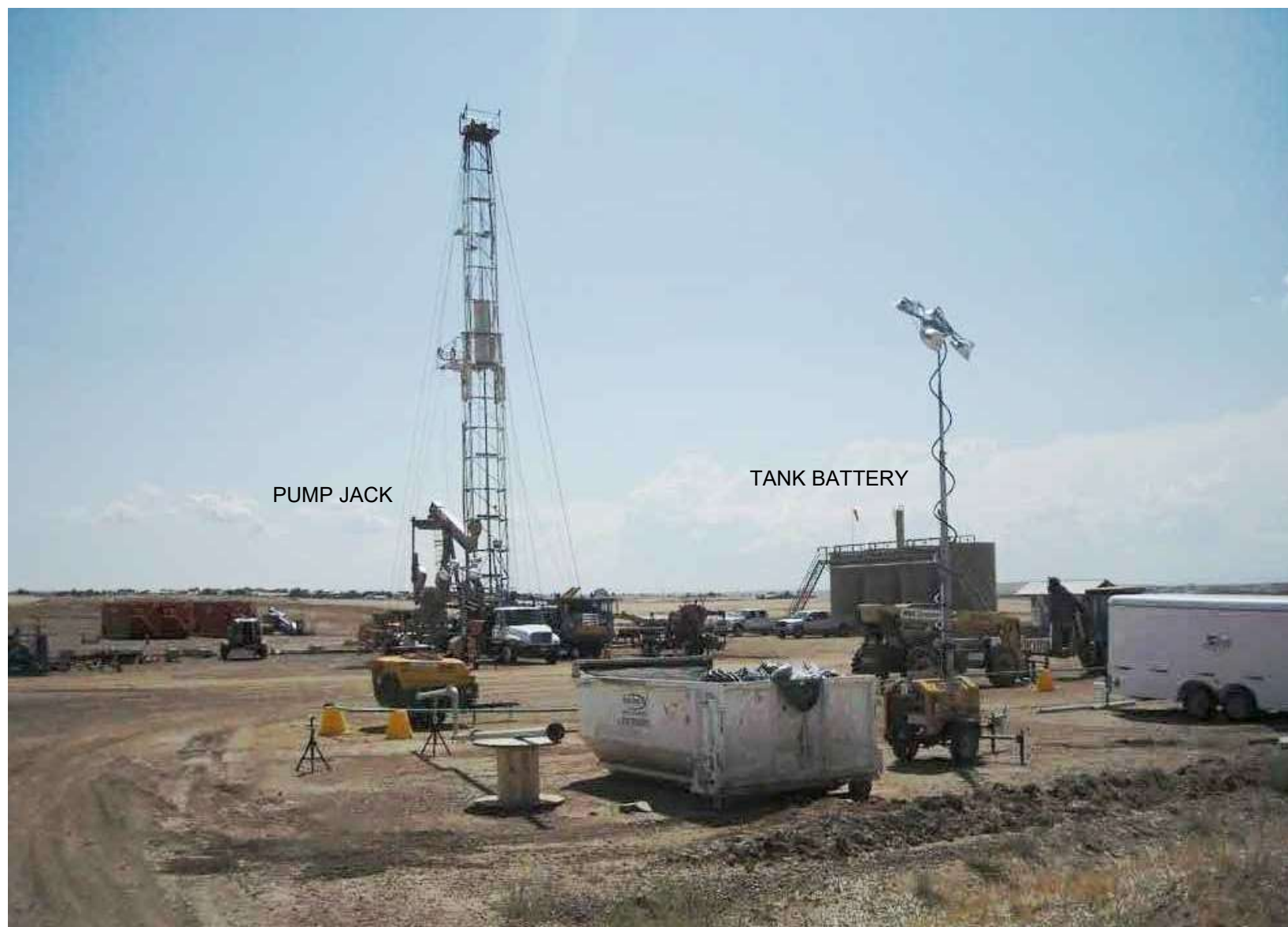


10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
PRODUCTION FACILITY

CONOCOPHILLIPS COMPANY
ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137



AURORA COLORADO OIL & GAS OPERATIONS
WORKOVER RIG-PRODUCTION SETTING

CONOCOPHILLIPS COMPANY





AURORA COLORADO OIL & GAS OPERATIONS
CLOSED LOOP DRILLING SYSTEM (MUD TANKS)

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546



AURORA COLORADO OIL & GAS OPERATIONS
SIGNAGE

CONOCOPHILLIPS COMPANY

ATTN: KATHY DENZER
34501 E. QUINCY AVE., BUILDING 1
WATKINS, CO 80137
PHONE: (303) 268-3773



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

PLAT PACKAGE

ConocoPhillips Company
16 1AH, 1BH, 1CH, 1DH, 2AH, 2BH
3BH PAD
SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

DATE:

DESCRIPTION:

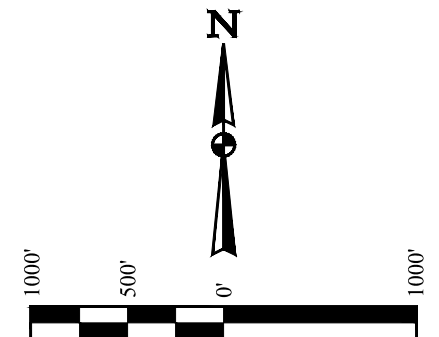
[illegible]

ConocoPhillips Company

LONE TREE #4-65 15-16 1AH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS
BASIS OF BEARINGS IS A G.P.S. OBSERVATION

BASIS OF ELEVATION
BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.








LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N27°57'56"W	1221.45'
L2	N89°56'15"W	135.00'

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO
08-14-16

PDOP = 1.3

 = 90° SYMBOL
 = PROPOSED WELLHEAD.
 = TARGET BOTTOM HOLE.
 = PRODUCTION INTERVAL.
 = SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'26.77" (39.707436)	LATITUDE = 39°42'37.42" (39.710394)	LATITUDE = 39°42'36.95" (39.710264)	LATITUDE = 39°42'36.95" (39.710264)
LONGITUDE = 104°38'34.93" (104.643036)	LONGITUDE = 104°38'42.27" (104.645075)	LONGITUDE = 104°40'15.66" (104.671017)	LONGITUDE = 104°40'17.39" (104.671497)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'26.82" (39.707450)	LATITUDE = 39°42'37.47" (39.710408)	LATITUDE = 39°42'36.99" (39.710275)	LATITUDE = 39°42'36.99" (39.710275)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.39" (104.644553)	LONGITUDE = 104°40'13.77" (104.670492)	LONGITUDE = 104°40'15.50" (104.670972)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683700.19 E: 3241105.84	N: 1684772.33 E: 3240521.39	N: 1684656.77 E: 3233224.11	N: 1684655.43 E: 3233089.16
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683692.60 E: 2241259.48	N: 684764.72 E: 2240675.01	N: 684649.04 E: 2233377.80	N: 684647.70 E: 2233242.84



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

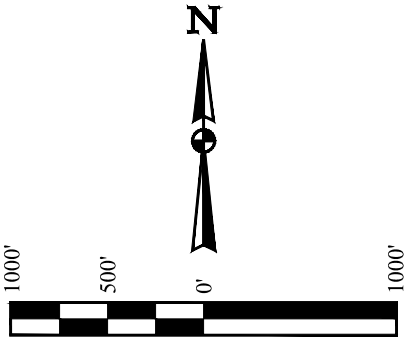
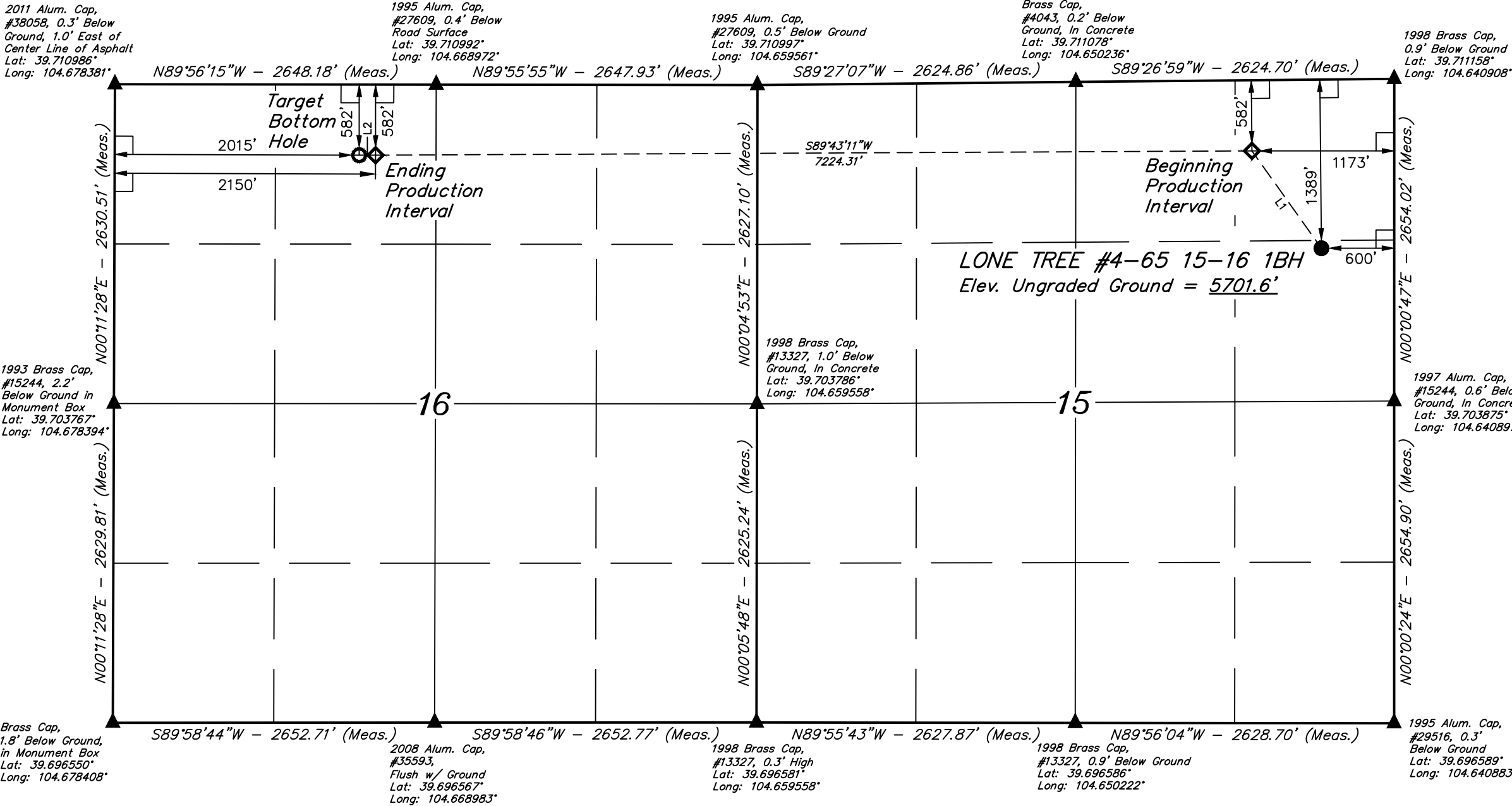
T4S, R65W, 6th P.M.

ConocoPhillips Company

LONE TREE #4-65 15-16 1BH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS IS A G.P.S. OBSERVATION
BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N35°32'27"W	985.38'
L2	N89°56'15"W	135.00'

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO
SECTION 15-16

PDOP = 1.3

LEGEND:

- 90° SYMBOL
- PROPOSED WELLHEAD.
- TARGET BOTTOM HOLE.
- PRODUCTION INTERVAL.
- SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'26.38" (39.707328)	LATITUDE = 39°42'34.29" (39.709525)	LATITUDE = 39°42'33.82" (39.709394)	LATITUDE = 39°42'33.82" (39.709394)
LONGITUDE = 104°38'34.93" (104.643036)	LONGITUDE = 104°38'42.27" (104.645075)	LONGITUDE = 104°40'14.68" (104.670744)	LONGITUDE = 104°40'16.41" (104.671225)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'26.42" (39.707339)	LATITUDE = 39°42'34.34" (39.709539)	LATITUDE = 39°42'33.86" (39.709406)	LATITUDE = 39°42'33.86" (39.709406)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.38" (104.644550)	LONGITUDE = 104°40'12.79" (104.670219)	LONGITUDE = 104°40'14.52" (104.670700)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683660.21 E: 3241106.21	N: 1684455.43 E: 3240524.81	N: 1684340.63 E: 3233303.51	N: 1684339.29 E: 3233168.56
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683652.62 E: 2241259.84	N: 684447.82 E: 2240678.43	N: 684332.91 E: 2233457.21	N: 684331.57 E: 2233322.25



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

T4S, R65W, 6th P.M.

ConocoPhillips Company

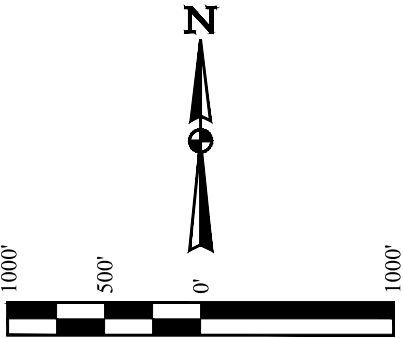
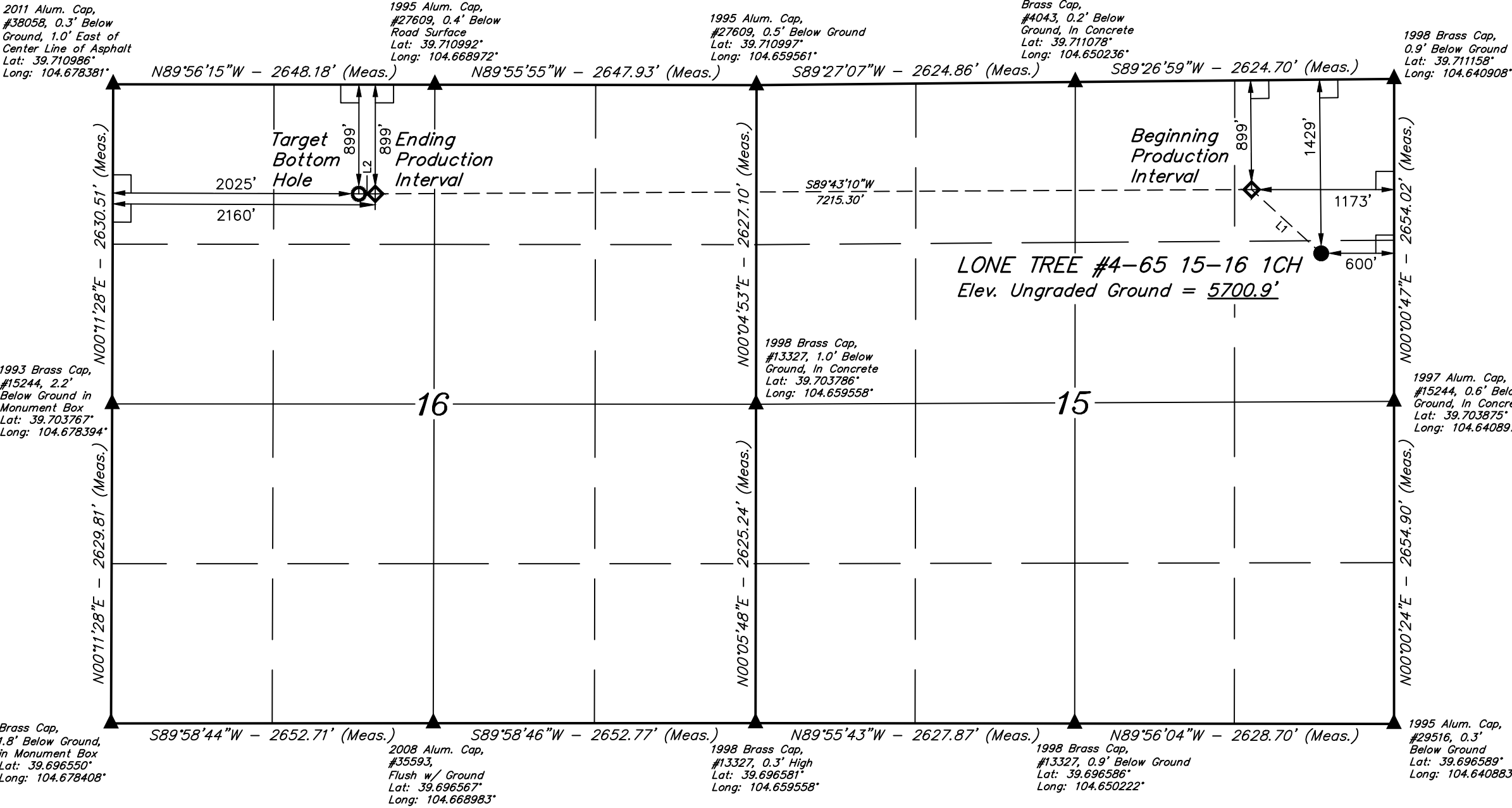
LONE TREE #4-65 15-16 1CH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION

BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N47°30'32"W	776.90'
L2	N89°56'15"W	135.00'

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO

SECTION 15-16

PDOP = 1.3

LEGEND:

- = 90° SYMBOL
- = PROPOSED WELLHEAD.
- = TARGET BOTTOM HOLE.
- = PRODUCTION INTERVAL.
- = SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'25.98" (39.707217)	LATITUDE = 39°42'31.16" (39.708656)	LATITUDE = 39°42'30.68" (39.708522)	LATITUDE = 39°42'30.68" (39.708522)
LONGITUDE = 104°38'34.93" (104.643036)	LONGITUDE = 104°38'42.26" (104.645072)	LONGITUDE = 104°40'14.56" (104.670711)	LONGITUDE = 104°40'16.29" (104.671192)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'26.03" (39.707231)	LATITUDE = 39°42'31.20" (39.708667)	LATITUDE = 39°42'30.73" (39.708536)	LATITUDE = 39°42'30.73" (39.708536)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.38" (104.644550)	LONGITUDE = 104°40'12.67" (104.670186)	LONGITUDE = 104°40'14.40" (104.670667)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683620.23 E: 3241106.66	N: 1684138.52 E: 3240528.22	N: 1684023.83 E: 3233315.94	N: 1684022.49 E: 3233180.99
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683612.64 E: 2241260.30	N: 684130.92 E: 2240681.86	N: 684016.12 E: 2233469.64	N: 684014.77 E: 2233334.69



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

T4S, R65W, 6th P.M.

ConocoPhillips Company

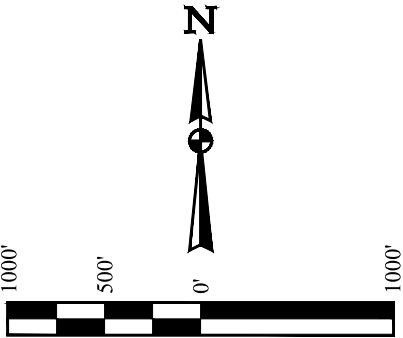
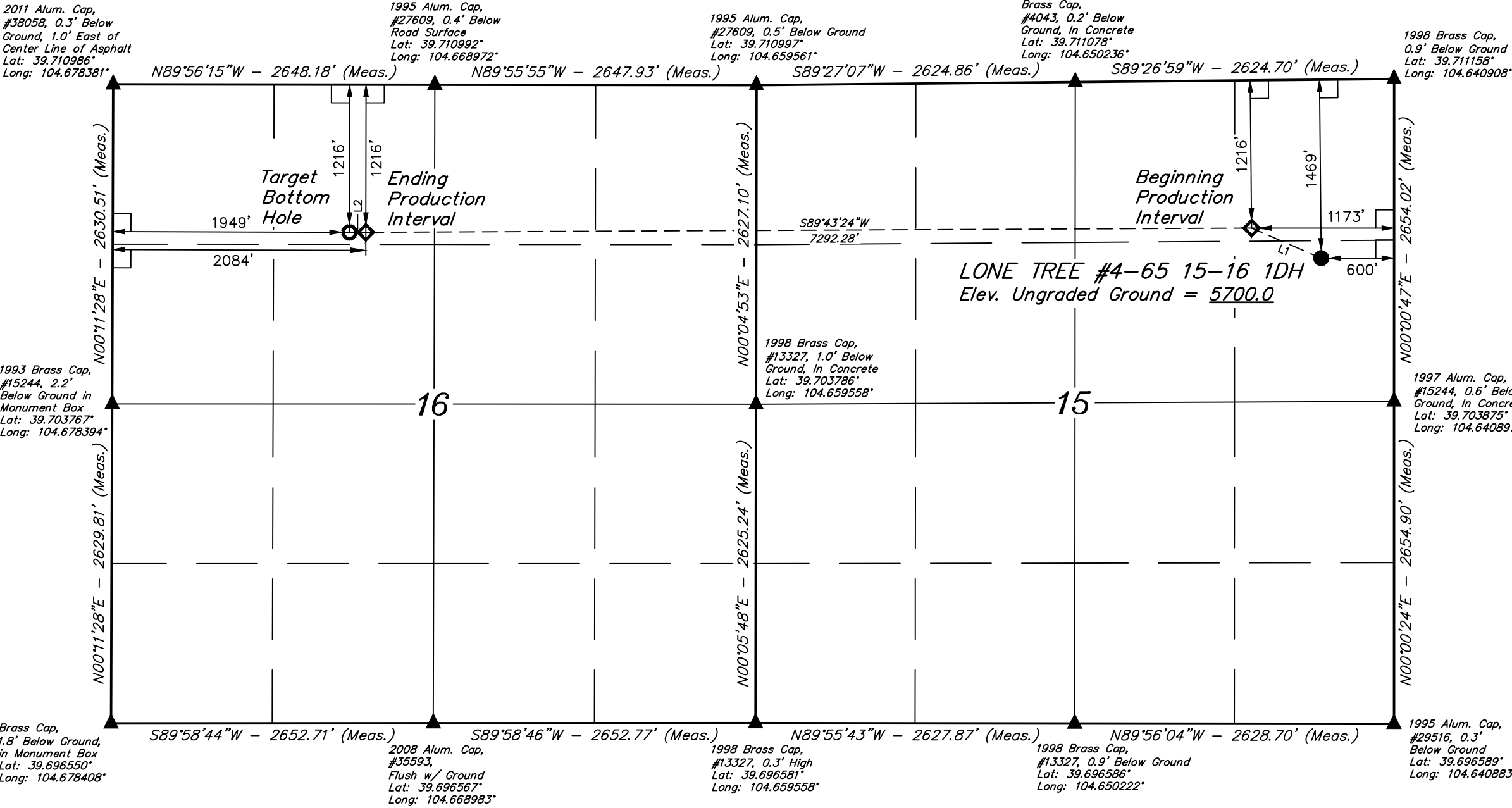
LONE TREE #4-65 15-16 1DH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION

BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N66°36'52"W	624.22'
L2	N89°56'15"W	135.00'

PDOP = 1.3

LEGEND:

- 90° SYMBOL
- PROPOSED WELLHEAD.
- TARGET BOTTOM HOLE.
- PRODUCTION INTERVAL.
- SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'25.59" (39.707108)	LATITUDE = 39°42'28.03" (39.707786)	LATITUDE = 39°42'27.55" (39.707653)	LATITUDE = 39°42'27.55" (39.707653)
LONGITUDE = 104°38'34.92" (104.643033)	LONGITUDE = 104°38'42.26" (104.645072)	LONGITUDE = 104°40'15.54" (104.670983)	LONGITUDE = 104°40'17.26" (104.671461)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'25.63" (39.707119)	LATITUDE = 39°42'28.07" (39.707797)	LATITUDE = 39°42'27.60" (39.707667)	LATITUDE = 39°42'27.60" (39.707667)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.37" (104.644547)	LONGITUDE = 104°40'13.65" (104.670458)	LONGITUDE = 104°40'15.37" (104.670936)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683580.25 E: 3241107.10	N: 1683821.62 E: 3240531.64	N: 1683706.18 E: 3233242.40	N: 1683704.84 E: 3233107.45
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683572.66 E: 2241260.74	N: 683814.02 E: 2240685.28	N: 683698.47 E: 2233396.10	N: 683697.13 E: 2233261.15

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO
SECTION 15-16



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

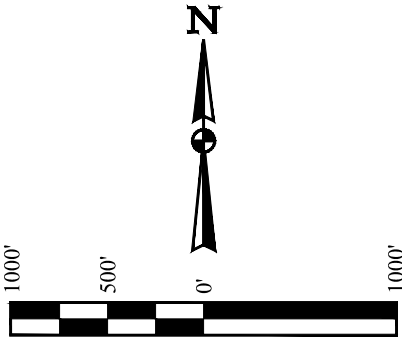
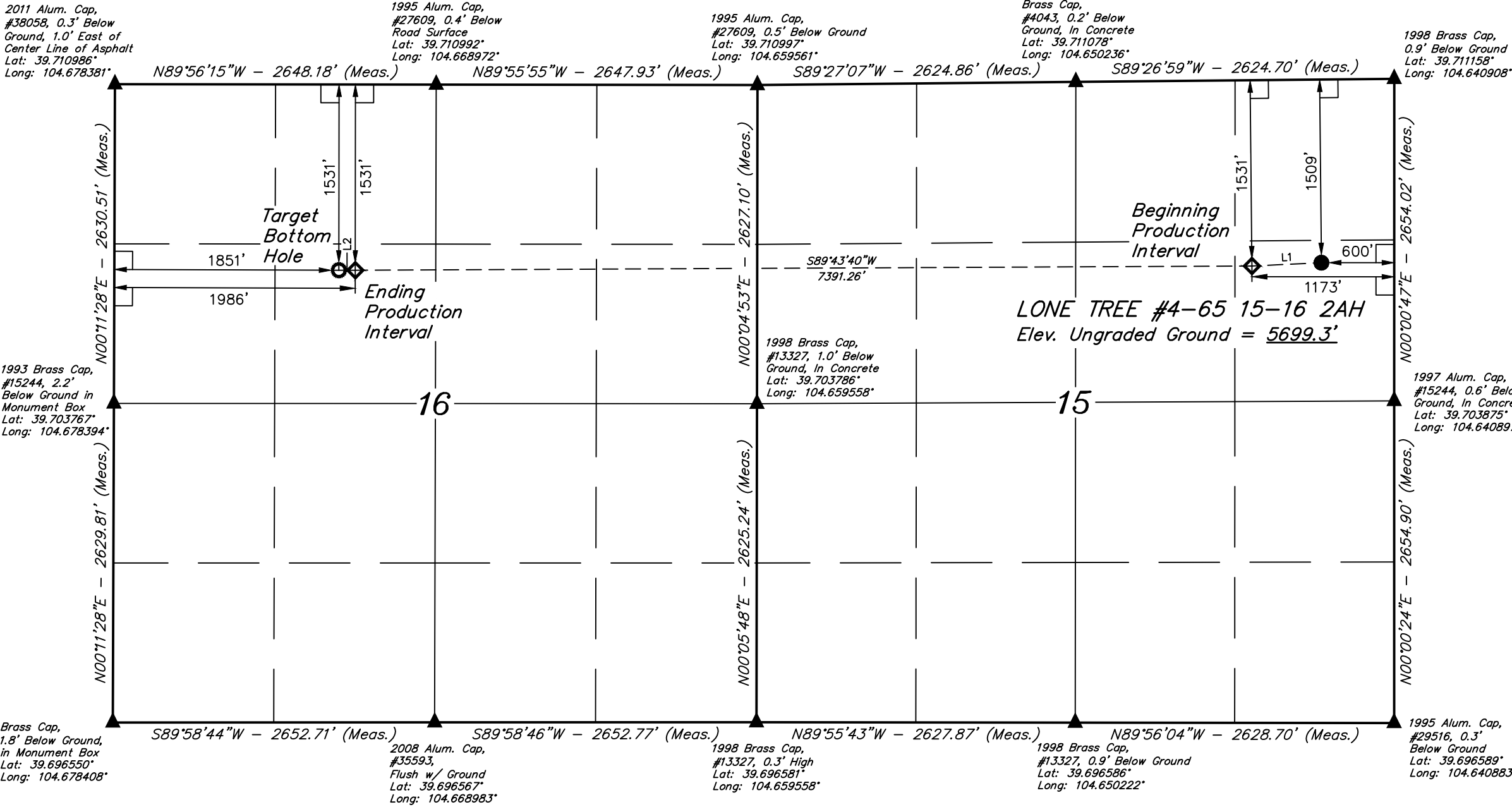
SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

LONE TREE #4-65 15-16 2AH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS
BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S87°16'44"W	573.63'
L2	N89°56'15"W	135.00'

- LEGEND:
- 90° SYMBOL
 - PROPOSED WELLHEAD.
 - TARGET BOTTOM HOLE.
 - PRODUCTION INTERVAL.
 - SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'25.19" (39.706997)	LATITUDE = 39°42'24.91" (39.706919)	LATITUDE = 39°42'24.44" (39.706789)	LATITUDE = 39°42'24.44" (39.706789)
LONGITUDE = 104°38'34.92" (104.643033)	LONGITUDE = 104°38'42.25" (104.645069)	LONGITUDE = 104°40'16.80" (104.671333)	LONGITUDE = 104°40'18.52" (104.671811)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'25.24" (39.707011)	LATITUDE = 39°42'24.96" (39.706933)	LATITUDE = 39°42'24.48" (39.706800)	LATITUDE = 39°42'24.48" (39.706800)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.37" (104.644547)	LONGITUDE = 104°40'14.91" (104.670808)	LONGITUDE = 104°40'16.63" (104.671286)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683540.24 E: 3241107.51	N: 1683506.71 E: 3240535.03	N: 1683390.31 E: 3233146.85	N: 1683388.97 E: 3233011.89
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683532.65 E: 2241261.15	N: 683499.12 E: 2240688.67	N: 683382.60 E: 2233300.56	N: 683381.26 E: 2233165.60

PDOP = 1.4

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO
2015-2018



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

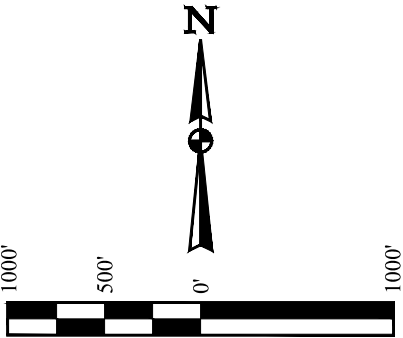
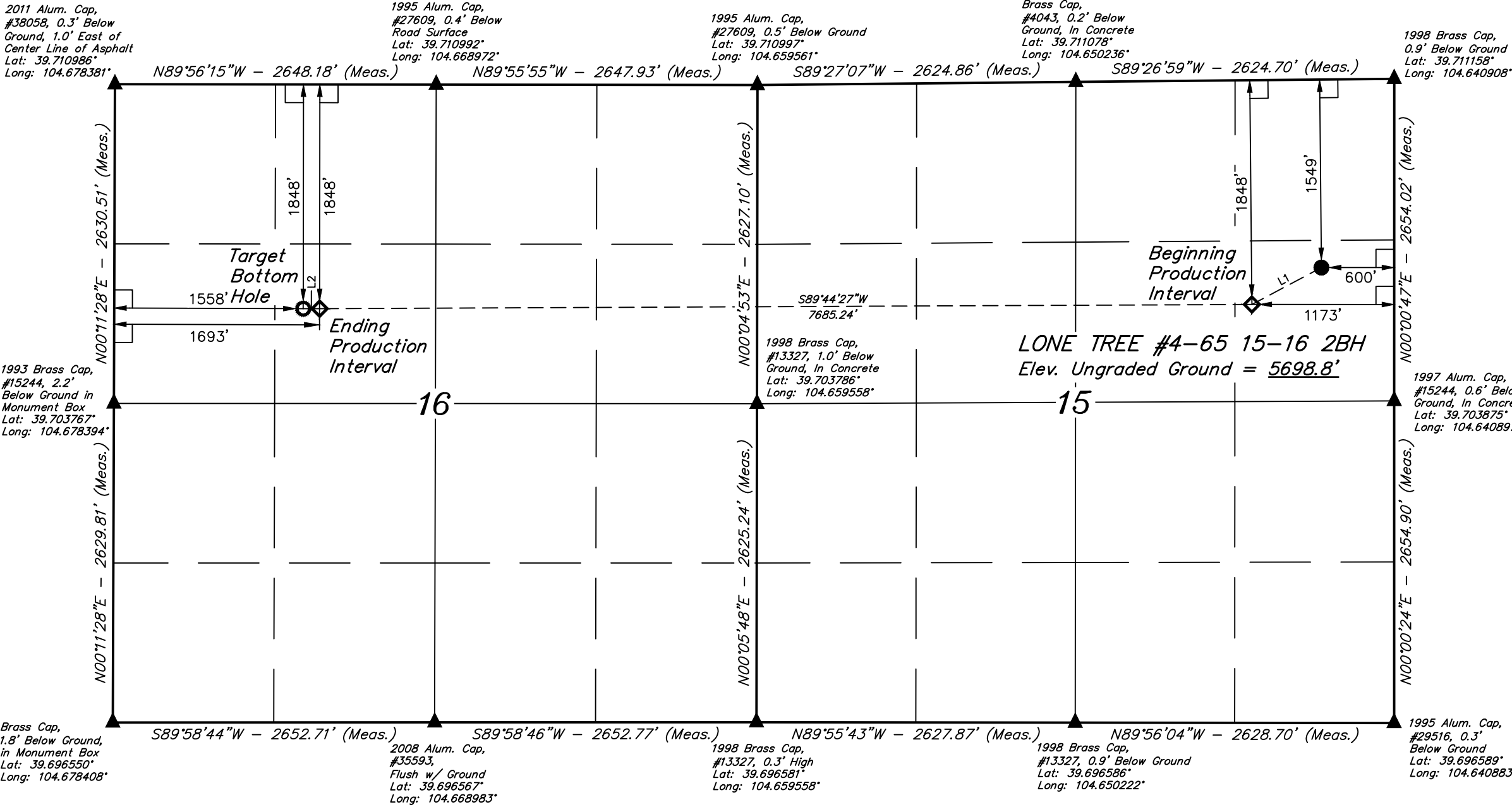
T4S, R65W, 6th P.M.

ConocoPhillips Company

LONE TREE #4-65 15-16 2BH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS
BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S62°02'08"W	648.82'
L2	N89°56'15"W	135.00'

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO

28285
DALLAS NIELSEN, G.W.

PDOP = 1.3

- LEGEND:
- 90° SYMBOL
 - PROPOSED WELLHEAD.
 - TARGET BOTTOM HOLE.
 - PRODUCTION INTERVAL.
 - SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'24.80" (39.706889)	LATITUDE = 39°42'21.78" (39.706050)	LATITUDE = 39°42'21.30" (39.705917)	LATITUDE = 39°42'21.30" (39.705917)
LONGITUDE = 104°38'34.92" (104.643033)	LONGITUDE = 104°38'42.25" (104.645069)	LONGITUDE = 104°40'20.55" (104.672375)	LONGITUDE = 104°40'22.28" (104.672856)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'24.84" (39.706900)	LATITUDE = 39°42'21.83" (39.706064)	LATITUDE = 39°42'21.35" (39.705931)	LATITUDE = 39°42'21.35" (39.705931)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.36" (104.644544)	LONGITUDE = 104°40'18.66" (104.671850)	LONGITUDE = 104°40'20.39" (104.672331)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683500.25 E: 3241107.96	N: 1683189.81 E: 3240538.45	N: 1683070.50 E: 3232856.38	N: 1683069.17 E: 3232721.43
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683492.67 E: 2241261.60	N: 683182.22 E: 2240692.10	N: 683062.79 E: 2233010.10	N: 683061.45 E: 2232875.14



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

T4S, R65W, 6th P.M.

ConocoPhillips Company

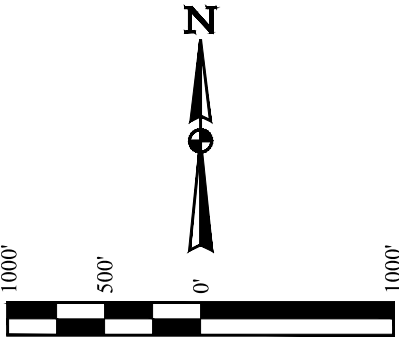
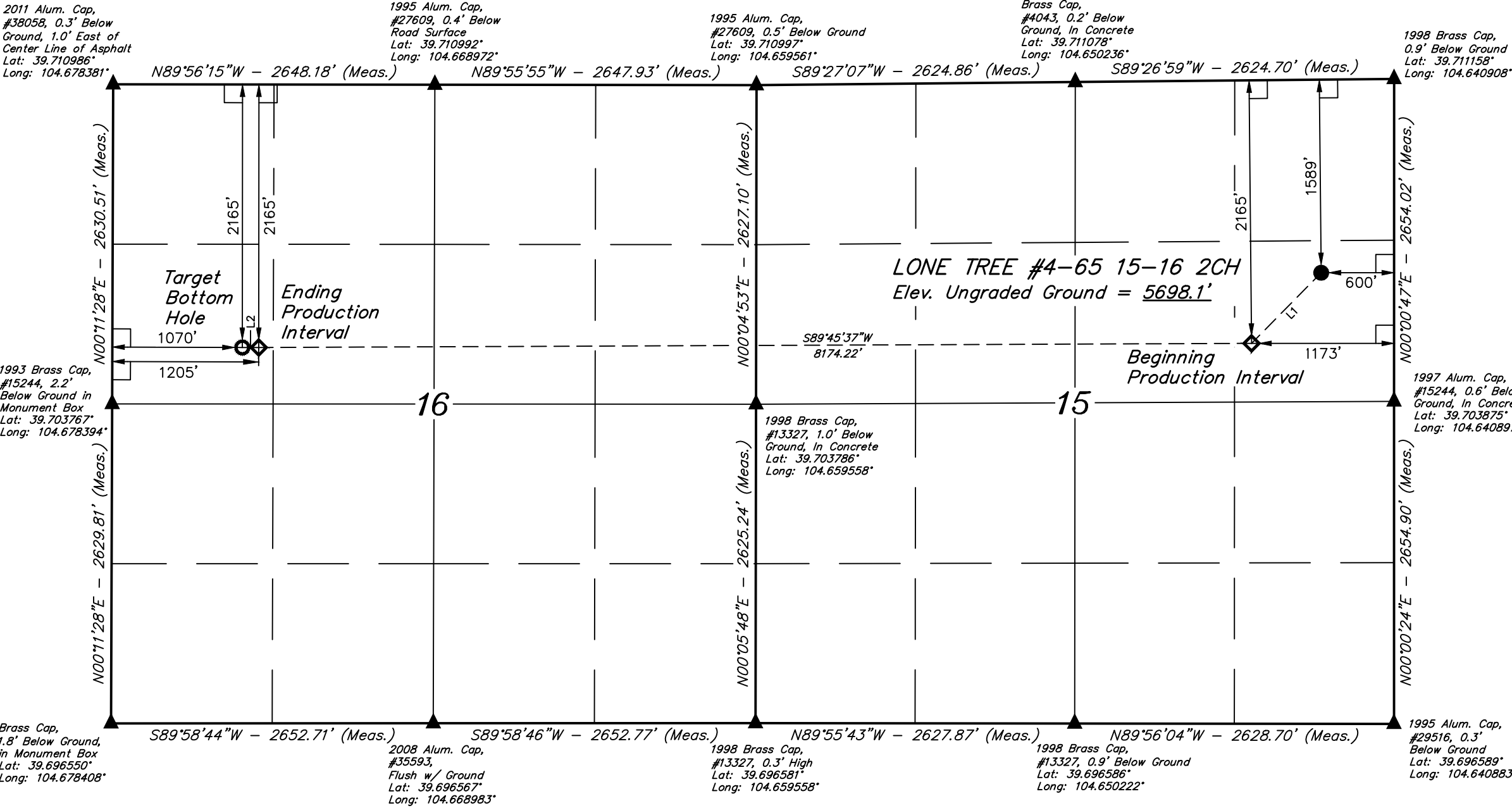
LONE TREE #4-65 15-16 2CH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION

BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S44°35'39"W	816.36'
L2	N89°56'15"W	135.00'

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO
2015-16

PDOP = 1.3

LEGEND:

- 90° SYMBOL
- PROPOSED WELLHEAD.
- TARGET BOTTOM HOLE.
- PRODUCTION INTERVAL.
- SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'24.40" (39.706778)	LATITUDE = 39°42'18.65" (39.705181)	LATITUDE = 39°42'18.17" (39.705047)	LATITUDE = 39°42'18.17" (39.705047)
LONGITUDE = 104°38'34.92" (104.643033)	LONGITUDE = 104°38'42.24" (104.645067)	LONGITUDE = 104°40'26.80" (104.674111)	LONGITUDE = 104°40'28.52" (104.674589)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'24.45" (39.706792)	LATITUDE = 39°42'18.70" (39.705194)	LATITUDE = 39°42'18.21" (39.705058)	LATITUDE = 39°42'18.21" (39.705058)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.36" (104.644544)	LONGITUDE = 104°40'24.91" (104.673586)	LONGITUDE = 104°40'26.63" (104.674064)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683460.33 E: 3241108.42	N: 1682872.90 E: 3240541.86	N: 1682748.77 E: 3232370.98	N: 1682747.43 E: 3232236.02
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683452.75 E: 2241262.06	N: 682865.32 E: 2240695.52	N: 682741.05 E: 2232524.70	N: 682739.71 E: 2232389.75



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

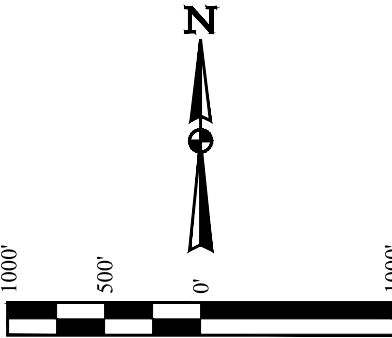
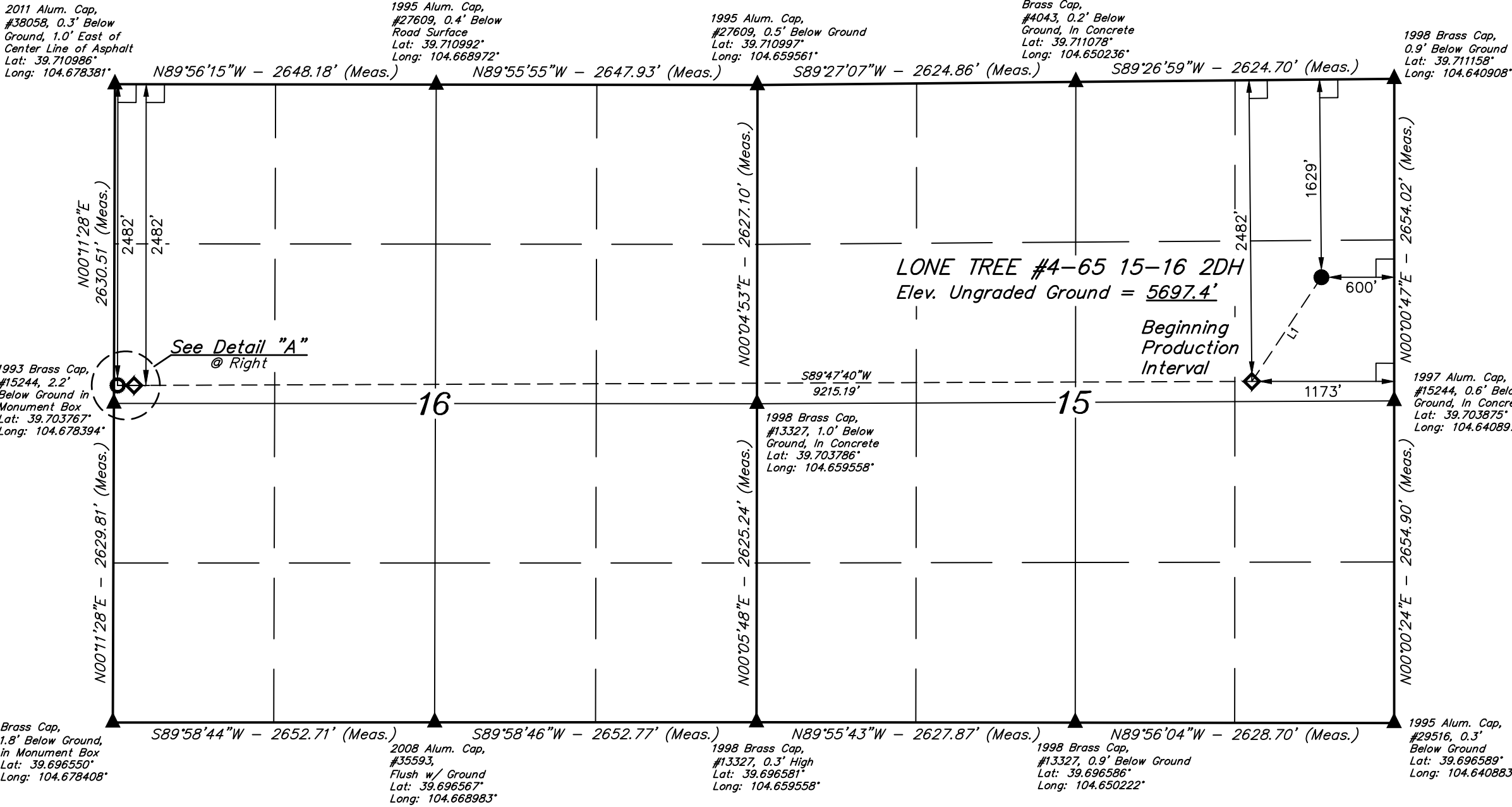
SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

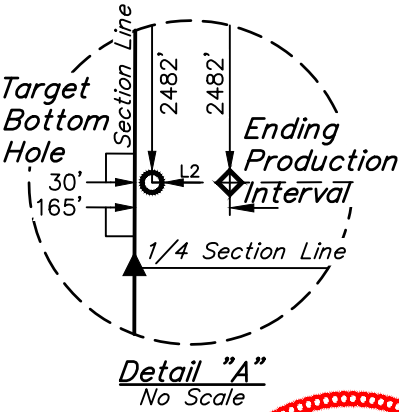
LONE TREE #4-65 15-16 2DH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS
BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S33°44'13"W	1032.10'
L2	N89°56'15"W	135.00'



CERTIFICATE
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD
NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION
AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY
KNOWLEDGE AND BELIEF.
REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO
JUL 28 2016

LEGEND:
= 90° SYMBOL
● = PROPOSED WELLHEAD.
○ = TARGET BOTTOM HOLE.
◇ = PRODUCTION INTERVAL.
▲ = SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'24.01" (39.706669)	LATITUDE = 39°42'15.52" (39.704311)	LATITUDE = 39°42'15.03" (39.704175)	LATITUDE = 39°42'15.03" (39.704175)
LONGITUDE = 104°38'34.92" (104.643033)	LONGITUDE = 104°38'42.24" (104.645067)	LONGITUDE = 104°40'40.11" (104.677808)	LONGITUDE = 104°40'41.83" (104.678286)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'24.05" (39.706681)	LATITUDE = 39°42'15.56" (39.704322)	LATITUDE = 39°42'15.07" (39.704186)	LATITUDE = 39°42'15.07" (39.704186)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.35" (104.644542)	LONGITUDE = 104°40'38.22" (104.677283)	LONGITUDE = 104°40'39.94" (104.677761)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683420.29 E: 3241108.84	N: 1682556.00 E: 3240545.28	N: 1682421.56 E: 3231333.76	N: 1682420.22 E: 3231198.81
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683412.71 E: 2241262.48	N: 682548.42 E: 2240698.94	N: 682413.83 E: 2231487.50	N: 682412.49 E: 2231352.55

PDOP = 1.3



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

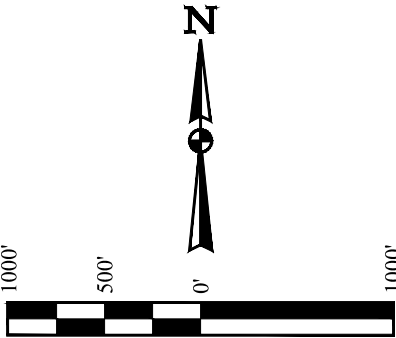
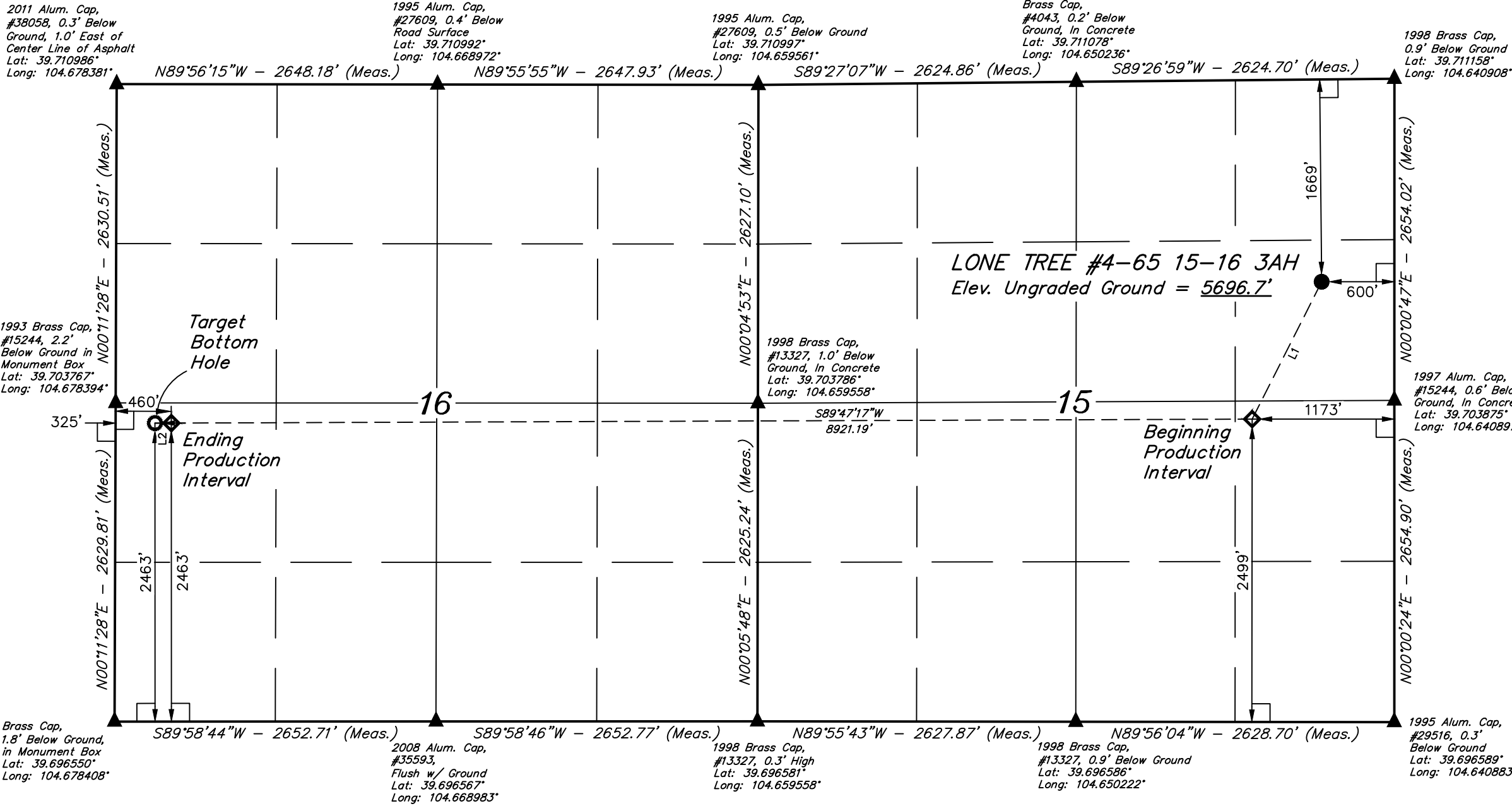
T4S, R65W, 6th P.M.

ConocoPhillips Company

LONE TREE #4-65 15-16 3AH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS
BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S26°49'36"W	1270.04'
L2	S89°58'44"W	135.00'

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO

SECTION 15-16

PDOP = 1.3

LEGEND:

- 90° SYMBOL
- PROPOSED WELLHEAD.
- TARGET BOTTOM HOLE.
- PRODUCTION INTERVAL.
- SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'23.61" (39.706558)	LATITUDE = 39°42'12.40" (39.703444)	LATITUDE = 39°42'11.92" (39.703311)	LATITUDE = 39°42'11.92" (39.703308)
LONGITUDE = 104°38'34.92" (104.643033)	LONGITUDE = 104°38'42.23" (104.645064)	LONGITUDE = 104°40'36.34" (104.676761)	LONGITUDE = 104°40'38.07" (104.677242)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'23.66" (39.706572)	LATITUDE = 39°42'12.45" (39.703458)	LATITUDE = 39°42'11.97" (39.703325)	LATITUDE = 39°42'11.96" (39.703322)
LONGITUDE = 104°38'33.04" (104.642511)	LONGITUDE = 104°38'40.34" (104.644539)	LONGITUDE = 104°40'34.45" (104.676236)	LONGITUDE = 104°40'36.17" (104.676714)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683380.36 E: 3241109.18	N: 1682241.10 E: 3240548.69	N: 1682109.96 E: 3231631.07	N: 1682108.42 E: 3231496.12
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683372.77 E: 2241262.82	N: 682233.52 E: 2240702.35	N: 682102.24 E: 2231784.82	N: 682100.70 E: 2231649.86



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT

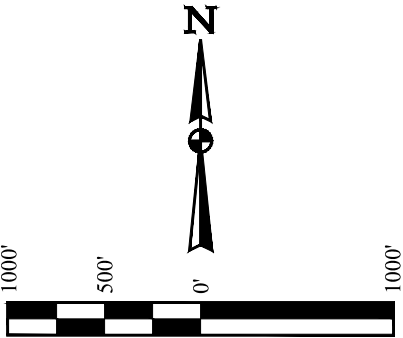
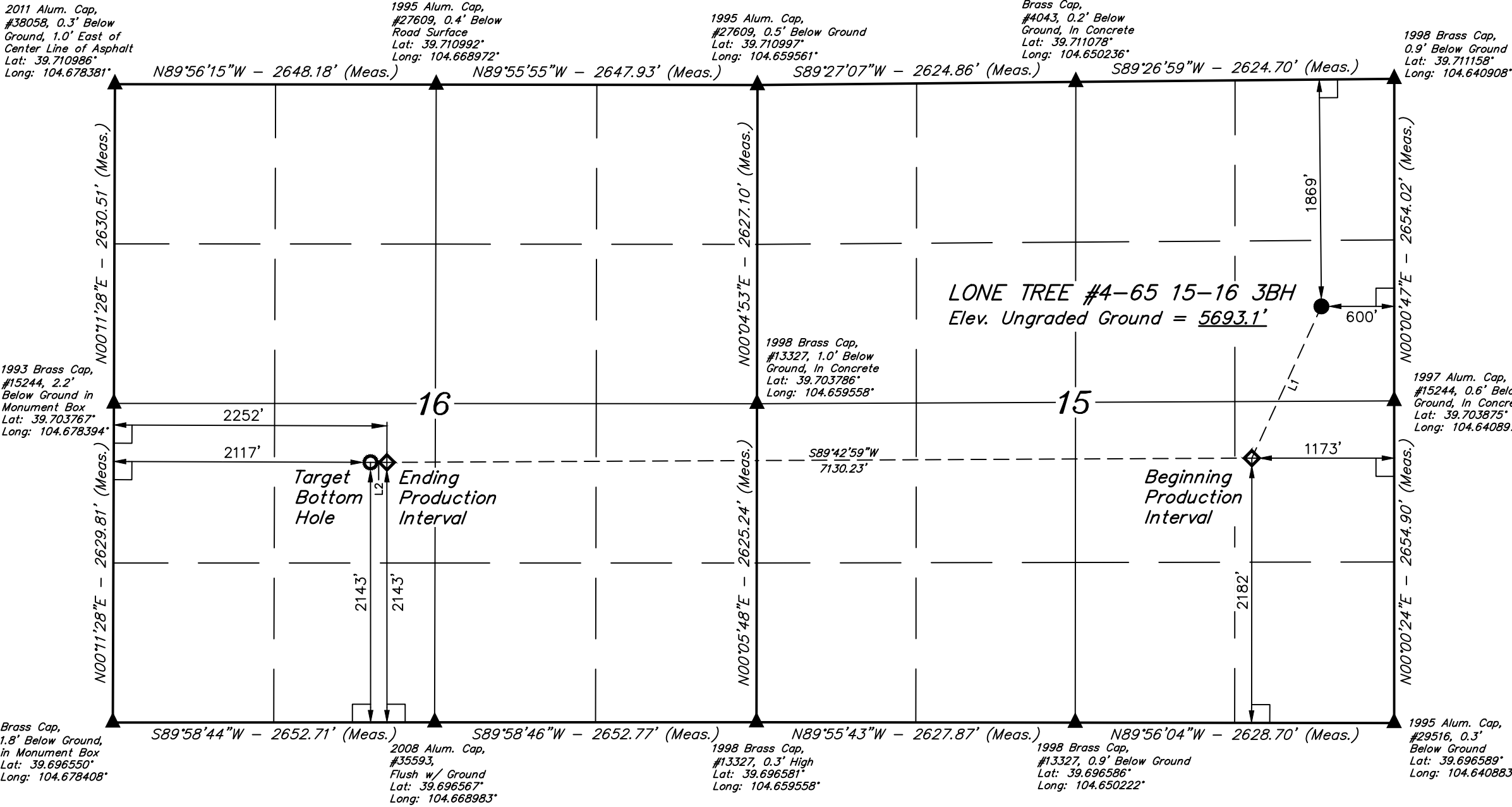
T4S, R65W, 6th P.M.

ConocoPhillips Company

LONE TREE #4-65 15-16 3BH
SE 1/4 NE 1/4, SECTION 15, T4S, R65W, 6th P.M.
ARAPAHOE COUNTY, COLORADO

BASIS OF BEARINGS
BASIS OF ELEVATION

BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN
SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988
PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF
THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S24°37'52"W	1375.43'
L2	N89°56'15"W	135.00'

CERTIFICATE

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

REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO

28285

SECTION 15-16

- LEGEND:
- 90° SYMBOL
 - PROPOSED WELLHEAD.
 - TARGET BOTTOM HOLE.
 - PRODUCTION INTERVAL.
 - SECTION CORNERS LOCATED.

NAD 83 (SURFACE LOCATION)	NAD 83 (BEGINNING PRODUCTION INTERVAL)	NAD 83 (ENDING PRODUCTION INTERVAL)	NAD 83 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'21.63" (39.706008)	LATITUDE = 39°42'09.27" (39.702575)	LATITUDE = 39°42'08.80" (39.702444)	LATITUDE = 39°42'08.80" (39.702444)
LONGITUDE = 104°38'34.92" (104.643033)	LONGITUDE = 104°38'42.22" (104.645061)	LONGITUDE = 104°40'13.42" (104.670394)	LONGITUDE = 104°40'15.15" (104.670875)
NAD 27 (SURFACE LOCATION)	NAD 27 (BEGINNING PRODUCTION INTERVAL)	NAD 27 (ENDING PRODUCTION INTERVAL)	NAD 27 (TARGET BOTTOM HOLE)
LATITUDE = 39°42'21.68" (39.706022)	LATITUDE = 39°42'09.32" (39.702589)	LATITUDE = 39°42'08.85" (39.702458)	LATITUDE = 39°42'08.85" (39.702458)
LONGITUDE = 104°38'33.03" (104.642508)	LONGITUDE = 104°38'40.34" (104.644539)	LONGITUDE = 104°40'11.53" (104.669869)	LONGITUDE = 104°40'13.26" (104.670350)
STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)	STATE PLANE NAD 83 (CO. CEN.)
N: 1683180.34 E: 3241111.43	N: 1681924.19 E: 3240552.14	N: 1681810.45 E: 3233424.90	N: 1681809.11 E: 3233289.95
STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)	STATE PLANE NAD 27 (CO. CEN.)
N: 683172.76 E: 2241265.07	N: 681916.62 E: 2240705.81	N: 681802.77 E: 2233578.63	N: 681801.43 E: 2233443.68

PDOP = 1.4



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

WELL LOCATION PLAT



LEGEND:

- = 90° SYMBOL
- = PROPOSED WELLHEAD.
- = TARGET BOTTOM HOLE.
- = PRODUCTION INTERVAL.
- = SECTION CORNERS LOCATED.

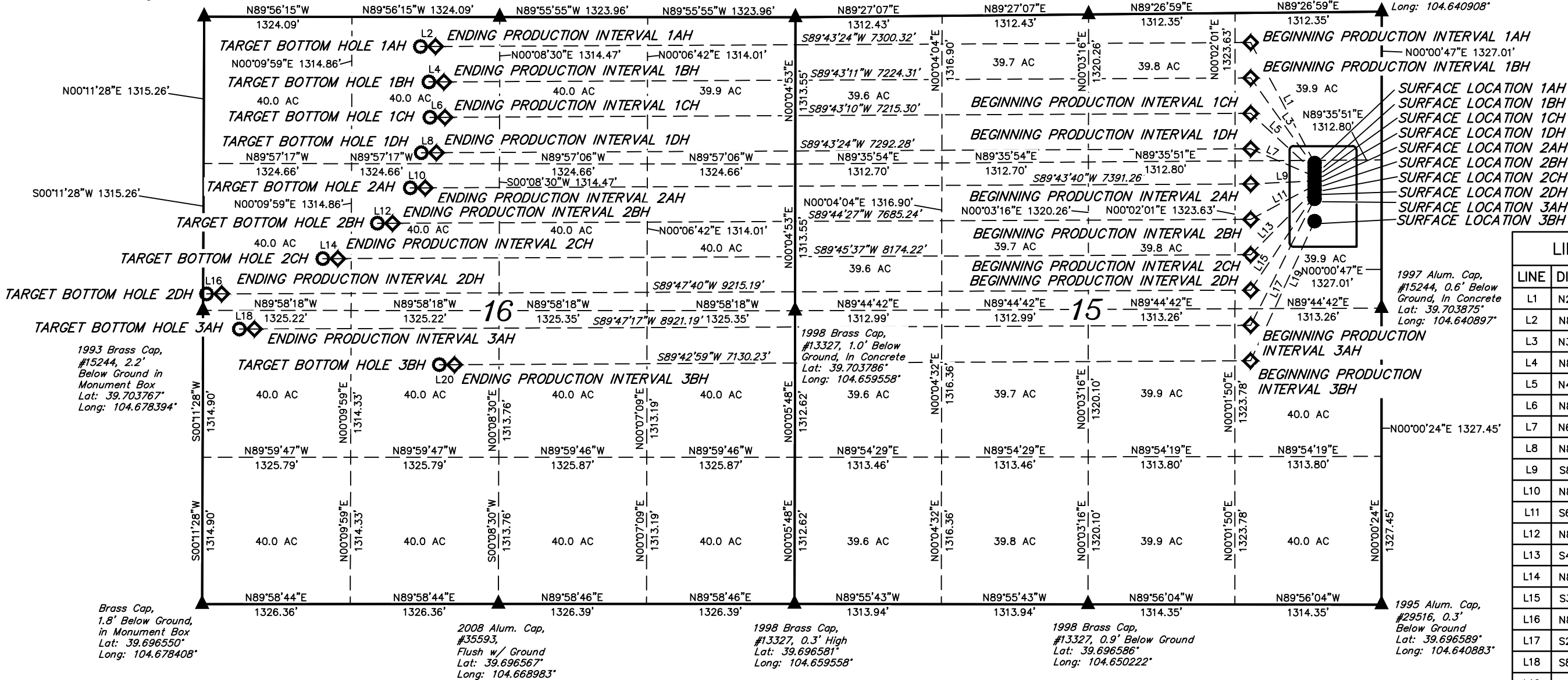
2011 Alum. Cap,
#38058, 0.3' Below
Ground, 1.0' East of
Center Line of Asphalt
Lat: 39.710986°
Long: 104.678381°

1995 Alum. Cap,
#27609, 0.4' Below
Road Surface
Lat: 39.710997°
Long: 104.668972°

1995 Alum. Cap,
#27609, 0.5' Below Ground
Lat: 39.710997°
Long: 104.659561°

Brass Cap,
#4043, 0.2' Below
Ground, In Concrete
Lat: 39.711078°
Long: 104.650236°

1998 Brass Cap,
0.9' Below Ground
Lat: 39.711158°
Long: 104.640908°



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N27°57'56"W	1221.45'
L2	N89°56'15"W	135.00'
L3	N35°32'27"W	985.38'
L4	N89°56'15"W	135.00'
L5	N47°30'32"W	776.90'
L6	N89°56'15"W	135.00'
L7	N66°36'52"W	624.22'
L8	N89°56'15"W	135.00'
L9	S87°16'44"W	573.63'
L10	N89°56'15"W	135.00'
L11	S62°02'08"W	648.82'
L12	N89°56'15"W	135.00'
L13	S44°35'39"W	816.36'
L14	N89°56'15"W	135.00'
L15	S33°44'13"W	1032.10'
L16	N89°56'15"W	135.00'
L17	S26°49'36"W	1270.04'
L18	S89°58'44"W	135.00'
L19	S24°37'52"W	1375.43'
L20	N89°56'15"W	135.00'

BASIS OF BEARINGS
BASIS OF BEARINGS IS A G.P.S. OBSERVATION

BASIS OF ELEVATION
BENCHMARK 374 LOCATED ON THE SECTION LINE BETWEEN SECTIONS 12 & 13, T5S, R64W, 6th. P.M., TAKEN FROM 1988 PUBLISHED DATUM BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY AS BEING 6054.61 FEET.

WELL	SURFACE LOCATION	BEGINNING PRODUCTION INTERVAL	ENDING PRODUCTION INTERVAL	TARGET BOTTOM HOLE
1AH	1349' FNL 600' FEL	265' FNL 1173' FEL	265' FNL 2073' FWL	265' FNL 1938' FWL
1BH	1389' FNL 600' FEL	582' FNL 1173' FEL	582' FNL 2150' FWL	582' FNL 2015' FWL
1CH	1429' FNL 600' FEL	899' FNL 1173' FEL	899' FNL 2160' FWL	899' FNL 2025' FWL
1DH	1469' FNL 600' FEL	1216' FNL 1173' FEL	1216' FNL 2084' FWL	1216' FNL 1949' FWL
2AH	1509' FNL 600' FEL	1531' FNL 1173' FEL	1531' FNL 1986' FWL	1531' FNL 1851' FWL
2BH	1549' FNL 600' FEL	1848' FNL 1173' FEL	1848' FNL 1693' FWL	1848' FNL 1558' FWL
2CH	1589' FNL 600' FEL	2165' FNL 1173' FEL	2165' FNL 1205' FWL	2165' FNL 1070' FWL
2DH	1629' FNL 600' FEL	2482' FNL 1173' FEL	2482' FNL 165' FWL	2482' FNL 30' FWL
3AH	1669' FNL 600' FEL	2499' FSL 1173' FEL	2463' FSL 460' FWL	2463' FSL 325' FWL
3BH	1869' FNL 600' FEL	2182' FSL 1173' FEL	2143' FSL 2252' FWL	2143' FSL 2117' FWL

CERTIFICATE
THIS IS TO CERTIFY THAT THE ABOVE MAP WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
REGISTERED LAND SURVEYOR
REGISTRATION NO. 28285
STATE OF COLORADO
SECTION 15-16

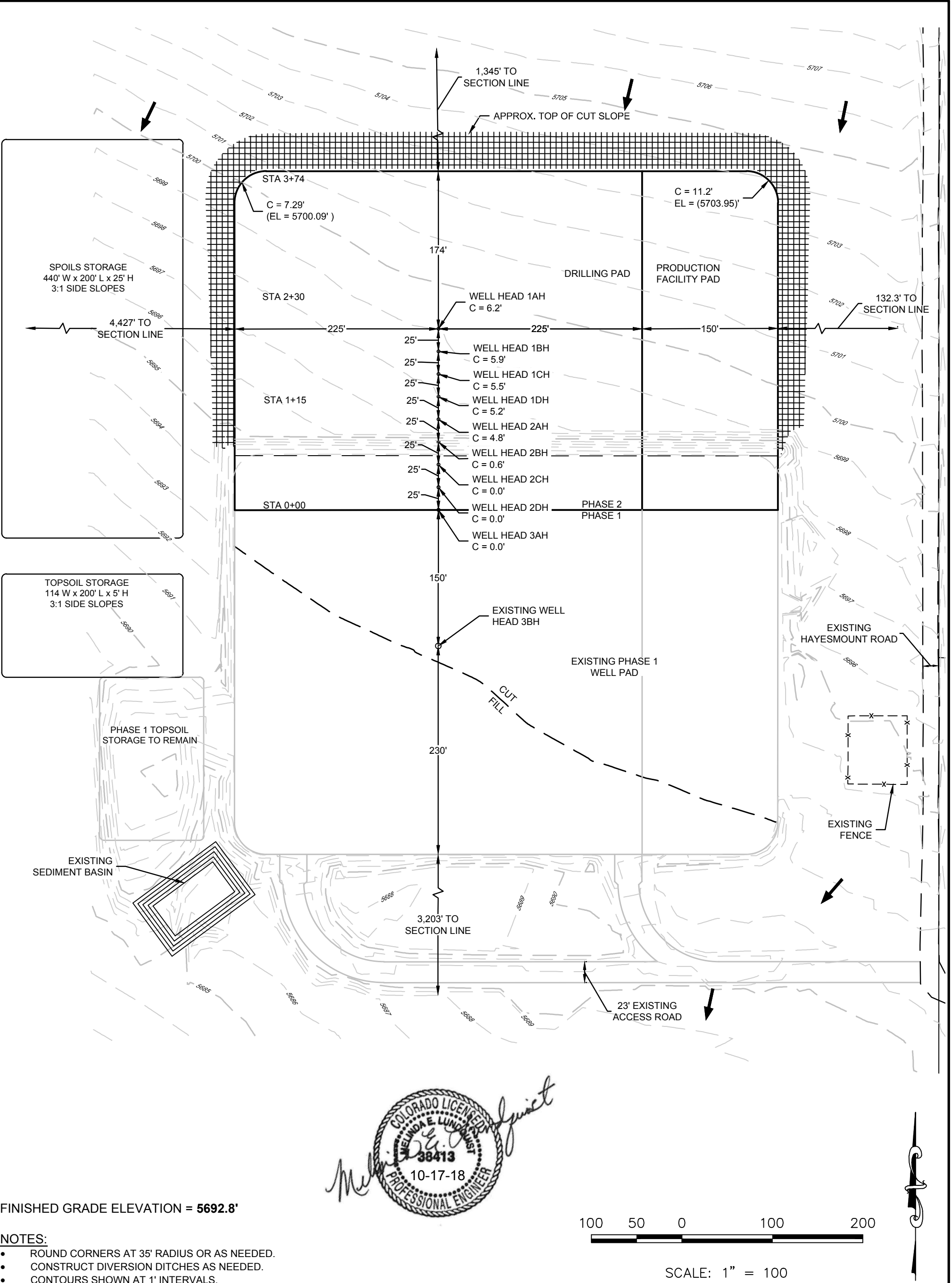
REV: 3 10-12-16 M.F.D. (LABEL CHANGE)

SURVEYED BY	DALLAS NIELSEN, G.W.	07-13-16	SCALE
DRAWN BY	L.C.S.	08-05-16	1" = 1000'

SECTION BREAKDOWN



UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



FINISHED GRADE ELEVATION = 5692.8'

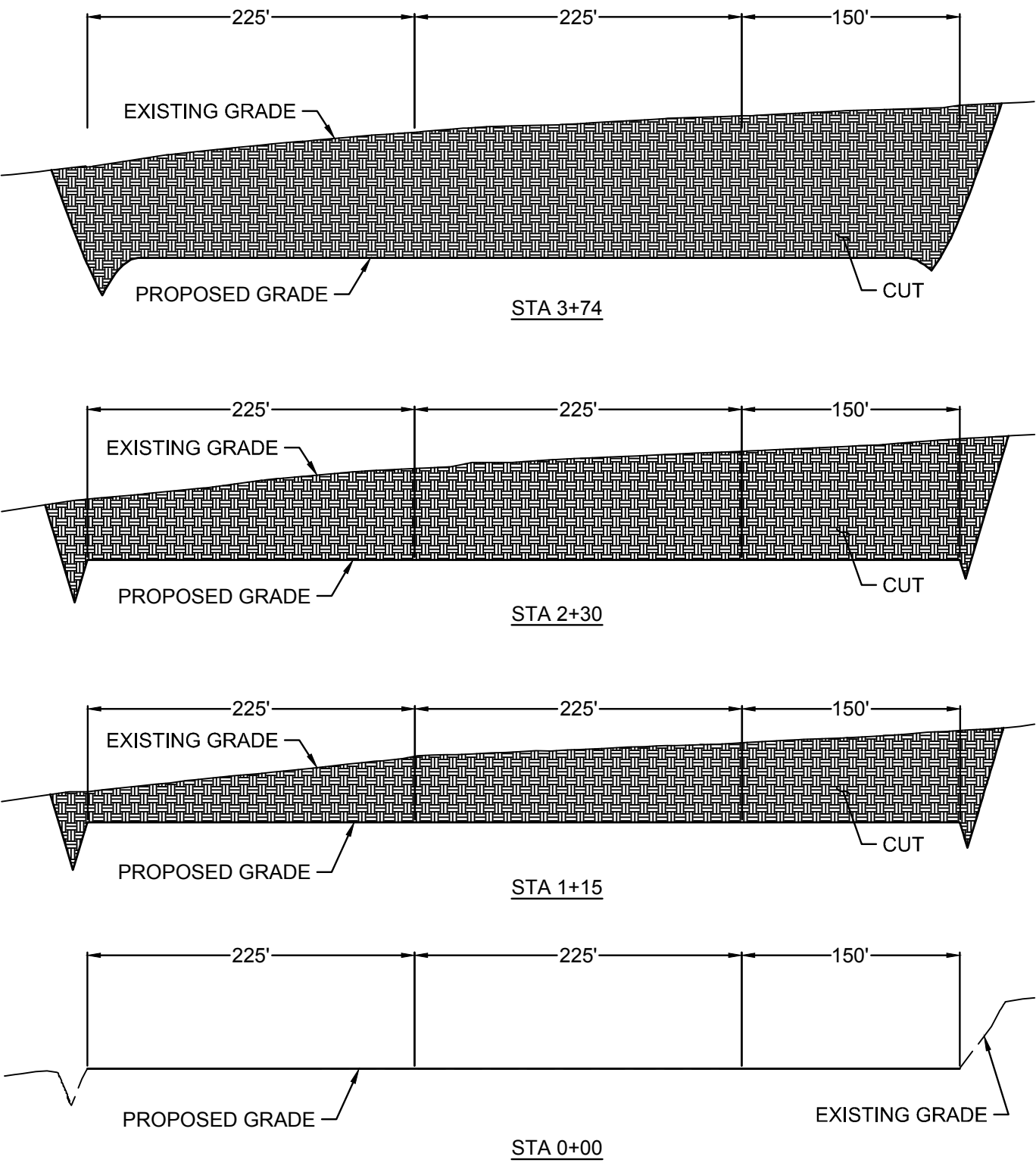
- NOTES:
- ROUND CORNERS AT 35' RADIUS OR AS NEEDED.
 - CONSTRUCT DIVERSION DITCHES AS NEEDED.
 - CONTOURS SHOWN AT 1' INTERVALS.
 - CUT/FILL SLOPES 3:1 (TYP.).

CONOCOPHILLIPS COMPANY			
LONE TREE 4-65 15-16 1AH-1DH, 2AH-2DH, 3AH & 3BH			
SECTION 15, T4S, R65W, 6TH P.M.			
CITY OF AURORA ,ARAPAHOE COUNTY, COLORADO			
CONSTRUCTION LAYOUT - PHASE 2			
DRAWN BY: JRG	DATE DRAWN: 10/17/18		



10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

FIGURE #1



APPROXIMATE EARTHWORK QUANTITIES	
TOPSOIL STRIPPING (6")	4,313 CU. YD.
REMAINING LOCATION	50,732 CU. YD.
TOTAL CUT	55,045 CU. YD.
FILL	182 CU. YD.
EXCESS MATERIAL	54,863 CU. YD.
TOPSOIL	4,229 CU. YD.
EXCESS UNBALANCE (AFTER RECLAMATION)	46,391 CU. YD.



APPROXIMATE SURFACE DISTURBANCE AREAS		
	DISTANCE	ACRES
WELL SITE DISTURBANCE	N/A	± 11
60' WIDE ACCESS ROAD R.O.W. DISTURBANCE	± 0'	± 0
TOTAL SURFACE USE AREA		± 11

- NOTES:
- FILL QUANTITY INCLUDES 10% FOR COMPACTION.
 - CALCULATIONS BASED ON 6" TOPSOIL STRIPPING.
 - CUT/FILL SLOPES 3:1 (TYP.).

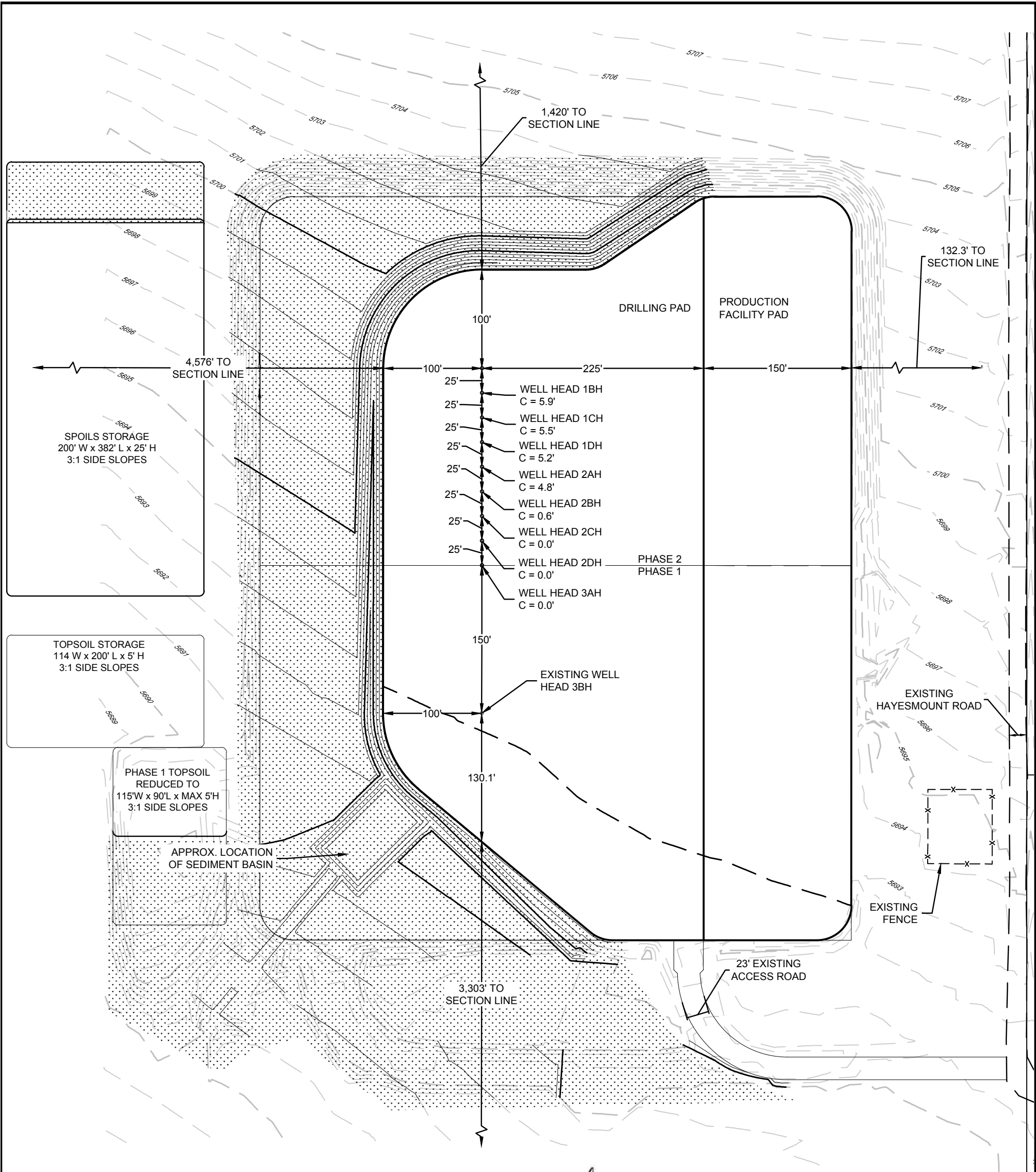
CONOCOPHILLIPS COMPANY
LONE TREE 4-65 15-16 1AH-1DH, 2AH-2DH, 3AH & 3BH
SECTION 15, T4S, R65W, 6TH P.M.
CITY OF AURORA ,ARAPAHOE COUNTY, COLORADO

CONSTRUCTION LAYOUT CROSS SECTIONS - PHASE 2

DRAWN BY: JRG DATE DRAWN: 10/17/18

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Fax: (720) 482-9546

FIGURE # 2



Melinda E. Lundquist
COLORADO LICENSE
38413
10-17-18
PROFESSIONAL ENGINEER

= RECLAIMED AREA

APPROXIMATE TOTAL DISTURBED ACREAGE = ± 11 ACRES
APPROXIMATE RECLAIMED ACREAGE = ± 7 ACRES
APPROXIMATE UN-RECLAIMED ACREAGE = ± 4 ACRES



SCALE: 1" = 100



CONOCOPHILLIPS COMPANY			
LONE TREE 4-65 15-16 1AH-1DH, 2AH-2DH, 3AH & 3BH			
SECTION 15, T4S, R65W, 6TH P.M.			
CITY OF AURORA, ARAPAHOE COUNTY, COLORADO			
CONSTRUCTION LAYOUT - PHASE 2 RECLAMATION			
DRAWN BY: JRG	DATE DRAWN: 10/17/18		

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FIGURE # 3