

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Centennial Resource Production, LLC
LEASE NO.:	NMNM-117125
WELL NAME & NO.:	Sheba Federal Com 507H
SURFACE HOLE FOOTAGE:	0300' FSL & 1755' FEL
BOTTOM HOLE FOOTAGE:	0330' FNL & 0330' FEL
LOCATION:	Section 22, T. 24 S., R 34 E., NMPM
COUNTY:	County, New Mexico

Communitization Agreement

The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.

In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 3933612

1. **Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the**

Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller’s log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

Possibility of water and brine flows in the Salado and Castile.

Possibility of lost circulation in the Rustler, Red Beds, and Delaware.

Abnormal pressures may be encountered when penetrating the 3rd Bone Spring Limestone and all subsequent formations.

1. The 13-3/8 inch surface casing shall be set at approximately 1300 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet above the salt and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Formation below the 13-3/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

- Cement as proposed by operator. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be psi. **5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**
4. The appropriate BLM office shall be notified a minimum of hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - a. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer.**
 - b. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 110818

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	CENTENNIAL RESOURCES PRODUCTION LLC.
LEASE NO.:	NMNM117125
WELL NAME & NO.:	506H- SHEBA FEDERAL COM
SURFACE HOLE FOOTAGE:	300'/S & 1755'/E
BOTTOM HOLE FOOTAGE:	330'/N & 330'/E
LOCATION:	Section. 22., T24S., R.34E., NMP
COUNTY:	LEA County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- General Provisions**
- Permit Expiration**
- Archaeology, Paleontology, and Historical Sites**
- Noxious Weeds**
- Special Requirements**
 - Watershed
 - Lesser Prairie-Chicken Timing Stipulations
 - Ground-level Abandoned Well Marker
- Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- Road Section Diagram**
- Production (Post Drilling)**
 - Well Structures & Facilities
- Interim Reclamation**
- Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for

acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Watershed

Surface disturbance will not be allowed (within x feet of drainage; or describe pad restriction).

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed.

Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

Stockpiling of topsoil is required. The top soil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control.

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Timing Limitation Exceptions:

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

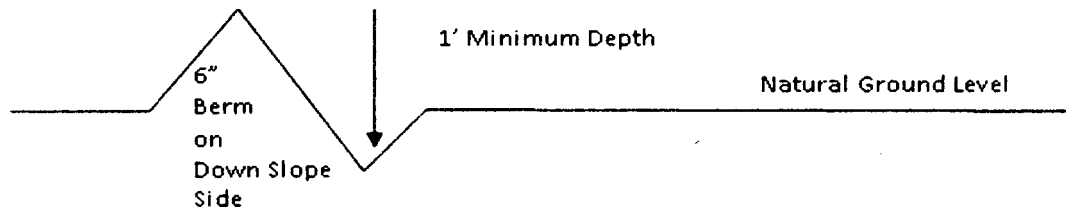
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Livestock Watering Requirement

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

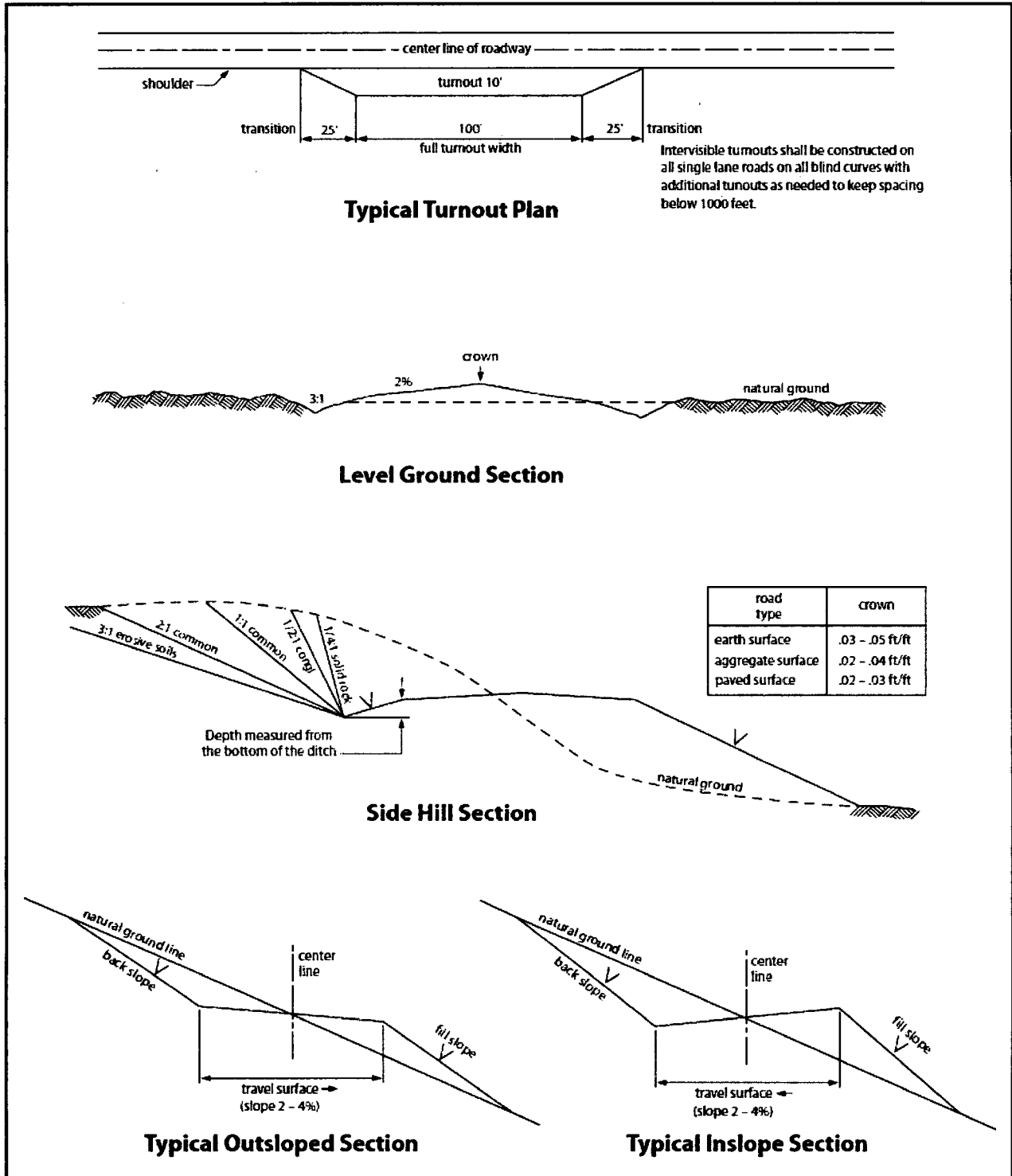


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads, without specific written approval granted by the Authorized Officer.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production

equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



Centennial Resource Development, Inc.

**Lea Co., NM (NAD83)
Sheba Federal Com
507H**

OH

Plan: Plan #1

Standard Planning Report

19 February, 2018



CASING ASSUMPTIONS WORKSHEET:

Centralizer Program:

Surface: - 3 welded bow spring centralizers, one on each of the bottom 3 joints, plus one on the shoe joint (4 minimum)
- No Cement baskets will be run

Production: - 1 welded bow spring centralizer on a stop ring 6' above float shoe
- 1 centralizer every other joint to the top of the tail cement
- 1 centralizer every 4 joints to 500' below the top of the lead cement
- The actual number and placement of centralizers will be determined from hole deviation and potential production zones. Centralizers will be run for maximum practical standoff and through all potential productive zones.

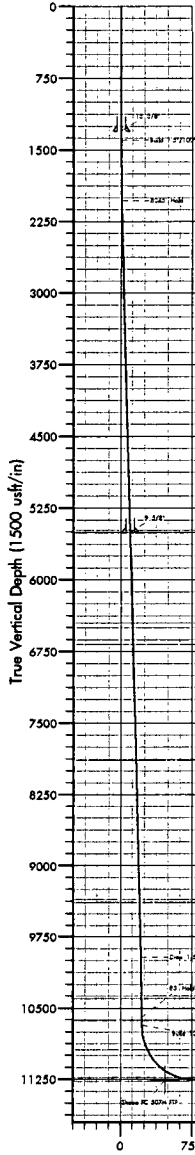
- All casing strings below the conductor shall be tested, prior to drilling out the casing shoe, to 0.22 psi/ft of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the internal yield pressure of the casing. If pressure declines more than 10 percent in 30 minutes, corrective action will be taken.

No freshly hard banded pipe will be rotated in the surface casing

- CENTENNIAL RESOURCE DEVELOPOMENT will not employ an air-drill rig for the surface casing. The casing shoe will be tested by drilling 5'-10' out from under the shoe and pressure testing to the maximum expected mud weight equivalent as shown in the mud program listed in the drilling plan.



Project: Leo Co., NM (NAD83)
 Site: Shaba Federal Com
 Well: 507H
 Wellbore: OH
 Design: Plan #1
 Lat: 32.196606
 Long: -103.454956
 GL: 3494.00
 KB: KB=25' @ 3519.00usf (H&P 650)



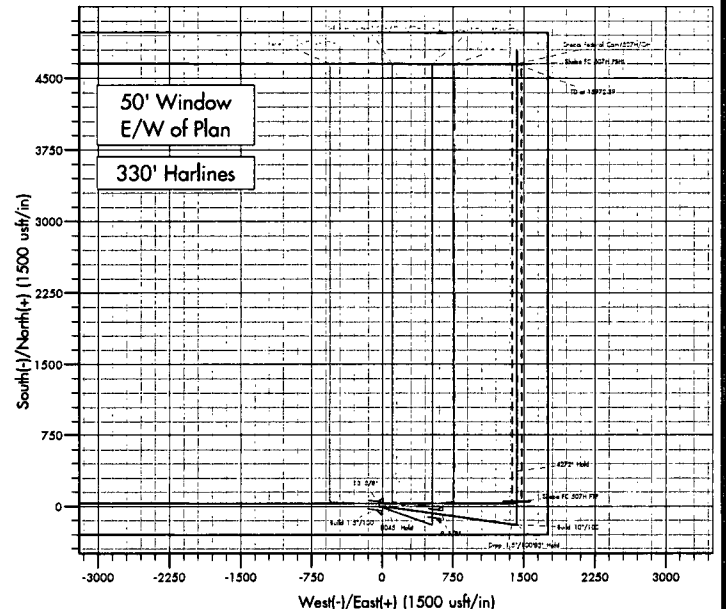
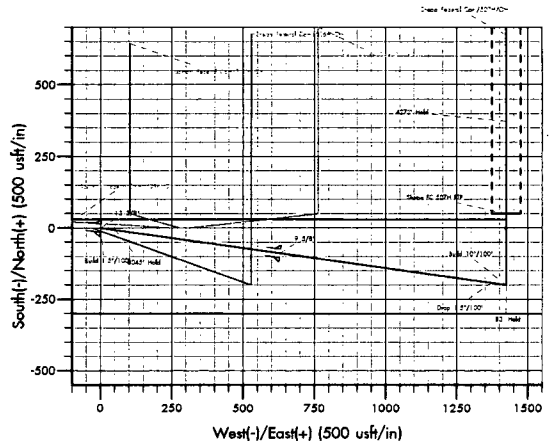
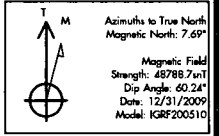
WELL DETAILS: 507H						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	436369.34	813046.16	32.196606	-103.454956	

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Shaba FC 507H FTP	11256.00	48.88	1424.73	436429.86	814470.44	Point
Shaba FC 507H PBHL	11256.00	4644.55	1426.26	441025.39	814434.43	Point

SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Tface	Vsect	Annotation	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	Build 1.5"/100'	
2035.85	9.54	98.02	2032.92	-7.36	52.29	1.50	98.02	8.31	8045' Hold	
10081.23	9.54	98.02	9967.08	-193.31	1372.35	0.00	0.00	218.07	Drop 1.5"/100'	
10717.08	0.00	0.00	10600.00	-200.67	1424.64	1.50	180.00	226.38	83' Hold	
10800.12	0.00	0.00	10683.04	-200.67	1424.64	0.00	0.00	226.38	Build 10"/100'	
11700.12	90.00	0.02	11256.00	372.29	1424.83	10.00	0.02	774.15	4272' Hold	
15972.39	90.00	0.02	11256.00	4644.55	1426.26	0.00	0.00	4858.61	TD at 15972.39	

Formation Tops	
TVDPath	Formation
5487.00	Liner
5515.00	Bell Canyon
6453.00	Cherry Canyon
6678.00	Manzanita Lime
7894.00	Brushy Canyon
9359.00	Bone Spring Lime
9393.00	Leonard Shale
10405.00	FBGS Sand
10635.00	SBSG Shale
10945.00	SBSG Sand
11236.00	Target Top at 0'VS

CASING DETAILS			
TVD	MD	Name	Size
1300.00	1300.00	13 3/8"	13-3/8
5506.38	5558.00	9 5/8"	9-5/8



Vertical Section at 17.07° (1500 usf/in)

Plan: Plan #1 (507H/OH)
 Created By: Dusty Meyer Date: 12-30-February 19 2018



Planning Report



Database: EDM 5000.14 Single User Db
 Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Site: Sheba Federal Com
 Well: 507H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project	Lea Co., NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sheba Federal Com				
Site Position:		Northing:	436,369.09 usft	Latitude:	32.196606
From:	Map	Easting:	813,016.11 usft	Longitude:	-103.455053
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.47 °

Well	507H					
Well Position	+N/-S	0.00 usft	Northing:	436,369.34 usft	Latitude:	32.196606
	+E/-W	30.05 usft	Easting:	813,046.16 usft	Longitude:	-103.454956
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,494.00 usft

Wellbore	OH					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength	
	IGRF200510	12/31/09	(°)	(°)	(nT)	
			7.69	60.24	48,788.72194481	

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	17.07	

Plan Survey Tool Program	Date	02/19/18			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(usft)	(usft)				
1	0.00	15,972.39 Plan #1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-St	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,035.85	9.54	98.02	2,032.92	-7.36	52.29	1.50	1.50	0.00	98.02	
10,081.23	9.54	98.02	9,967.08	-193.31	1,372.35	0.00	0.00	0.00	0.00	
10,717.08	0.00	0.00	10,600.00	-200.67	1,424.64	1.50	-1.50	0.00	180.00	
10,800.12	0.00	0.00	10,683.04	-200.67	1,424.64	0.00	0.00	0.00	0.00	
11,700.12	90.00	0.02	11,256.00	372.29	1,424.83	10.00	10.00	0.00	0.02	
15,972.39	90.00	0.02	11,256.00	4,644.55	1,426.26	0.00	0.00	0.00	0.00	Sheba FC 507H PBH



Planning Report



Database: EDM 5000.14 Single User Db
Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Sheba Federal Com
Well: 507H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
13 3/8"										
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
Build 1.5°/100'										
1,500.00	1.50	98.02	1,499.99	-0.18	1.30	0.21	1.50	1.50	0.00	
1,600.00	3.00	98.02	1,599.91	-0.73	5.18	0.82	1.50	1.50	0.00	
1,700.00	4.50	98.02	1,699.69	-1.64	11.66	1.85	1.50	1.50	0.00	
1,800.00	6.00	98.02	1,799.27	-2.92	20.72	3.29	1.50	1.50	0.00	
1,900.00	7.50	98.02	1,898.57	-4.56	32.36	5.14	1.50	1.50	0.00	
2,000.00	9.00	98.02	1,997.54	-6.56	46.57	7.40	1.50	1.50	0.00	
2,035.85	9.54	98.02	2,032.92	-7.36	52.29	8.31	1.50	1.50	0.00	
8045' Hold										
2,100.00	9.54	98.02	2,096.18	-8.85	62.81	9.98	0.00	0.00	0.00	
2,200.00	9.54	98.02	2,194.80	-11.16	79.22	12.59	0.00	0.00	0.00	
2,300.00	9.54	98.02	2,293.42	-13.47	95.63	15.20	0.00	0.00	0.00	
2,400.00	9.54	98.02	2,392.03	-15.78	112.03	17.80	0.00	0.00	0.00	
2,500.00	9.54	98.02	2,490.65	-18.09	128.44	20.41	0.00	0.00	0.00	
2,600.00	9.54	98.02	2,589.27	-20.40	144.85	23.02	0.00	0.00	0.00	
2,700.00	9.54	98.02	2,687.89	-22.71	161.26	25.62	0.00	0.00	0.00	
2,800.00	9.54	98.02	2,786.50	-25.03	177.67	28.23	0.00	0.00	0.00	
2,900.00	9.54	98.02	2,885.12	-27.34	194.07	30.84	0.00	0.00	0.00	
3,000.00	9.54	98.02	2,983.74	-29.65	210.48	33.45	0.00	0.00	0.00	
3,100.00	9.54	98.02	3,082.36	-31.96	226.89	36.05	0.00	0.00	0.00	
3,200.00	9.54	98.02	3,180.97	-34.27	243.30	38.66	0.00	0.00	0.00	
3,300.00	9.54	98.02	3,279.59	-36.58	259.70	41.27	0.00	0.00	0.00	
3,400.00	9.54	98.02	3,378.21	-38.89	276.11	43.87	0.00	0.00	0.00	
3,500.00	9.54	98.02	3,476.83	-41.20	292.52	46.48	0.00	0.00	0.00	
3,600.00	9.54	98.02	3,575.45	-43.51	308.93	49.09	0.00	0.00	0.00	
3,700.00	9.54	98.02	3,674.06	-45.83	325.34	51.70	0.00	0.00	0.00	
3,800.00	9.54	98.02	3,772.68	-48.14	341.74	54.30	0.00	0.00	0.00	
3,900.00	9.54	98.02	3,871.30	-50.45	358.15	56.91	0.00	0.00	0.00	
4,000.00	9.54	98.02	3,969.92	-52.76	374.56	59.52	0.00	0.00	0.00	
4,100.00	9.54	98.02	4,068.53	-55.07	390.97	62.13	0.00	0.00	0.00	
4,200.00	9.54	98.02	4,167.15	-57.38	407.37	64.73	0.00	0.00	0.00	
4,300.00	9.54	98.02	4,265.77	-59.69	423.78	67.34	0.00	0.00	0.00	
4,400.00	9.54	98.02	4,364.39	-62.00	440.19	69.95	0.00	0.00	0.00	
4,500.00	9.54	98.02	4,463.00	-64.31	456.60	72.55	0.00	0.00	0.00	
4,600.00	9.54	98.02	4,561.62	-66.63	473.01	75.16	0.00	0.00	0.00	
4,700.00	9.54	98.02	4,660.24	-68.94	489.41	77.77	0.00	0.00	0.00	
4,800.00	9.54	98.02	4,758.86	-71.25	505.82	80.38	0.00	0.00	0.00	

Database: EDM 5000.14 Single User Db
Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Sheba Federal Com
Well: 507H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	9.54	98.02	4,857.48	-73.56	522.23	82.98	0.00	0.00	0.00
5,000.00	9.54	98.02	4,956.09	-75.87	538.64	85.59	0.00	0.00	0.00
5,100.00	9.54	98.02	5,054.71	-78.18	555.04	88.20	0.00	0.00	0.00
5,200.00	9.54	98.02	5,153.33	-80.49	571.45	90.81	0.00	0.00	0.00
5,300.00	9.54	98.02	5,251.95	-82.80	587.86	93.41	0.00	0.00	0.00
5,400.00	9.54	98.02	5,350.56	-85.12	604.27	96.02	0.00	0.00	0.00
5,500.00	9.54	98.02	5,449.18	-87.43	620.68	98.63	0.00	0.00	0.00
5,538.35	9.54	98.02	5,487.00	-88.31	626.97	99.63	0.00	0.00	0.00
Lamar									
5,558.00	9.54	98.02	5,506.38	-88.77	630.19	100.14	0.00	0.00	0.00
9 5/8"									
5,566.74	9.54	98.02	5,515.00	-88.97	631.63	100.37	0.00	0.00	0.00
Bell Canyon									
5,600.00	9.54	98.02	5,547.80	-89.74	637.08	101.23	0.00	0.00	0.00
5,700.00	9.54	98.02	5,646.42	-92.05	653.49	103.84	0.00	0.00	0.00
5,800.00	9.54	98.02	5,745.03	-94.36	669.90	106.45	0.00	0.00	0.00
5,900.00	9.54	98.02	5,843.65	-96.67	686.31	109.06	0.00	0.00	0.00
6,000.00	9.54	98.02	5,942.27	-98.98	702.71	111.66	0.00	0.00	0.00
6,100.00	9.54	98.02	6,040.89	-101.29	719.12	114.27	0.00	0.00	0.00
6,200.00	9.54	98.02	6,139.50	-103.60	735.53	116.88	0.00	0.00	0.00
6,300.00	9.54	98.02	6,238.12	-105.92	751.94	119.48	0.00	0.00	0.00
6,400.00	9.54	98.02	6,336.74	-108.23	768.35	122.09	0.00	0.00	0.00
6,500.00	9.54	98.02	6,435.36	-110.54	784.75	124.70	0.00	0.00	0.00
6,517.89	9.54	98.02	6,453.00	-110.95	787.69	125.17	0.00	0.00	0.00
Cherry Canyon									
6,600.00	9.54	98.02	6,533.98	-112.85	801.16	127.31	0.00	0.00	0.00
6,700.00	9.54	98.02	6,632.59	-115.16	817.57	129.91	0.00	0.00	0.00
6,746.04	9.54	98.02	6,678.00	-116.22	825.12	131.11	0.00	0.00	0.00
Manzanita Lime									
6,800.00	9.54	98.02	6,731.21	-117.47	833.98	132.52	0.00	0.00	0.00
6,900.00	9.54	98.02	6,829.83	-119.78	850.39	135.13	0.00	0.00	0.00
7,000.00	9.54	98.02	6,928.45	-122.09	866.79	137.74	0.00	0.00	0.00
7,100.00	9.54	98.02	7,027.06	-124.40	883.20	140.34	0.00	0.00	0.00
7,200.00	9.54	98.02	7,125.68	-126.72	899.61	142.95	0.00	0.00	0.00
7,300.00	9.54	98.02	7,224.30	-129.03	916.02	145.56	0.00	0.00	0.00
7,400.00	9.54	98.02	7,322.92	-131.34	932.42	148.16	0.00	0.00	0.00
7,500.00	9.54	98.02	7,421.53	-133.65	948.83	150.77	0.00	0.00	0.00
7,600.00	9.54	98.02	7,520.15	-135.96	965.24	153.38	0.00	0.00	0.00
7,700.00	9.54	98.02	7,618.77	-138.27	981.65	155.99	0.00	0.00	0.00
7,800.00	9.54	98.02	7,717.39	-140.58	998.06	158.59	0.00	0.00	0.00
7,900.00	9.54	98.02	7,816.01	-142.89	1,014.46	161.20	0.00	0.00	0.00
7,979.09	9.54	98.02	7,894.00	-144.72	1,027.44	163.26	0.00	0.00	0.00
Brushy Canyon									
8,000.00	9.54	98.02	7,914.62	-145.21	1,030.87	163.81	0.00	0.00	0.00
8,100.00	9.54	98.02	8,013.24	-147.52	1,047.28	166.42	0.00	0.00	0.00
8,200.00	9.54	98.02	8,111.86	-149.83	1,063.69	169.02	0.00	0.00	0.00
8,300.00	9.54	98.02	8,210.48	-152.14	1,080.09	171.63	0.00	0.00	0.00
8,400.00	9.54	98.02	8,309.09	-154.45	1,096.50	174.24	0.00	0.00	0.00
8,500.00	9.54	98.02	8,407.71	-156.76	1,112.91	176.84	0.00	0.00	0.00
8,600.00	9.54	98.02	8,506.33	-159.07	1,129.32	179.45	0.00	0.00	0.00
8,700.00	9.54	98.02	8,604.95	-161.38	1,145.73	182.06	0.00	0.00	0.00
8,800.00	9.54	98.02	8,703.56	-163.69	1,162.13	184.67	0.00	0.00	0.00
8,900.00	9.54	98.02	8,802.18	-166.01	1,178.54	187.27	0.00	0.00	0.00

Database: EDM 5000.14 Single User Db
Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Sheba Federal Com
Well: 507H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,000.00	9.54	98.02	8,900.80	-168.32	1,194.95	189.88	0.00	0.00	0.00
9,100.00	9.54	98.02	8,999.42	-170.63	1,211.36	192.49	0.00	0.00	0.00
9,200.00	9.54	98.02	9,098.03	-172.94	1,227.76	195.09	0.00	0.00	0.00
9,300.00	9.54	98.02	9,196.65	-175.25	1,244.17	197.70	0.00	0.00	0.00
9,400.00	9.54	98.02	9,295.27	-177.56	1,260.58	200.31	0.00	0.00	0.00
9,464.62	9.54	98.02	9,359.00	-179.05	1,271.18	201.99	0.00	0.00	0.00
Bone Spring Lime									
9,499.10	9.54	98.02	9,393.00	-179.85	1,276.84	202.89	0.00	0.00	0.00
Leonard Shale									
9,500.00	9.54	98.02	9,393.89	-179.87	1,276.99	202.92	0.00	0.00	0.00
9,600.00	9.54	98.02	9,492.51	-182.18	1,293.40	205.52	0.00	0.00	0.00
9,700.00	9.54	98.02	9,591.12	-184.49	1,309.80	208.13	0.00	0.00	0.00
9,800.00	9.54	98.02	9,689.74	-186.81	1,326.21	210.74	0.00	0.00	0.00
9,900.00	9.54	98.02	9,788.36	-189.12	1,342.62	213.35	0.00	0.00	0.00
10,000.00	9.54	98.02	9,886.98	-191.43	1,359.03	215.95	0.00	0.00	0.00
10,081.23	9.54	98.02	9,967.08	-193.31	1,372.35	218.07	0.00	0.00	0.00
Drop 1.5°/100'									
10,100.00	9.26	98.02	9,985.60	-193.73	1,375.39	218.55	1.50	-1.50	0.00
10,200.00	7.76	98.02	10,084.50	-195.80	1,390.04	220.88	1.50	-1.50	0.00
10,300.00	6.26	98.02	10,183.75	-197.50	1,402.11	222.80	1.50	-1.50	0.00
10,400.00	4.76	98.02	10,283.28	-198.84	1,411.62	224.31	1.50	-1.50	0.00
10,500.00	3.26	98.02	10,383.04	-199.81	1,418.53	225.41	1.50	-1.50	0.00
10,522.00	2.93	98.02	10,405.00	-199.98	1,419.71	225.60	1.50	-1.50	0.00
FBSG Sand									
10,600.00	1.76	98.02	10,482.94	-200.42	1,422.86	226.10	1.50	-1.50	0.00
10,700.00	0.26	98.02	10,582.92	-200.66	1,424.60	226.37	1.50	-1.50	0.00
10,717.08	0.00	0.00	10,600.00	-200.67	1,424.64	226.38	1.50	-1.50	0.00
83' Hold									
10,752.08	0.00	0.00	10,635.00	-200.67	1,424.64	226.38	0.00	0.00	0.00
SBSG Shale									
10,800.12	0.00	0.00	10,683.04	-200.67	1,424.64	226.38	0.00	0.00	0.00
Build 10°/100'									
10,850.00	4.99	0.02	10,732.86	-198.50	1,424.64	228.45	10.00	10.00	0.00
10,900.00	9.99	0.02	10,782.42	-191.99	1,424.64	234.68	10.00	10.00	0.00
10,950.00	14.99	0.02	10,831.22	-181.18	1,424.65	245.01	10.00	10.00	0.00
11,000.00	19.99	0.02	10,878.89	-166.16	1,424.65	259.37	10.00	10.00	0.00
11,050.00	24.99	0.02	10,925.07	-147.04	1,424.66	277.65	10.00	10.00	0.00
11,072.19	27.21	0.02	10,945.00	-137.28	1,424.66	286.98	10.00	10.00	0.00
SBSG Sand									
11,100.00	29.99	0.02	10,969.42	-123.97	1,424.67	299.71	10.00	10.00	0.00
11,150.00	34.99	0.02	11,011.58	-97.12	1,424.67	325.38	10.00	10.00	0.00
11,200.00	39.99	0.02	11,051.24	-66.70	1,424.68	354.46	10.00	10.00	0.00
11,250.00	44.99	0.02	11,088.10	-32.94	1,424.70	386.73	10.00	10.00	0.00
11,300.00	49.99	0.02	11,121.88	3.90	1,424.71	421.96	10.00	10.00	0.00
11,350.00	54.99	0.02	11,152.31	43.55	1,424.72	459.87	10.00	10.00	0.00
11,400.00	59.99	0.02	11,179.18	85.70	1,424.74	500.16	10.00	10.00	0.00
11,450.00	64.99	0.02	11,202.27	130.03	1,424.75	542.55	10.00	10.00	0.00
11,500.00	69.99	0.02	11,221.40	176.21	1,424.77	586.69	10.00	10.00	0.00
11,548.29	74.82	0.02	11,236.00	222.23	1,424.78	630.69	10.00	10.00	0.00
Target Top at 0°VS									
11,550.00	74.99	0.02	11,236.45	223.88	1,424.78	632.26	10.00	10.00	0.00
11,600.00	79.99	0.02	11,247.27	272.67	1,424.80	678.92	10.00	10.00	0.00
11,650.00	84.99	0.02	11,253.81	322.23	1,424.82	726.29	10.00	10.00	0.00



Planning Report



Database: EDM 5000.14 Single User Db
 Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Site: Sheba Federal Com
 Well: 507H
 Wellbore: OH
 Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,700.12	90.00	0.02	11,256.00	372.29	1,424.83	774.15	10.00	10.00	0.00
4272' Hold									
11,800.00	90.00	0.02	11,256.00	472.17	1,424.87	869.64	0.00	0.00	0.00
11,900.00	90.00	0.02	11,256.00	572.17	1,424.90	965.24	0.00	0.00	0.00
12,000.00	90.00	0.02	11,256.00	672.17	1,424.93	1,060.85	0.00	0.00	0.00
12,100.00	90.00	0.02	11,256.00	772.17	1,424.97	1,156.45	0.00	0.00	0.00
12,200.00	90.00	0.02	11,256.00	872.17	1,425.00	1,252.05	0.00	0.00	0.00
12,300.00	90.00	0.02	11,256.00	972.17	1,425.03	1,347.66	0.00	0.00	0.00
12,400.00	90.00	0.02	11,256.00	1,072.17	1,425.07	1,443.26	0.00	0.00	0.00
12,500.00	90.00	0.02	11,256.00	1,172.17	1,425.10	1,538.87	0.00	0.00	0.00
12,600.00	90.00	0.02	11,256.00	1,272.17	1,425.13	1,634.47	0.00	0.00	0.00
12,700.00	90.00	0.02	11,256.00	1,372.17	1,425.17	1,730.07	0.00	0.00	0.00
12,800.00	90.00	0.02	11,256.00	1,472.17	1,425.20	1,825.68	0.00	0.00	0.00
12,900.00	90.00	0.02	11,256.00	1,572.17	1,425.23	1,921.28	0.00	0.00	0.00
13,000.00	90.00	0.02	11,256.00	1,672.17	1,425.27	2,016.89	0.00	0.00	0.00
13,100.00	90.00	0.02	11,256.00	1,772.17	1,425.30	2,112.49	0.00	0.00	0.00
13,200.00	90.00	0.02	11,256.00	1,872.17	1,425.33	2,208.09	0.00	0.00	0.00
13,300.00	90.00	0.02	11,256.00	1,972.17	1,425.37	2,303.70	0.00	0.00	0.00
13,400.00	90.00	0.02	11,256.00	2,072.17	1,425.40	2,399.30	0.00	0.00	0.00
13,500.00	90.00	0.02	11,256.00	2,172.17	1,425.43	2,494.91	0.00	0.00	0.00
13,600.00	90.00	0.02	11,256.00	2,272.17	1,425.47	2,590.51	0.00	0.00	0.00
13,700.00	90.00	0.02	11,256.00	2,372.17	1,425.50	2,686.12	0.00	0.00	0.00
13,800.00	90.00	0.02	11,256.00	2,472.17	1,425.53	2,781.72	0.00	0.00	0.00
13,900.00	90.00	0.02	11,256.00	2,572.17	1,425.57	2,877.32	0.00	0.00	0.00
14,000.00	90.00	0.02	11,256.00	2,672.17	1,425.60	2,972.93	0.00	0.00	0.00
14,100.00	90.00	0.02	11,256.00	2,772.17	1,425.63	3,068.53	0.00	0.00	0.00
14,200.00	90.00	0.02	11,256.00	2,872.17	1,425.67	3,164.14	0.00	0.00	0.00
14,300.00	90.00	0.02	11,256.00	2,972.17	1,425.70	3,259.74	0.00	0.00	0.00
14,400.00	90.00	0.02	11,256.00	3,072.17	1,425.74	3,355.34	0.00	0.00	0.00
14,500.00	90.00	0.02	11,256.00	3,172.17	1,425.77	3,450.95	0.00	0.00	0.00
14,600.00	90.00	0.02	11,256.00	3,272.17	1,425.80	3,546.55	0.00	0.00	0.00
14,700.00	90.00	0.02	11,256.00	3,372.17	1,425.84	3,642.16	0.00	0.00	0.00
14,800.00	90.00	0.02	11,256.00	3,472.17	1,425.87	3,737.76	0.00	0.00	0.00
14,900.00	90.00	0.02	11,256.00	3,572.17	1,425.90	3,833.36	0.00	0.00	0.00
15,000.00	90.00	0.02	11,256.00	3,672.17	1,425.94	3,928.97	0.00	0.00	0.00
15,100.00	90.00	0.02	11,256.00	3,772.17	1,425.97	4,024.57	0.00	0.00	0.00
15,200.00	90.00	0.02	11,256.00	3,872.17	1,426.00	4,120.18	0.00	0.00	0.00
15,300.00	90.00	0.02	11,256.00	3,972.17	1,426.04	4,215.78	0.00	0.00	0.00
15,400.00	90.00	0.02	11,256.00	4,072.17	1,426.07	4,311.38	0.00	0.00	0.00
15,500.00	90.00	0.02	11,256.00	4,172.17	1,426.10	4,406.99	0.00	0.00	0.00
15,600.00	90.00	0.02	11,256.00	4,272.17	1,426.14	4,502.59	0.00	0.00	0.00
15,700.00	90.00	0.02	11,256.00	4,372.17	1,426.17	4,598.20	0.00	0.00	0.00
15,800.00	90.00	0.02	11,256.00	4,472.17	1,426.20	4,693.80	0.00	0.00	0.00
15,900.00	90.00	0.02	11,256.00	4,572.17	1,426.24	4,789.41	0.00	0.00	0.00
15,972.39	90.00	0.02	11,256.00	4,644.55	1,426.26	4,858.61	0.00	0.00	0.00
TD at 15972.39									

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 507H
Company:	Centennial Resource Development, Inc.	TVD Reference:	KB=25' @ 3519.00usft (H&P 650)
Project:	Lea Co., NM (NAD83)	MD Reference:	KB=25' @ 3519.00usft (H&P 650)
Site:	Sheba Federal Com	North Reference:	True
Well:	507H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Sheba FC 507H FTP	0.00	0.00	11,256.00	48.88	1,424.73	436,429.86	814,470.44	32.196740	-103.450350
- plan misses target center by 85.03usft at 11402.83usft MD (11180.59 TVD, 88.16 N, 1424.74 E)									
- Point									
Sheba FC 507H PBHL	0.00	0.00	11,256.00	4,644.55	1,426.26	441,025.39	814,434.43	32.209372	-103.450345
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(usft)	(usft)		(")	(")	
1,300.00	1,300.00	13 3/8"	13-3/8	17-1/2	
5,558.00	5,506.38	9 5/8"	9-5/8	12-1/4	

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,538.35	5,487.00	Lamar		0.00		
5,566.74	5,515.00	Bell Canyon		0.00		
6,517.89	6,453.00	Cherry Canyon		0.00		
6,746.04	6,678.00	Manzanita Lime		0.00		
7,979.09	7,894.00	Brushy Canyon		0.00		
9,464.62	9,359.00	Bone Spring Lime		0.00		
9,499.10	9,393.00	Leonard Shale		0.00		
10,522.00	10,405.00	FBSG Sand		0.00		
10,752.08	10,635.00	SBSG Shale		0.00		
11,072.19	10,945.00	SBSG Sand		0.00		
11,548.29	11,236.00	Target Top at 0°VS		0.00		

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
1,400.00	1,400.00	0.00	0.00	Build 1.5°/100'	
2,035.85	2,032.92	-7.36	52.29	8045' Hold	
10,081.23	9,967.08	-193.31	1,372.35	Drop 1.5°/100'	
10,717.08	10,600.00	-200.67	1,424.64	83' Hold	
10,800.12	10,683.04	-200.67	1,424.64	Build 10°/100'	
11,700.12	11,256.00	372.29	1,424.83	4272' Hold	
15,972.39	11,256.00	4,644.55	1,426.26	TD at 15972.39	



Centennial Resource Development, Inc.

**Lea Co., NM (NAD83)
Sheba Federal Com
507H**

**OH
Plan #1**

Anticollision Report

19 February, 2018



Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Reference	Plan #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 9,999.98 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program	Date	02/19/18
From (usft)	To (usft)	Survey (Wellbore)
0.00	15,972.39	Plan #1 (OH)
		Tool Name
		MWD+IFR1+MS
		Description
		OWSG MWD + IFR1 + Multi-Station Correction

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance		Separation Factor	Warning
			Between Centres (usft)	Between Ellipses (usft)		
Offset Well - Wellbore - Design						
Sheba Federal Com						
506H - OH - Plan #1	1,400.00	1,400.00	30.05	20.46	3.134	CC, ES
506H - OH - Plan #1	1,500.00	1,500.01	31.35	21.05	3.045	SF
711H - OH - Plan #1	5,466.72	5,426.81	142.85	103.95	3.673	CC
711H - OH - Plan #1	5,700.00	5,659.45	143.88	103.28	3.544	ES
711H - OH - Plan #1	6,300.00	6,258.95	154.85	109.92	3.446	SF
Solomon Federal Com						
709H - OH - Plan #1	2,685.08	2,676.93	27.94	9.33	1.501	CC, ES, SF
710H - OH - Plan #1	3,254.74	3,235.23	41.78	19.04	1.837	CC, ES, SF

Offset Design Sheba Federal Com - 506H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis			Distance				Separation Factor	Warning		
				Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			Minimum Separation (usft)	
0.00	0.00	0.00	0.00	0.00	0.00	-90.01	0.00	-30.05	30.05					
100.00	100.00	100.00	100.00	0.13	0.13	-90.01	0.00	-30.05	30.05	29.78	0.27	111.775		
200.00	200.00	200.00	200.00	0.49	0.49	-90.01	0.00	-30.05	30.05	29.07	0.99	30.484		
300.00	300.00	300.00	300.00	0.85	0.85	-90.01	0.00	-30.05	30.05	28.35	1.70	17.649		
400.00	400.00	400.00	400.00	1.21	1.21	-90.01	0.00	-30.05	30.05	27.63	2.42	12.419		
500.00	500.00	500.00	500.00	1.57	1.57	-90.01	0.00	-30.05	30.05	26.91	3.14	9.581		
600.00	600.00	600.00	600.00	1.93	1.93	-90.01	0.00	-30.05	30.05	26.20	3.85	7.798		
700.00	700.00	700.00	700.00	2.29	2.29	-90.01	0.00	-30.05	30.05	25.48	4.57	6.575		
800.00	800.00	800.00	800.00	2.64	2.64	-90.01	0.00	-30.05	30.05	24.76	5.29	5.683		
900.00	900.00	900.00	900.00	3.00	3.00	-90.01	0.00	-30.05	30.05	24.05	6.00	5.005		
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.01	0.00	-30.05	30.05	23.33	6.72	4.471		
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	-90.01	0.00	-30.05	30.05	22.61	7.44	4.040		
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	-90.01	0.00	-30.05	30.05	21.90	8.16	3.685		
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	-90.01	0.00	-30.05	30.05	21.18	8.87	3.387		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.01	0.00	-30.05	30.05	20.46	9.59	3.134	CC, ES	
1,500.00	1,499.99	1,500.01	1,499.99	5.14	5.15	172.31	0.00	-30.05	31.35	21.05	10.30	3.045	SF	
1,600.00	1,599.91	1,599.91	1,599.91	5.48	5.51	173.15	0.00	-30.05	35.24	24.25	10.99	3.205		
1,700.00	1,699.69	1,700.72	1,700.71	5.83	5.86	173.66	-0.45	-28.80	40.49	28.81	11.68	3.466		
1,800.00	1,799.27	1,801.66	1,801.57	6.17	6.20	173.38	-1.80	-25.04	45.83	33.47	12.36	3.709		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Sheba Federal Com - 506H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
1,900.00	1,898.57	1,902.73	1,902.41	6.52	6.55	172.57	-4.04	-18.76	51.27	38.24	13.03	3.934		
2,000.00	1,997.54	2,003.64	2,002.89	6.87	6.89	171.39	-7.16	-10.04	56.86	43.15	13.71	4.148		
2,035.85	2,032.92	2,039.41	2,038.48	7.00	7.01	171.02	-8.37	-6.66	59.21	45.26	13.96	4.243		
2,100.00	2,096.18	2,103.40	2,102.15	7.23	7.24	170.48	-10.54	-0.61	63.72	49.32	14.40	4.425		
2,200.00	2,194.80	2,203.14	2,201.39	7.58	7.58	169.77	-13.91	8.82	70.76	55.67	15.10	4.687		
2,300.00	2,293.42	2,302.89	2,300.64	7.94	7.93	169.18	-17.28	18.24	77.82	62.01	15.80	4.925		
2,400.00	2,392.03	2,402.64	2,399.88	8.30	8.28	168.70	-20.65	27.67	84.87	68.37	16.51	5.142		
2,500.00	2,490.65	2,502.39	2,499.13	8.66	8.63	168.29	-24.02	37.09	91.93	74.72	17.21	5.340		
2,600.00	2,589.27	2,602.14	2,598.37	9.02	8.98	167.94	-27.39	46.52	99.00	81.07	17.93	5.523		
2,700.00	2,687.89	2,701.89	2,697.62	9.39	9.33	167.63	-30.77	55.94	106.07	87.43	18.64	5.690		
2,800.00	2,786.50	2,801.63	2,796.86	9.75	9.69	167.37	-34.14	65.37	113.14	93.79	19.36	5.845		
2,900.00	2,885.12	2,901.38	2,896.10	10.12	10.04	167.13	-37.51	74.79	120.22	100.14	20.07	5.988		
3,000.00	2,983.74	3,001.13	2,995.35	10.48	10.40	166.92	-40.88	84.22	127.29	106.50	20.79	6.121		
3,100.00	3,082.36	3,100.88	3,094.59	10.85	10.75	166.73	-44.25	93.64	134.37	112.85	21.52	6.245		
3,200.00	3,180.97	3,200.63	3,193.84	11.22	11.11	166.56	-47.62	103.07	141.45	119.21	22.24	6.360		
3,300.00	3,279.59	3,300.38	3,293.08	11.58	11.46	166.41	-51.00	112.50	148.53	125.56	22.96	6.468		
3,400.00	3,378.21	3,400.12	3,392.33	11.95	11.82	166.27	-54.37	121.92	155.61	131.92	23.69	6.569		
3,500.00	3,476.83	3,500.13	3,491.57	12.32	12.18	166.15	-57.74	131.35	162.69	138.27	24.42	6.663		
3,600.00	3,575.45	3,600.38	3,590.82	12.69	12.54	166.03	-61.11	140.77	169.77	144.63	25.15	6.751		
3,700.00	3,674.06	3,700.63	3,690.06	13.06	12.90	165.92	-64.48	150.20	176.85	150.98	25.88	6.835		
3,800.00	3,772.68	3,799.12	3,789.31	13.43	13.25	165.83	-67.85	159.62	183.94	157.34	26.60	6.915		
3,900.00	3,871.30	3,901.13	3,888.55	13.80	13.62	165.74	-71.23	169.05	191.02	163.68	27.34	6.987		
4,000.00	3,969.92	4,001.39	3,987.80	14.17	13.98	165.65	-74.60	178.47	198.11	170.03	28.07	7.057		
4,100.00	4,068.53	4,101.64	4,087.04	14.54	14.34	165.57	-77.97	187.90	205.19	176.39	28.81	7.123		
4,200.00	4,167.15	4,201.89	4,186.29	14.91	14.71	165.50	-81.34	197.32	212.28	182.74	29.54	7.186		
4,300.00	4,265.77	4,297.86	4,285.53	15.29	15.05	165.43	-84.71	206.75	219.36	189.10	30.26	7.249		
4,400.00	4,364.39	4,402.39	4,384.78	15.66	15.43	165.36	-88.08	216.18	226.45	195.44	31.01	7.302		
4,500.00	4,463.00	4,497.36	4,484.02	16.03	15.77	165.30	-91.46	225.60	233.53	201.81	31.73	7.361		
4,600.00	4,561.62	4,602.90	4,583.27	16.40	16.16	165.25	-94.83	235.03	240.62	208.14	32.48	7.408		
4,700.00	4,660.24	4,703.15	4,682.51	16.78	16.52	165.19	-98.20	244.45	247.71	214.49	33.22	7.457		
4,800.00	4,758.86	4,796.60	4,781.76	17.15	16.86	165.14	-101.57	253.88	254.79	220.86	33.93	7.509		
4,900.00	4,857.48	4,903.65	4,881.00	17.52	17.25	165.10	-104.94	263.30	261.88	227.19	34.69	7.549		
5,000.00	4,956.09	4,996.10	4,980.24	17.89	17.58	165.05	-108.31	272.73	268.97	233.57	35.40	7.598		
5,100.00	5,054.71	5,104.15	5,079.49	18.27	17.97	165.01	-111.69	282.15	276.05	239.89	36.17	7.633		
5,200.00	5,153.33	5,195.59	5,178.73	18.64	18.31	164.97	-115.06	291.58	283.14	246.27	36.87	7.679		
5,300.00	5,251.95	5,304.66	5,277.98	19.02	18.70	164.93	-118.43	301.00	290.23	252.59	37.64	7.710		
5,400.00	5,350.56	5,404.91	5,377.22	19.39	19.07	164.89	-121.80	310.43	297.32	258.93	38.38	7.746		
5,500.00	5,449.18	5,505.16	5,476.47	19.76	19.43	164.85	-125.17	319.86	304.41	265.28	39.12	7.781		
5,600.00	5,547.80	5,605.41	5,575.71	20.14	19.79	164.82	-128.54	329.28	311.49	271.63	39.86	7.814		
5,700.00	5,646.42	5,705.66	5,674.96	20.51	20.16	164.79	-131.92	338.71	318.58	277.98	40.60	7.847		
5,800.00	5,745.03	5,805.92	5,774.20	20.89	20.52	164.76	-135.29	348.13	325.67	284.33	41.34	7.878		
5,900.00	5,843.65	5,906.17	5,873.45	21.26	20.89	164.73	-138.66	357.56	332.76	290.68	42.08	7.908		
6,000.00	5,942.27	6,006.42	5,972.69	21.63	21.25	164.70	-142.03	366.98	339.85	297.02	42.82	7.936		
6,100.00	6,040.89	6,106.67	6,071.94	22.01	21.62	164.67	-145.40	376.41	346.93	303.37	43.56	7.964		
6,200.00	6,139.50	6,193.08	6,171.18	22.38	21.93	164.65	-148.77	385.83	354.02	309.77	44.25	8.000		
6,300.00	6,238.12	6,307.17	6,270.43	22.76	22.35	164.62	-152.14	395.26	361.11	316.07	45.04	8.017		
6,400.00	6,336.74	6,407.43	6,369.67	23.13	22.71	164.60	-155.52	404.68	368.20	322.42	45.78	8.042		
6,500.00	6,435.36	6,507.68	6,468.92	23.51	23.08	164.57	-158.89	414.11	375.29	328.76	46.52	8.066		
6,600.00	6,533.98	6,592.07	6,568.16	23.88	23.38	164.55	-162.26	423.53	382.38	335.17	47.21	8.100		
6,700.00	6,632.59	6,708.18	6,667.41	24.26	23.81	164.53	-165.63	432.96	389.47	341.46	48.01	8.113		
6,800.00	6,731.21	6,808.43	6,766.65	24.63	24.17	164.51	-169.00	442.39	396.55	347.81	48.75	8.135		
6,900.00	6,829.83	6,908.68	6,865.90	25.01	24.54	164.49	-172.37	451.81	403.64	354.15	49.49	8.156		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Sheba Federal Com - 506H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
7,000.00	6,928.45	7,008.94	6,965.14	25.38	24.90	164.47	-175.75	461.24	410.73	360.50	50.23	8.177		
7,100.00	7,027.06	7,109.19	7,064.38	25.76	25.27	164.45	-179.12	470.66	417.82	366.85	50.97	8.197		
7,200.00	7,125.68	7,209.44	7,163.63	26.13	25.63	164.43	-182.49	480.09	424.91	373.19	51.72	8.216		
7,300.00	7,224.30	7,290.31	7,262.87	26.51	25.93	164.42	-185.86	489.51	432.00	379.61	52.39	8.246		
7,400.00	7,322.92	7,409.94	7,362.12	26.89	26.37	164.40	-189.23	498.94	439.09	385.89	53.20	8.254		
7,500.00	7,421.53	7,489.81	7,461.36	27.26	26.66	164.38	-192.60	508.36	446.18	392.31	53.87	8.283		
7,600.00	7,520.15	7,583.32	7,554.45	27.64	27.00	164.39	-195.61	516.77	453.71	399.14	54.58	8.314		
7,700.00	7,618.77	7,673.25	7,644.14	28.01	27.32	164.52	-197.83	522.97	463.22	407.97	55.25	8.385		
7,800.00	7,717.39	7,762.76	7,733.53	28.39	27.64	164.75	-199.33	527.17	474.81	418.92	55.89	8.495		
7,900.00	7,816.01	7,851.74	7,822.48	28.76	27.96	165.09	-200.12	529.39	488.49	431.98	56.51	8.645		
8,000.00	7,914.62	7,943.89	7,914.62	29.14	28.27	165.52	-200.27	529.78	504.11	446.97	57.14	8.823		
8,100.00	8,013.24	8,042.50	8,013.24	29.52	28.61	165.98	-200.27	529.78	520.18	462.34	57.84	8.993		
8,200.00	8,111.86	8,141.12	8,111.86	29.89	28.94	166.40	-200.27	529.78	536.28	477.74	58.54	9.160		
8,300.00	8,210.48	8,239.74	8,210.48	30.27	29.28	166.81	-200.27	529.78	552.42	493.17	59.25	9.324		
8,400.00	8,309.09	8,338.36	8,309.09	30.64	29.61	167.19	-200.27	529.78	568.57	508.62	59.95	9.484		
8,500.00	8,407.71	8,436.97	8,407.71	31.02	29.95	167.55	-200.27	529.78	584.75	524.09	60.66	9.640		
8,600.00	8,506.33	8,535.59	8,506.33	31.40	30.28	167.89	-200.27	529.78	600.95	539.59	61.36	9.793		
8,700.00	8,604.95	8,634.21	8,604.95	31.77	30.62	168.21	-200.27	529.78	617.17	555.10	62.07	9.943		
8,800.00	8,703.56	8,732.83	8,703.56	32.15	30.96	168.52	-200.27	529.78	633.41	570.63	62.78	10.090		
8,900.00	8,802.18	8,831.44	8,802.18	32.52	31.30	168.81	-200.27	529.78	649.67	586.18	63.49	10.233		
9,000.00	8,900.80	8,930.06	8,900.80	32.90	31.63	169.09	-200.27	529.78	665.94	601.74	64.19	10.374		
9,100.00	8,999.42	9,028.68	8,999.42	33.28	31.97	169.35	-200.27	529.78	682.22	617.32	64.90	10.511		
9,200.00	9,098.03	9,127.30	9,098.03	33.65	32.31	169.60	-200.27	529.78	698.52	632.91	65.61	10.646		
9,300.00	9,196.65	9,225.91	9,196.65	34.03	32.65	169.84	-200.27	529.78	714.83	648.51	66.32	10.778		
9,400.00	9,295.27	9,324.53	9,295.27	34.41	32.99	170.07	-200.27	529.78	731.15	664.12	67.03	10.907		
9,500.00	9,393.89	9,423.15	9,393.89	34.78	33.33	170.29	-200.27	529.78	747.49	679.74	67.74	11.034		
9,600.00	9,492.51	9,521.77	9,492.51	35.16	33.67	170.50	-200.27	529.78	763.83	695.38	68.45	11.158		
9,700.00	9,591.12	9,620.39	9,591.12	35.54	34.01	170.70	-200.27	529.78	780.18	711.02	69.17	11.280		
9,800.00	9,689.74	9,719.00	9,689.74	35.91	34.35	170.89	-200.27	529.78	796.55	726.67	69.88	11.399		
9,900.00	9,788.36	9,817.62	9,788.36	36.29	34.69	171.08	-200.27	529.78	812.92	742.33	70.59	11.516		
10,000.00	9,886.98	9,916.24	9,886.98	36.67	35.03	171.25	-200.27	529.78	829.30	757.99	71.30	11.630		
10,081.23	9,967.08	10,003.66	9,967.08	36.97	35.33	171.39	-200.27	529.78	842.60	770.70	71.91	11.718		
10,100.00	9,985.60	10,014.86	9,985.60	37.04	35.37	171.43	-200.27	529.78	845.64	773.62	72.02	11.742		
10,200.00	10,084.50	10,113.76	10,084.50	37.42	35.71	171.61	-200.27	529.78	860.27	787.54	72.73	11.828		
10,300.00	10,183.75	10,213.01	10,183.75	37.78	36.06	171.75	-200.27	529.78	872.34	798.90	73.44	11.879		
10,400.00	10,283.28	10,312.55	10,283.28	38.15	36.40	171.86	-200.27	529.78	881.84	807.69	74.14	11.894		
10,500.00	10,383.04	10,412.30	10,383.04	38.51	36.75	171.94	-200.27	529.78	888.75	813.91	74.85	11.875		
10,600.00	10,482.94	10,512.20	10,482.94	38.86	37.10	171.99	-200.27	529.78	893.08	817.54	75.54	11.822		
10,700.00	10,582.92	10,612.18	10,582.92	39.21	37.44	172.01	-200.27	529.78	894.82	818.59	76.23	11.738		
10,717.08	10,600.00	10,629.26	10,600.00	39.26	37.50	-89.97	-200.27	529.78	894.86	818.51	76.35	11.720		
10,727.09	10,610.01	10,639.27	10,610.01	39.30	37.54	-89.97	-200.27	529.78	894.86	818.44	76.42	11.710		
10,800.12	10,683.04	10,712.30	10,683.03	39.54	37.79	-89.96	-200.07	529.78	894.86	817.95	76.91	11.635		
10,850.00	10,732.96	10,762.08	10,732.68	39.70	37.96	-89.90	-196.61	529.78	894.86	817.62	77.24	11.585		
10,900.00	10,782.42	10,811.87	10,781.84	39.87	38.13	-89.81	-188.85	529.78	894.87	817.30	77.57	11.537		
10,950.00	10,831.22	10,861.54	10,830.04	40.03	38.30	-89.73	-176.89	529.79	894.87	816.99	77.88	11.490		
11,000.00	10,878.89	10,911.11	10,876.92	40.19	38.46	-89.65	-160.83	529.79	894.88	816.69	78.19	11.445		
11,050.00	10,925.07	10,960.58	10,922.15	40.34	38.61	-89.58	-140.83	529.80	894.89	816.40	78.49	11.402		
11,100.00	10,969.42	11,009.95	10,965.40	40.49	38.75	-89.51	-117.06	529.81	894.89	816.12	78.77	11.361		
11,150.00	11,011.58	11,059.23	11,006.37	40.63	38.89	-89.44	-89.71	529.82	894.90	815.87	79.04	11.322		
11,200.00	11,051.24	11,108.42	11,044.78	40.75	39.01	-89.37	-58.99	529.83	894.92	815.63	79.29	11.287		
11,250.00	11,088.10	11,157.52	11,080.35	40.87	39.12	-89.31	-25.16	529.84	894.93	815.40	79.52	11.253		
11,300.00	11,121.88	11,206.56	11,112.84	40.97	39.23	-89.26	11.54	529.85	894.94	815.19	79.74	11.223		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Sheba Federal Com - 506H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,350.00	11,152.31	11,255.52	11,142.05	41.07	39.32	-89.21	50.82	529.86	894.95	815.00	79.94	11.195	
11,400.00	11,179.18	11,304.43	11,167.76	41.15	39.41	-89.16	92.41	529.88	894.96	814.83	80.12	11.170	
11,450.00	11,202.27	11,353.29	11,189.82	41.21	39.48	-89.12	135.98	529.89	894.97	814.68	80.29	11.147	
11,500.00	11,221.40	11,402.10	11,208.07	41.26	39.55	-89.09	181.24	529.91	894.97	814.54	80.43	11.127	
11,550.00	11,236.45	11,450.87	11,222.39	41.31	39.61	-89.07	227.85	529.92	894.98	814.42	80.55	11.110	
11,600.00	11,247.27	11,499.63	11,232.69	41.33	39.65	-89.05	275.49	529.94	894.98	814.32	80.66	11.096	
11,650.00	11,253.81	11,548.36	11,238.91	41.35	39.69	-89.04	323.81	529.96	894.99	814.24	80.74	11.084	
11,700.12	11,256.00	11,597.41	11,241.00	41.36	39.72	-89.04	372.59	529.97	894.99	814.18	80.81	11.075	
11,800.00	11,256.00	11,702.92	11,241.00	41.37	39.77	-89.04	472.47	530.01	894.99	814.05	80.94	11.057	
11,900.00	11,256.00	11,802.92	11,241.00	41.41	39.85	-89.04	572.47	530.04	894.99	813.89	81.10	11.036	
12,000.00	11,256.00	11,902.92	11,241.00	41.49	39.94	-89.04	672.47	530.07	894.99	813.70	81.28	11.011	
12,100.00	11,256.00	12,002.92	11,241.00	41.59	40.04	-89.04	772.47	530.11	894.99	813.49	81.49	10.982	
12,200.00	11,256.00	12,102.92	11,241.00	41.71	40.17	-89.04	872.47	530.14	894.99	813.25	81.74	10.950	
12,300.00	11,256.00	12,202.92	11,241.00	41.86	40.30	-89.04	972.47	530.17	894.98	812.98	82.00	10.914	
12,400.00	11,256.00	12,302.92	11,241.00	42.02	40.45	-89.04	1,072.47	530.21	894.98	812.68	82.30	10.874	
12,500.00	11,256.00	12,402.92	11,241.00	42.19	40.62	-89.04	1,172.47	530.24	894.98	812.36	82.63	10.832	
12,600.00	11,256.00	12,502.92	11,241.00	42.38	40.80	-89.04	1,272.47	530.27	894.98	812.01	82.98	10.786	
12,700.00	11,256.00	12,602.92	11,241.00	42.59	40.99	-89.04	1,372.47	530.31	894.98	811.63	83.36	10.737	
12,800.00	11,256.00	12,702.92	11,241.00	42.80	41.20	-89.04	1,472.47	530.34	894.98	811.22	83.76	10.685	
12,900.00	11,256.00	12,802.92	11,241.00	43.03	41.42	-89.04	1,572.47	530.38	894.98	810.79	84.19	10.630	
13,000.00	11,256.00	12,902.92	11,241.00	43.27	41.65	-89.04	1,672.47	530.41	894.98	810.34	84.65	10.573	
13,100.00	11,256.00	13,002.92	11,241.00	43.52	41.90	-89.04	1,772.47	530.44	894.98	809.86	85.13	10.514	
13,200.00	11,256.00	13,102.92	11,241.00	43.78	42.16	-89.04	1,872.47	530.48	894.98	809.35	85.63	10.451	
13,300.00	11,256.00	13,202.92	11,241.00	44.06	42.43	-89.04	1,972.47	530.51	894.98	808.82	86.16	10.387	
13,400.00	11,256.00	13,302.92	11,241.00	44.34	42.71	-89.04	2,072.47	530.54	894.98	808.27	86.72	10.321	
13,500.00	11,256.00	13,402.92	11,241.00	44.64	43.00	-89.04	2,172.47	530.58	894.98	807.69	87.29	10.253	
13,600.00	11,256.00	13,502.92	11,241.00	44.94	43.31	-89.04	2,272.47	530.61	894.98	807.09	87.89	10.183	
13,700.00	11,256.00	13,602.92	11,241.00	45.26	43.63	-89.04	2,372.47	530.64	894.98	806.47	88.52	10.111	
13,800.00	11,256.00	13,702.92	11,241.00	45.59	43.95	-89.04	2,472.47	530.68	894.98	805.82	89.16	10.038	
13,900.00	11,256.00	13,802.92	11,241.00	45.92	44.29	-89.04	2,572.47	530.71	894.98	805.16	89.83	9.964	
14,000.00	11,256.00	13,902.92	11,241.00	46.27	44.64	-89.04	2,672.47	530.75	894.98	804.47	90.51	9.888	
14,100.00	11,256.00	14,002.92	11,241.00	46.63	45.00	-89.04	2,772.47	530.78	894.98	803.76	91.22	9.811	
14,200.00	11,256.00	14,102.92	11,241.00	46.99	45.37	-89.04	2,872.47	530.81	894.98	803.03	91.95	9.734	
14,300.00	11,256.00	14,202.92	11,241.00	47.37	45.75	-89.04	2,972.47	530.85	894.98	802.29	92.69	9.655	
14,400.00	11,256.00	14,302.92	11,241.00	47.75	46.14	-89.04	3,072.47	530.88	894.98	801.52	93.46	9.576	
14,500.00	11,256.00	14,402.92	11,241.00	48.15	46.54	-89.04	3,172.47	530.91	894.98	800.74	94.24	9.496	
14,600.00	11,256.00	14,502.92	11,241.00	48.55	46.94	-89.04	3,272.47	530.95	894.98	799.93	95.05	9.416	
14,700.00	11,256.00	14,602.92	11,241.00	48.96	47.36	-89.04	3,372.47	530.98	894.98	799.11	95.87	9.336	
14,800.00	11,256.00	14,702.92	11,241.00	49.38	47.78	-89.04	3,472.47	531.01	894.98	798.27	96.71	9.255	
14,900.00	11,256.00	14,802.92	11,241.00	49.80	48.22	-89.04	3,572.47	531.05	894.98	797.42	97.56	9.174	
15,000.00	11,256.00	14,902.92	11,241.00	50.24	48.66	-89.04	3,672.47	531.08	894.98	796.55	98.43	9.092	
15,100.00	11,256.00	15,002.92	11,241.00	50.68	49.11	-89.04	3,772.47	531.12	894.98	795.66	99.32	9.011	
15,200.00	11,256.00	15,102.92	11,241.00	51.13	49.56	-89.04	3,872.47	531.15	894.98	794.76	100.22	8.930	
15,300.00	11,256.00	15,202.92	11,241.00	51.59	50.03	-89.04	3,972.47	531.18	894.98	793.84	101.14	8.849	
15,400.00	11,256.00	15,302.92	11,241.00	52.05	50.50	-89.04	4,072.47	531.22	894.98	792.91	102.07	8.768	
15,500.00	11,256.00	15,402.92	11,241.00	52.52	50.98	-89.04	4,172.47	531.25	894.98	791.96	103.02	8.687	
15,600.00	11,256.00	15,502.92	11,241.00	53.00	51.46	-89.04	4,272.47	531.28	894.98	791.00	103.98	8.607	
15,700.00	11,256.00	15,602.92	11,241.00	53.48	51.96	-89.04	4,372.47	531.32	894.98	790.02	104.96	8.527	
15,800.00	11,256.00	15,702.92	11,241.00	53.97	52.45	-89.04	4,472.47	531.35	894.98	789.04	105.94	8.448	
15,900.00	11,256.00	15,802.92	11,241.00	54.47	52.96	-89.04	4,572.47	531.39	894.98	788.03	106.94	8.369	
15,972.39	11,256.00	15,869.47	11,241.00	54.83	53.30	-89.04	4,644.85	531.41	894.98	787.33	107.64	8.314	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Sheba Federal Com - 711H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.04	-0.23	309.91	309.91	309.91	309.64	0.27	1,152.702	
100.00	100.00	100.00	100.00	0.13	0.13	90.04	-0.23	309.91	309.91	309.91	308.92	0.99	314.374	
200.00	200.00	200.00	200.00	0.49	0.49	90.04	-0.23	309.91	309.91	309.91	308.21	1.70	182.006	
300.00	300.00	300.00	300.00	0.85	0.85	90.04	-0.23	309.91	309.91	309.91	307.49	2.42	128.078	
400.00	400.00	400.00	400.00	1.21	1.21	90.04	-0.23	309.91	309.91	309.91	306.77	3.14	98.803	
500.00	500.00	500.00	500.00	1.57	1.57	90.04	-0.23	309.91	309.91	309.91	306.05	3.85	80.421	
600.00	600.00	600.00	600.00	1.93	1.93	90.04	-0.23	309.91	309.91	309.91	305.34	4.57	67.806	
700.00	700.00	700.00	700.00	2.29	2.29	90.04	-0.23	309.91	309.91	309.91	304.62	5.29	58.612	
800.00	800.00	800.00	800.00	2.64	2.64	90.04	-0.23	309.91	309.91	309.91	303.90	6.00	51.614	
900.00	900.00	900.00	900.00	3.00	3.00	90.04	-0.23	309.91	309.91	309.91	303.19	6.72	46.108	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	90.04	-0.23	309.91	309.91	309.91	302.47	7.44	41.664	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.04	-0.23	309.91	309.91	309.91	301.75	8.16	38.001	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	90.04	-0.23	309.91	309.91	309.91	301.04	8.87	34.930	
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	90.04	-0.23	309.91	309.91	309.91	300.32	9.59	32.319	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	90.04	-0.23	309.91	309.91	309.91	299.61	10.30	29.974	
1,500.00	1,499.99	1,499.99	1,499.99	5.14	5.15	-8.01	-0.23	309.91	308.61	298.32	298.97	10.96	27.919	
1,600.00	1,599.91	1,592.55	1,592.54	5.48	5.48	-8.13	-0.11	311.02	305.93	294.97	291.46	11.61	26.102	
1,700.00	1,699.69	1,685.16	1,685.08	5.83	5.80	-8.37	0.25	314.37	303.07	291.46	287.78	12.26	24.770	
1,800.00	1,799.27	1,777.81	1,777.57	6.17	6.12	-8.72	0.86	319.95	300.04	287.78	283.94	12.91	22.996	
1,900.00	1,898.57	1,870.51	1,869.93	6.52	6.44	-9.20	1.71	327.76	296.85	283.94	279.00	13.60	21.517	
2,000.00	1,997.54	1,969.50	1,968.43	6.87	6.79	-9.82	2.78	337.56	292.59	279.00	276.61	13.85	20.972	
2,035.85	2,032.92	2,005.27	2,004.02	7.00	6.91	-10.08	3.17	341.11	290.46	276.61	272.05	14.30	20.026	
2,100.00	2,096.18	2,069.24	2,067.67	7.23	7.14	-10.54	3.86	347.45	286.35	272.05	269.98	15.00	18.663	
2,200.00	2,194.80	2,168.97	2,166.90	7.58	7.49	-11.30	4.94	357.34	279.98	269.98	267.96	15.71	17.422	
2,300.00	2,293.42	2,268.70	2,266.13	7.94	7.84	-12.09	6.02	367.23	273.67	267.96	264.98	16.42	16.287	
2,400.00	2,392.03	2,368.42	2,365.36	8.30	8.20	-12.91	7.10	377.12	267.41	264.98	261.21	17.13	15.247	
2,500.00	2,490.65	2,468.15	2,464.59	8.66	8.55	-13.78	8.18	387.02	261.21	261.21	257.07	17.85	14.291	
2,600.00	2,589.27	2,567.88	2,563.82	9.02	8.91	-14.68	9.26	396.91	255.07	257.07	252.48	18.57	13.411	
2,700.00	2,687.89	2,667.61	2,663.05	9.39	9.26	-15.63	10.34	406.80	249.00	252.48	245.25	19.29	12.599	
2,800.00	2,786.50	2,767.34	2,762.28	9.75	9.62	-16.63	11.41	416.69	242.99	245.25	238.23	20.01	11.848	
2,900.00	2,885.12	2,867.06	2,861.51	10.12	9.98	-17.68	12.49	426.58	237.07	238.23	232.04	20.73	11.153	
3,000.00	2,983.74	2,966.79	2,960.74	10.48	10.34	-18.78	13.57	436.47	231.23	232.04	225.48	21.46	10.507	
3,100.00	3,082.36	3,066.52	3,059.97	10.85	10.69	-19.94	14.65	446.36	225.48	225.48	219.83	22.19	9.908	
3,200.00	3,180.97	3,166.25	3,159.20	11.22	11.05	-21.16	15.73	456.25	219.83	219.83	214.28	22.92	9.350	
3,300.00	3,279.59	3,265.98	3,258.44	11.58	11.41	-22.44	16.81	466.14	214.28	214.28	208.84	23.65	8.831	
3,400.00	3,378.21	3,365.70	3,357.67	11.95	11.77	-23.79	17.89	476.03	208.84	208.84	203.53	24.38	8.348	
3,500.00	3,476.83	3,465.43	3,456.90	12.32	12.13	-25.21	18.97	485.93	203.53	203.53	198.30	25.11	7.898	
3,600.00	3,575.45	3,565.16	3,556.13	12.69	12.49	-26.70	20.04	495.82	198.30	198.30	193.30	25.85	7.478	
3,700.00	3,674.06	3,664.89	3,655.36	13.06	12.85	-28.27	21.12	505.71	193.30	193.30	188.42	26.58	7.087	
3,800.00	3,772.68	3,764.62	3,754.59	13.43	13.21	-29.93	22.20	515.60	188.42	188.42	183.69	27.32	6.723	
3,900.00	3,871.30	3,864.34	3,853.82	13.80	13.57	-31.67	23.28	525.49	183.69	183.69	179.15	28.06	6.385	
4,000.00	3,969.92	3,964.07	3,953.05	14.17	13.93	-33.51	24.36	535.38	179.15	179.15	174.80	28.80	6.070	
4,100.00	4,068.53	4,063.80	4,052.28	14.54	14.29	-35.43	25.44	545.27	174.80	174.80	170.66	29.54	5.777	
4,200.00	4,167.15	4,163.53	4,151.51	14.91	14.65	-37.45	26.52	555.16	170.66	170.66	166.74	30.28	5.507	
4,300.00	4,265.77	4,263.26	4,250.74	15.29	15.01	-39.57	27.60	565.05	166.74	166.74	163.06	31.02	5.257	
4,400.00	4,364.39	4,362.98	4,349.97	15.66	15.37	-41.79	28.67	574.94	163.06	163.06	159.64	31.76	5.026	
4,500.00	4,463.00	4,462.71	4,449.20	16.03	15.74	-44.10	29.75	584.83	159.64	159.64	155.49	32.50	4.815	
4,600.00	4,561.62	4,562.44	4,548.43	16.40	16.10	-46.51	30.83	594.73	155.49	155.49	151.07	33.24	4.621	
4,700.00	4,660.24	4,662.17	4,647.66	16.78	16.46	-49.02	31.91	604.62	151.07	151.07	146.83	33.98	4.445	
4,800.00	4,758.86	4,761.90	4,746.89	17.15	16.82	-51.61	32.99	614.51	146.83	146.83	142.67	34.72	4.286	
4,900.00	4,857.48	4,861.62	4,846.12	17.52	17.18	-54.29	34.07	624.40	142.67	142.67	138.51	35.46	4.143	
5,000.00	4,956.09	4,961.35	4,945.35	17.89	17.54	-57.04	35.15	634.29	138.51	138.51	134.35			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Sheba Federal Com - 711H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/S (usft)	Offset Wellbore Centre +E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	5,054.71	5,061.08	5,044.58	18.27	17.91	-59.86	36.22	644.18	145.38	109.18	36.20	4.016	
5,200.00	5,153.33	5,160.81	5,143.81	18.64	18.27	-62.73	37.30	654.07	144.20	107.26	36.94	3.904	
5,300.00	5,251.95	5,260.54	5,243.04	19.02	18.63	-65.65	38.38	663.96	143.38	105.70	37.67	3.806	
5,400.00	5,350.56	5,360.26	5,342.27	19.39	18.99	-68.58	39.46	673.85	142.93	104.53	38.41	3.722	
5,466.72	5,416.37	5,426.81	5,408.48	19.64	19.23	-70.55	40.18	680.45	142.85	103.95	38.90	3.673 CC	
5,500.00	5,449.18	5,459.99	5,441.50	19.76	19.36	-71.53	40.54	683.74	142.87	103.73	39.14	3.650	
5,600.00	5,547.80	5,559.72	5,540.73	20.14	19.72	-74.47	41.62	693.64	143.19	103.32	39.87	3.591	
5,700.00	5,646.42	5,659.45	5,639.96	20.51	20.08	-77.40	42.70	703.53	143.88	103.28	40.60	3.544 ES	
5,800.00	5,745.03	5,759.18	5,739.19	20.89	20.44	-80.28	43.78	713.42	144.95	103.62	41.32	3.508	
5,900.00	5,843.65	5,858.90	5,838.43	21.26	20.81	-83.12	44.85	723.31	146.38	104.33	42.05	3.481	
6,000.00	5,942.27	5,958.63	5,937.66	21.63	21.17	-85.90	45.93	733.20	148.16	105.39	42.77	3.464	
6,100.00	6,040.89	6,058.36	6,036.89	22.01	21.53	-88.60	47.01	743.09	150.28	106.79	43.49	3.455	
6,200.00	6,139.50	6,158.72	6,136.81	22.38	21.90	-91.49	48.02	752.37	152.58	108.37	44.22	3.451	
6,300.00	6,238.12	6,258.95	6,236.81	22.76	22.26	-95.20	48.76	759.13	154.85	109.92	44.93	3.446 SF	
6,400.00	6,336.74	6,358.63	6,336.40	23.13	22.61	-99.71	49.21	763.27	157.52	111.89	45.63	3.452	
6,500.00	6,435.36	6,457.61	6,435.36	23.51	22.96	-104.93	49.38	764.81	161.16	114.84	46.32	3.479	
6,600.00	6,533.98	6,556.22	6,533.98	23.88	23.30	-110.38	49.38	764.83	166.25	119.25	47.00	3.538	
6,700.00	6,632.59	6,654.84	6,632.59	24.26	23.65	-115.48	49.38	764.83	172.79	125.12	47.67	3.624	
6,800.00	6,731.21	6,753.46	6,731.21	24.63	23.99	-120.18	49.38	764.83	180.62	132.26	48.35	3.735	
6,900.00	6,829.83	6,852.08	6,829.83	25.01	24.33	-124.47	49.38	764.83	189.57	140.53	49.04	3.866	
7,000.00	6,928.45	6,950.69	6,928.45	25.38	24.67	-128.37	49.38	764.83	199.50	149.78	49.73	4.012	
7,100.00	7,027.06	7,049.31	7,027.06	25.76	25.01	-131.88	49.38	764.83	210.27	159.85	50.42	4.171	
7,200.00	7,125.68	7,147.93	7,125.68	26.13	25.36	-135.05	49.38	764.83	221.76	170.64	51.11	4.339	
7,300.00	7,224.30	7,246.55	7,224.30	26.51	25.70	-137.90	49.38	764.83	233.85	182.04	51.81	4.513	
7,400.00	7,322.92	7,345.17	7,322.92	26.89	26.04	-140.47	49.38	764.83	246.47	193.96	52.52	4.693	
7,500.00	7,421.53	7,443.78	7,421.53	27.26	26.39	-142.79	49.38	764.83	259.53	206.31	53.22	4.877	
7,600.00	7,520.15	7,542.40	7,520.15	27.64	26.73	-144.88	49.38	764.83	272.98	219.05	53.93	5.062	
7,700.00	7,618.77	7,641.02	7,618.77	28.01	27.08	-146.78	49.38	764.83	286.75	232.11	54.64	5.248	
7,800.00	7,717.39	7,739.64	7,717.39	28.39	27.42	-148.50	49.38	764.83	300.80	245.45	55.35	5.435	
7,900.00	7,816.01	7,838.25	7,816.01	28.76	27.77	-150.07	49.38	764.83	315.10	259.04	56.06	5.621	
8,000.00	7,914.62	7,936.87	7,914.62	29.14	28.11	-151.50	49.38	764.83	329.61	272.84	56.77	5.806	
8,100.00	8,013.24	8,035.49	8,013.24	29.52	28.46	-152.81	49.38	764.83	344.31	286.82	57.49	5.989	
8,200.00	8,111.86	8,134.11	8,111.86	29.89	28.80	-154.02	49.38	764.83	359.17	300.96	58.20	6.171	
8,300.00	8,210.48	8,232.72	8,210.48	30.27	29.15	-155.13	49.38	764.83	374.17	315.25	58.92	6.351	
8,400.00	8,309.09	8,331.34	8,309.09	30.64	29.49	-156.15	49.38	764.83	389.30	329.66	59.64	6.528	
8,500.00	8,407.71	8,429.96	8,407.71	31.02	29.84	-157.10	49.38	764.83	404.54	344.19	60.35	6.703	
8,600.00	8,506.33	8,528.58	8,506.33	31.40	30.19	-157.98	49.38	764.83	419.89	358.82	61.07	6.875	
8,700.00	8,604.95	8,627.20	8,604.95	31.77	30.53	-158.79	49.38	764.83	435.32	373.53	61.79	7.045	
8,800.00	8,703.56	8,725.81	8,703.56	32.15	30.88	-159.55	49.38	764.83	450.84	388.33	62.51	7.213	
8,900.00	8,802.18	8,824.43	8,802.18	32.52	31.23	-160.26	49.38	764.83	466.42	403.20	63.23	7.377	
9,000.00	8,900.80	8,923.05	8,900.80	32.90	31.57	-160.93	49.38	764.83	482.08	418.13	63.95	7.539	
9,100.00	8,999.42	9,021.67	8,999.42	33.28	31.92	-161.55	49.38	764.83	497.79	433.12	64.67	7.698	
9,200.00	9,098.03	9,120.28	9,098.03	33.65	32.27	-162.13	49.38	764.83	513.55	448.17	65.39	7.854	
9,300.00	9,196.65	9,218.90	9,196.65	34.03	32.62	-162.68	49.38	764.83	529.37	463.26	66.11	8.008	
9,400.00	9,295.27	9,317.52	9,295.27	34.41	32.96	-163.20	49.38	764.83	545.23	478.40	66.83	8.159	
9,500.00	9,393.89	9,416.14	9,393.89	34.78	33.31	-163.69	49.38	764.83	561.13	493.58	67.55	8.307	
9,600.00	9,492.51	9,514.75	9,492.51	35.16	33.66	-164.15	49.38	764.83	577.07	508.80	68.27	8.453	
9,700.00	9,591.12	9,613.37	9,591.12	35.54	34.01	-164.59	49.38	764.83	593.04	524.05	68.99	8.596	
9,800.00	9,689.74	9,711.99	9,689.74	35.91	34.36	-165.00	49.38	764.83	609.04	539.33	69.71	8.737	
9,900.00	9,788.36	9,810.61	9,788.36	36.29	34.70	-165.39	49.38	764.83	625.08	554.65	70.43	8.875	
10,000.00	9,886.98	9,909.22	9,886.98	36.67	35.05	-165.77	49.38	764.83	641.14	569.99	71.15	9.011	
10,081.23	9,967.08	9,989.33	9,967.08	36.97	35.33	-166.06	49.38	764.83	654.21	582.46	71.74	9.119	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Sheba Federal Com - 711H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	9,985.60	10,007.85	9,985.60	37.04	35.40	-166.13	49.38	764.83	657.18	585.31	71.88	9.143		
10,200.00	10,084.50	10,106.75	10,084.50	37.42	35.75	-166.49	49.38	764.83	671.56	598.97	72.60	9.251		
10,300.00	10,183.75	10,206.00	10,183.75	37.78	36.10	-166.77	49.38	764.83	683.43	610.12	73.31	9.322		
10,400.00	10,283.28	10,305.53	10,283.28	38.15	36.45	-166.98	49.38	764.83	692.78	618.75	74.03	9.358		
10,500.00	10,383.04	10,405.29	10,383.04	38.51	36.81	-167.13	49.38	764.83	699.59	624.85	74.74	9.361		
10,600.00	10,482.94	10,505.19	10,482.94	38.86	37.16	-167.22	49.38	764.83	703.85	628.41	75.44	9.330		
10,700.00	10,582.92	10,605.17	10,582.92	39.21	37.51	-167.26	49.38	764.83	705.57	629.43	76.14	9.267		
10,717.08	10,600.00	10,622.25	10,600.00	39.26	37.57	-69.24	49.38	764.83	705.60	629.35	76.26	9.253		
10,800.12	10,683.04	10,705.29	10,683.04	39.54	37.87	-69.24	49.38	764.83	705.60	628.78	76.82	9.185		
10,850.00	10,732.86	10,755.11	10,732.86	39.70	38.04	-69.50	49.38	764.83	704.84	627.68	77.16	9.134		
10,900.00	10,782.42	10,804.66	10,782.42	39.87	38.22	-70.21	49.38	764.83	702.58	625.08	77.50	9.066		
10,950.00	10,831.22	10,853.47	10,831.22	40.03	38.39	-71.37	49.38	764.83	698.94	621.11	77.83	8.980		
11,000.00	10,878.89	10,901.14	10,878.89	40.19	38.56	-72.95	49.38	764.83	694.14	615.98	78.15	8.882		
11,050.00	10,925.07	10,947.32	10,925.07	40.34	38.72	-74.92	49.38	764.83	688.44	609.98	78.47	8.774		
11,100.00	10,969.42	11,008.34	10,969.42	40.49	38.94	-77.20	49.38	764.83	682.23	603.39	78.83	8.654		
11,150.00	11,011.58	11,033.83	11,011.58	40.63	39.03	-79.71	49.38	764.83	675.91	596.84	79.07	8.548		
11,200.00	11,051.24	11,073.49	11,051.24	40.75	39.17	-82.34	49.38	764.83	669.99	590.63	79.36	8.443		
11,250.00	11,088.10	11,110.35	11,088.10	40.87	39.30	-84.97	49.38	764.83	664.98	585.35	79.64	8.350		
11,300.00	11,121.88	11,144.12	11,121.88	40.97	39.42	-87.48	49.38	764.83	661.44	581.54	79.90	8.278		
11,350.00	11,152.31	11,174.56	11,152.31	41.07	39.53	-89.72	49.38	764.83	659.92	579.77	80.15	8.233		
11,356.82	11,156.19	11,178.44	11,156.19	41.08	39.54	-90.00	49.38	764.83	659.89	579.71	80.19	8.230		
11,400.00	11,179.18	11,201.43	11,179.18	41.15	39.62	-91.59	49.38	764.83	660.91	580.52	80.39	8.221		
11,450.00	11,202.27	11,224.52	11,202.27	41.21	39.71	-92.97	49.38	764.83	664.83	584.23	80.60	8.249		
11,500.00	11,221.40	11,243.65	11,221.40	41.26	39.77	-93.77	49.38	764.83	672.01	591.23	80.78	8.319		
11,550.00	11,236.45	11,258.69	11,236.45	41.31	39.83	-93.92	49.38	764.83	682.63	601.70	80.94	8.434		
11,600.00	11,247.27	11,269.52	11,247.27	41.33	39.87	-93.37	49.38	764.83	696.72	615.67	81.05	8.596		
11,650.00	11,253.81	11,276.06	11,253.81	41.35	39.89	-92.07	49.38	764.83	714.16	633.03	81.13	8.803		
11,700.12	11,256.00	11,278.25	11,256.00	41.36	39.90	-90.00	49.38	764.83	734.76	653.60	81.16	9.053		
11,800.00	11,256.00	11,278.25	11,256.00	41.37	39.90	-90.00	49.38	764.83	783.83	702.66	81.18	9.656		
11,900.00	11,256.00	11,278.25	11,256.00	41.41	39.90	-90.00	49.38	764.83	842.02	760.85	81.17	10.374		
12,000.00	11,256.00	11,278.25	11,256.00	41.49	39.90	-90.00	49.38	764.83	907.52	826.37	81.15	11.184		
12,100.00	11,256.00	11,278.25	11,256.00	41.59	39.90	-90.00	49.38	764.83	978.87	897.75	81.12	12.067		
12,200.00	11,256.00	11,278.25	11,256.00	41.71	39.90	-90.00	49.38	764.83	1,054.89	973.80	81.09	13.009		
12,300.00	11,256.00	11,278.25	11,256.00	41.86	39.90	-90.00	49.38	764.83	1,134.63	1,053.57	81.06	13.997		
12,400.00	11,256.00	11,278.25	11,256.00	42.02	39.90	-90.00	49.38	764.83	1,217.37	1,136.34	81.04	15.023		
12,500.00	11,256.00	13,272.34	12,373.00	42.19	44.39	-149.43	1,172.39	765.21	1,297.36	1,228.55	68.81	18.854		
12,600.00	11,256.00	13,372.34	12,373.00	42.38	44.53	-149.43	1,272.39	765.24	1,297.36	1,227.96	69.40	18.693		
12,700.00	11,256.00	13,472.34	12,373.00	42.59	44.69	-149.43	1,372.39	765.27	1,297.36	1,227.33	70.03	18.526		
12,800.00	11,256.00	13,572.34	12,373.00	42.80	44.85	-149.43	1,472.39	765.31	1,297.36	1,226.68	70.68	18.355		
12,900.00	11,256.00	13,672.34	12,373.00	43.03	45.03	-149.43	1,572.39	765.34	1,297.36	1,226.00	71.36	18.179		
13,000.00	11,256.00	13,772.34	12,373.00	43.27	45.23	-149.43	1,672.39	765.38	1,297.36	1,225.29	72.07	18.001		
13,100.00	11,256.00	13,872.34	12,373.00	43.52	45.43	-149.43	1,772.39	765.41	1,297.36	1,224.55	72.81	17.819		
13,200.00	11,256.00	13,972.34	12,373.00	43.78	45.65	-149.43	1,872.39	765.44	1,297.36	1,223.79	73.57	17.635		
13,300.00	11,256.00	14,072.34	12,373.00	44.06	45.87	-149.43	1,972.39	765.48	1,297.36	1,223.01	74.35	17.448		
13,400.00	11,256.00	14,172.34	12,373.00	44.34	46.11	-149.43	2,072.39	765.51	1,297.36	1,222.20	75.16	17.261		
13,500.00	11,256.00	14,272.34	12,373.00	44.64	46.36	-149.43	2,172.39	765.54	1,297.36	1,221.36	76.00	17.071		
13,600.00	11,256.00	14,372.34	12,373.00	44.94	46.62	-149.43	2,272.39	765.58	1,297.36	1,220.51	76.85	16.881		
13,700.00	11,256.00	14,472.34	12,373.00	45.26	46.90	-149.43	2,372.39	765.61	1,297.36	1,219.63	77.73	16.691		
13,800.00	11,256.00	14,572.34	12,373.00	45.59	47.18	-149.43	2,472.39	765.64	1,297.36	1,218.73	78.63	16.500		
13,900.00	11,256.00	14,672.34	12,373.00	45.92	47.47	-149.43	2,572.39	765.68	1,297.36	1,217.81	79.55	16.309		
14,000.00	11,256.00	14,772.34	12,373.00	46.27	47.78	-149.43	2,672.39	765.71	1,297.36	1,216.87	80.49	16.119		
14,100.00	11,256.00	14,872.34	12,373.00	46.63	48.09	-149.43	2,772.39	765.75	1,297.36	1,215.92	81.44	15.930		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Sheba Federal Com - 711H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.00	11,256.00	14,972.34	12,373.00	46.99	48.42	-149.43	2,872.39	765.78	1,297.36	1,214.94	82.42	15.741		
14,300.00	11,256.00	15,072.34	12,373.00	47.37	48.75	-149.43	2,972.39	765.81	1,297.36	1,213.95	83.41	15.553		
14,400.00	11,256.00	15,172.34	12,373.00	47.75	49.10	-149.43	3,072.39	765.85	1,297.36	1,212.93	84.43	15.367		
14,500.00	11,256.00	15,272.34	12,373.00	48.15	49.45	-149.43	3,172.39	765.88	1,297.36	1,211.91	85.45	15.182		
14,600.00	11,256.00	15,372.34	12,373.00	48.55	49.81	-149.43	3,272.39	765.91	1,297.36	1,210.86	86.50	14.999		
14,700.00	11,256.00	15,472.34	12,373.00	48.96	50.18	-149.43	3,372.39	765.95	1,297.36	1,209.80	87.56	14.817		
14,800.00	11,256.00	15,572.34	12,373.00	49.38	50.56	-149.43	3,472.39	765.98	1,297.36	1,208.73	88.63	14.638		
14,900.00	11,256.00	15,672.34	12,373.00	49.80	50.95	-149.43	3,572.39	766.01	1,297.36	1,207.64	89.72	14.460		
15,000.00	11,256.00	15,772.34	12,373.00	50.24	51.35	-149.43	3,672.39	766.05	1,297.36	1,206.54	90.82	14.285		
15,100.00	11,256.00	15,872.34	12,373.00	50.68	51.76	-149.43	3,772.39	766.08	1,297.36	1,205.42	91.94	14.112		
15,200.00	11,256.00	15,972.34	12,373.00	51.13	52.17	-149.43	3,872.39	766.12	1,297.36	1,204.29	93.06	13.940		
15,300.00	11,256.00	16,072.34	12,373.00	51.59	52.59	-149.43	3,972.39	766.15	1,297.36	1,203.15	94.21	13.772		
15,400.00	11,256.00	16,172.34	12,373.00	52.05	53.02	-149.43	4,072.39	766.18	1,297.36	1,202.00	95.36	13.605		
15,500.00	11,256.00	16,272.34	12,373.00	52.52	53.46	-149.43	4,172.39	766.22	1,297.36	1,200.84	96.52	13.441		
15,600.00	11,256.00	16,372.34	12,373.00	53.00	53.90	-149.43	4,272.39	766.25	1,297.36	1,199.66	97.70	13.279		
15,700.00	11,256.00	16,472.34	12,373.00	53.48	54.36	-149.43	4,372.39	766.28	1,297.36	1,198.48	98.88	13.120		
15,800.00	11,256.00	16,572.34	12,373.00	53.97	54.81	-149.43	4,472.39	766.32	1,297.36	1,197.28	100.08	12.963		
15,900.00	11,256.00	16,672.34	12,373.00	54.47	55.28	-149.43	4,572.39	766.35	1,297.36	1,196.07	101.29	12.809		
15,972.39	11,256.00	16,744.73	12,373.00	54.83	55.62	-149.43	4,644.78	766.38	1,297.36	1,195.19	102.16	12.699		

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Solomon Federal Com - 709H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Offset				Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.03	-0.12	249.87	249.87					
100.00	100.00	100.00	100.00	0.13	0.13	90.03	-0.12	249.87	249.87	249.60	0.27	929.379		
200.00	200.00	200.00	200.00	0.49	0.49	90.03	-0.12	249.87	249.87	248.88	0.99	253.467		
300.00	300.00	300.00	300.00	0.85	0.85	90.03	-0.12	249.87	249.87	248.16	1.70	146.744		
400.00	400.00	400.00	400.00	1.21	1.21	90.03	-0.12	249.87	249.87	247.45	2.42	103.265		
500.00	500.00	500.00	500.00	1.57	1.57	90.03	-0.12	249.87	249.87	246.73	3.14	79.661		
600.00	600.00	600.00	600.00	1.93	1.93	90.03	-0.12	249.87	249.87	246.01	3.85	64.841		
700.00	700.00	700.00	700.00	2.29	2.29	90.03	-0.12	249.87	249.87	245.30	4.57	54.669		
800.00	800.00	800.00	800.00	2.64	2.64	90.03	-0.12	249.87	249.87	244.58	5.29	47.257		
900.00	900.00	900.00	900.00	3.00	3.00	90.03	-0.12	249.87	249.87	243.86	6.00	41.614		
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	90.03	-0.12	249.87	249.87	243.15	6.72	37.175		
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.03	-0.12	249.87	249.87	242.43	7.44	33.592		
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	90.03	-0.12	249.87	249.87	241.71	8.16	30.639		
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	90.03	-0.12	249.87	249.87	241.00	8.87	28.163		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	90.03	-0.12	249.87	249.87	240.28	9.59	26.057		
1,500.00	1,499.99	1,499.99	1,499.99	5.14	5.15	-8.03	-0.12	249.87	248.57	238.28	10.30	24.143		
1,600.00	1,599.91	1,606.70	1,606.69	5.48	5.53	-8.21	-0.03	248.38	243.29	232.28	11.01	22.103		
1,700.00	1,699.69	1,712.72	1,712.61	5.83	5.89	-8.55	0.25	243.96	232.66	220.96	11.70	19.880		
1,800.00	1,799.27	1,817.58	1,817.21	6.17	6.26	-9.11	0.71	236.70	216.75	204.36	12.39	17.492		
1,900.00	1,898.57	1,916.38	1,915.64	6.52	6.60	-9.91	1.24	228.14	196.61	183.53	13.07	15.038		
2,000.00	1,997.54	2,013.72	2,012.61	6.87	6.94	-11.06	1.77	219.67	173.96	160.20	13.76	12.646		
2,035.85	2,032.92	2,048.46	2,047.22	7.00	7.06	-11.59	1.96	216.65	165.25	151.24	14.00	11.801		
2,100.00	2,096.18	2,110.56	2,109.08	7.23	7.28	-12.66	2.30	211.24	149.41	134.97	14.44	10.347		
2,200.00	2,194.80	2,207.36	2,205.52	7.58	7.62	-14.88	2.83	202.82	124.85	109.73	15.12	8.256		
2,300.00	2,293.42	2,304.16	2,301.95	7.94	7.97	-18.17	3.36	194.40	100.56	84.75	15.81	6.360		
2,400.00	2,392.03	2,400.97	2,398.38	8.30	8.31	-23.52	3.89	185.98	76.78	60.27	16.51	4.651		
2,500.00	2,490.65	2,502.23	2,494.82	8.66	8.67	-33.41	4.42	177.56	54.19	36.96	17.23	3.145		
2,600.00	2,589.27	2,605.43	2,591.25	9.02	9.04	-55.06	4.95	169.14	35.16	17.16	18.00	1.953		
2,685.08	2,673.17	2,676.93	2,673.29	9.33	9.29	-91.54	5.40	161.97	27.94	9.33	18.62	1.501 CC, ES, SF		
2,700.00	2,687.89	2,708.63	2,687.68	9.39	9.40	-98.93	5.47	160.72	28.19	9.41	18.78	1.501		
2,800.00	2,786.50	2,788.18	2,784.12	9.75	9.69	-136.50	6.00	152.30	40.15	20.80	19.35	2.075		
2,900.00	2,885.12	2,884.98	2,880.55	10.12	10.03	-153.37	6.53	143.87	60.73	40.73	20.00	3.036		
3,000.00	2,983.74	2,981.78	2,976.99	10.48	10.38	-161.46	7.06	135.45	83.80	63.11	20.68	4.051		
3,100.00	3,082.36	3,078.58	3,073.42	10.85	10.73	-166.04	7.59	127.03	107.77	86.40	21.38	5.041		
3,200.00	3,180.97	3,175.39	3,169.85	11.22	11.07	-168.94	8.12	118.61	132.16	110.09	22.08	5.987		
3,300.00	3,279.59	3,272.19	3,266.29	11.58	11.42	-170.94	8.65	110.19	156.77	133.99	22.78	6.883		
3,400.00	3,378.21	3,368.99	3,362.72	11.95	11.77	-172.39	9.17	101.77	181.51	158.03	23.48	7.731		
3,500.00	3,476.83	3,465.79	3,459.16	12.32	12.12	-173.50	9.70	93.35	206.33	182.15	24.18	8.532		
3,600.00	3,575.45	3,562.59	3,555.59	12.69	12.47	-174.37	10.23	84.93	231.21	206.32	24.89	9.290		
3,700.00	3,674.06	3,659.40	3,652.02	13.06	12.81	-175.07	10.76	76.50	256.13	230.54	25.60	10.007		
3,800.00	3,772.68	3,756.20	3,748.46	13.43	13.16	-175.84	11.29	68.08	281.08	254.78	26.30	10.686		
3,900.00	3,871.30	3,853.00	3,844.89	13.80	13.51	-176.13	11.82	59.66	306.06	279.04	27.01	11.331		
4,000.00	3,969.92	3,949.80	3,941.33	14.17	13.86	-176.54	12.35	51.24	331.04	303.32	27.72	11.943		
4,100.00	4,068.53	4,046.61	4,037.76	14.54	14.21	-176.89	12.87	42.82	356.05	327.62	28.43	12.524		
4,200.00	4,167.15	4,143.41	4,134.19	14.91	14.56	-177.19	13.40	34.40	381.06	351.92	29.14	13.077		
4,300.00	4,265.77	4,240.21	4,230.63	15.29	14.91	-177.46	13.93	25.98	406.08	376.23	29.85	13.604		
4,400.00	4,364.39	4,337.01	4,327.06	15.66	15.26	-177.70	14.46	17.56	431.11	400.55	30.56	14.107		
4,500.00	4,463.00	4,433.82	4,423.49	16.03	15.61	-177.91	14.99	9.14	456.15	424.88	31.27	14.587		
4,600.00	4,561.62	4,530.62	4,519.93	16.40	15.96	-178.10	15.52	0.71	481.19	449.21	31.98	15.045		
4,700.00	4,660.24	4,627.42	4,616.36	16.78	16.31	-178.27	16.05	-7.71	506.24	473.54	32.70	15.483		
4,800.00	4,758.86	4,724.22	4,712.80	17.15	16.66	-178.42	16.57	-16.13	531.29	497.88	33.41	15.903		
4,900.00	4,857.48	4,821.02	4,809.23	17.52	17.01	-178.56	17.10	-24.55	556.34	522.22	34.12	16.305		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design												Offset Site Error:	0.00 usft	
Solomon Federal Com - 709H - OH - Plan #1												Offset Well Error:	0.00 usft	
Survey Program: 0-MWD+IFR1+MS														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,956.09	4,917.83	4,905.66	17.89	17.36	-178.69	17.63	-32.97	581.40	546.56	34.84	16.690		
5,100.00	5,054.71	5,014.63	5,002.10	18.27	17.71	-178.81	18.16	-41.39	606.45	570.91	35.55	17.060		
5,200.00	5,153.33	5,111.43	5,098.53	18.64	18.06	-178.92	18.69	-49.81	631.51	595.25	36.26	17.415		
5,300.00	5,251.95	5,208.23	5,194.97	19.02	18.41	-179.02	19.22	-58.23	656.58	619.60	36.98	17.756		
5,400.00	5,350.56	5,305.04	5,291.40	19.39	18.76	-179.11	19.75	-66.66	681.64	643.95	37.69	18.084		
5,500.00	5,449.18	5,401.84	5,387.83	19.76	19.11	-179.20	20.27	-75.08	706.71	668.30	38.41	18.400		
5,600.00	5,547.80	5,501.36	5,484.27	20.14	19.48	-179.28	20.80	-83.50	731.77	692.64	39.13	18.700		
5,700.00	5,646.42	5,604.56	5,580.70	20.51	19.85	-179.35	21.33	-91.92	756.84	716.97	39.87	18.982		
5,800.00	5,745.03	5,692.25	5,677.14	20.89	20.17	-179.42	21.86	-100.34	781.91	741.36	40.55	19.281		
5,900.00	5,843.65	5,789.05	5,773.57	21.26	20.52	-179.49	22.39	-108.76	806.98	765.71	41.27	19.554		
6,000.00	5,942.27	5,885.85	5,870.00	21.63	20.87	-179.55	22.92	-117.18	832.05	790.07	41.99	19.818		
6,100.00	6,040.89	5,982.65	5,966.44	22.01	21.22	-179.61	23.45	-125.60	857.13	814.42	42.70	20.072		
6,200.00	6,139.50	6,079.45	6,062.87	22.38	21.57	-179.66	23.97	-134.03	882.20	838.78	43.42	20.318		
6,300.00	6,238.12	6,176.26	6,159.30	22.76	21.92	-179.71	24.50	-142.45	907.27	863.14	44.14	20.557		
6,400.00	6,336.74	6,273.06	6,255.74	23.13	22.28	-179.76	25.03	-150.87	932.35	887.50	44.85	20.787		
6,500.00	6,435.36	6,369.86	6,352.17	23.51	22.63	-179.81	25.56	-159.29	957.42	911.85	45.57	21.010		
6,600.00	6,533.98	6,466.66	6,448.61	23.88	22.98	-179.85	26.09	-167.71	982.50	936.21	46.29	21.226		
6,700.00	6,632.59	6,563.47	6,545.04	24.26	23.33	-179.89	26.62	-176.13	1,007.58	960.57	47.00	21.435		
6,800.00	6,731.21	6,660.27	6,641.47	24.63	23.68	-179.93	27.15	-184.55	1,032.65	984.93	47.72	21.639		
6,900.00	6,829.83	6,757.07	6,737.91	25.01	24.03	-179.97	27.67	-192.97	1,057.73	1,009.29	48.44	21.835		
7,000.00	6,928.45	6,853.87	6,834.34	25.38	24.38	179.99	28.20	-201.39	1,082.81	1,033.65	49.16	22.027		
7,100.00	7,027.06	6,950.68	6,930.78	25.76	24.74	179.96	28.73	-209.82	1,107.88	1,058.01	49.88	22.212		
7,200.00	7,125.68	7,047.48	7,027.21	26.13	25.09	179.92	29.26	-218.24	1,132.96	1,082.37	50.60	22.392		
7,300.00	7,224.30	7,144.28	7,123.64	26.51	25.44	179.89	29.79	-226.66	1,158.04	1,106.73	51.31	22.567		
7,400.00	7,322.92	7,241.08	7,220.08	26.89	25.79	179.86	30.32	-235.08	1,183.12	1,131.09	52.03	22.738		
7,500.00	7,421.53	7,337.88	7,316.51	27.26	26.14	179.83	30.85	-243.50	1,208.20	1,155.45	52.75	22.903		
7,600.00	7,520.15	7,434.69	7,412.94	27.64	26.50	179.80	31.37	-251.92	1,233.28	1,179.81	53.47	23.064		
7,700.00	7,618.77	7,531.49	7,509.38	28.01	26.85	179.78	31.90	-260.34	1,258.36	1,204.17	54.19	23.221		
7,800.00	7,717.39	7,628.29	7,605.81	28.39	27.20	179.75	32.43	-268.76	1,283.44	1,228.53	54.91	23.373		
7,900.00	7,816.01	7,725.09	7,702.25	28.76	27.55	179.73	32.96	-277.19	1,308.52	1,252.89	55.63	23.521		
8,000.00	7,914.62	7,821.90	7,798.68	29.14	27.90	179.70	33.49	-285.61	1,333.60	1,277.25	56.35	23.666		
8,100.00	8,013.24	7,918.70	7,895.11	29.52	28.25	179.68	34.02	-294.03	1,358.68	1,301.61	57.07	23.807		
8,200.00	8,111.86	8,015.50	7,991.55	29.89	28.61	179.66	34.55	-302.45	1,383.76	1,325.97	57.79	23.944		
8,300.00	8,210.48	8,112.30	8,087.98	30.27	28.96	179.64	35.07	-310.87	1,408.84	1,350.33	58.51	24.078		
8,400.00	8,309.09	8,209.11	8,184.42	30.64	29.31	179.62	35.60	-319.29	1,433.92	1,374.69	59.23	24.209		
8,500.00	8,407.71	8,305.91	8,280.85	31.02	29.66	179.60	36.13	-327.71	1,459.00	1,399.05	59.95	24.336		
8,600.00	8,506.33	8,402.71	8,377.28	31.40	30.01	179.58	36.66	-336.13	1,484.09	1,423.41	60.67	24.460		
8,700.00	8,604.95	8,499.51	8,473.72	31.77	30.37	179.56	37.19	-344.56	1,509.17	1,447.77	61.39	24.582		
8,800.00	8,703.56	8,603.69	8,570.15	32.15	30.75	179.54	37.72	-352.98	1,534.25	1,472.11	62.14	24.689		
8,900.00	8,802.18	8,706.88	8,666.59	32.52	31.12	179.52	38.25	-361.40	1,559.33	1,496.45	62.89	24.796		
9,000.00	8,900.80	8,789.92	8,763.02	32.90	31.42	179.51	38.77	-369.82	1,584.41	1,520.86	63.56	24.929		
9,100.00	8,999.42	8,886.72	8,859.45	33.28	31.78	179.49	39.30	-378.24	1,609.50	1,545.22	64.28	25.039		
9,200.00	9,098.03	8,983.52	8,955.89	33.65	32.13	179.48	39.83	-386.66	1,634.58	1,569.58	65.00	25.147		
9,300.00	9,196.65	9,080.33	9,052.32	34.03	32.48	179.46	40.36	-395.08	1,659.66	1,593.94	65.72	25.252		
9,400.00	9,295.27	9,177.13	9,148.75	34.41	32.83	179.45	40.89	-403.50	1,684.74	1,618.30	66.45	25.355		
9,500.00	9,393.89	9,273.93	9,245.19	34.78	33.18	179.43	41.42	-411.92	1,709.83	1,642.66	67.17	25.456		
9,600.00	9,492.51	9,370.73	9,341.62	35.16	33.54	179.42	41.95	-420.35	1,734.91	1,667.02	67.89	25.555		
9,700.00	9,591.12	9,467.54	9,438.06	35.54	33.89	179.40	42.47	-428.77	1,759.99	1,691.38	68.61	25.651		
9,800.00	9,689.74	9,564.34	9,534.49	35.91	34.24	179.39	43.00	-437.19	1,785.08	1,715.74	69.34	25.746		
9,900.00	9,788.36	9,661.14	9,630.92	36.29	34.59	179.38	43.53	-445.61	1,810.16	1,740.10	70.06	25.838		
10,000.00	9,886.98	9,757.94	9,727.36	36.67	34.95	179.36	44.06	-454.03	1,835.24	1,764.46	70.78	25.929		
10,081.23	9,967.08	9,836.57	9,805.69	36.97	35.23	179.35	44.49	-460.87	1,855.62	1,784.25	71.37	26.001		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design													Offset Site Error:	0.00 usft
Solomon Federal Com - 709H - OH - Plan #1													Offset Well Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS														
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,100.00	9,985.60	9,854.76	9,823.80	37.04	35.30	179.35	44.59	-462.45	1,860.28	1,788.78	71.50	26.017		
10,200.00	10,084.50	9,951.99	9,920.67	37.42	35.65	179.34	45.12	-470.91	1,883.62	1,811.39	72.23	26.080		
10,300.00	10,183.75	10,049.80	10,018.11	37.78	36.01	179.34	45.65	-479.42	1,904.40	1,831.45	72.95	26.107		
10,400.00	10,283.28	10,148.13	10,116.06	38.15	36.37	179.32	46.19	-487.97	1,922.61	1,848.95	73.66	26.100		
10,500.00	10,383.04	10,246.89	10,214.45	38.51	36.73	179.31	46.73	-496.57	1,938.25	1,863.87	74.38	26.059		
10,600.00	10,482.94	10,346.03	10,313.21	38.86	37.09	179.30	47.27	-505.19	1,951.29	1,876.20	75.09	25.986		
10,700.00	10,582.92	10,445.48	10,412.28	39.21	37.45	179.29	47.81	-513.84	1,961.74	1,885.94	75.80	25.881		
10,717.08	10,600.00	10,462.49	10,429.23	39.26	37.51	-82.70	47.91	-515.32	1,963.26	1,887.35	75.92	25.861		
10,800.12	10,683.04	10,545.22	10,511.64	39.54	37.81	-82.71	48.36	-522.52	1,970.49	1,894.00	76.49	25.761		
10,850.00	10,732.86	10,594.86	10,561.09	39.70	37.99	-82.40	48.63	-526.84	1,974.55	1,897.72	76.83	25.699		
10,900.00	10,782.42	10,644.26	10,610.30	39.87	38.17	-82.24	48.90	-531.14	1,978.06	1,900.88	77.17	25.631		
10,950.00	10,831.22	10,692.94	10,658.79	40.03	38.35	-82.26	49.17	-535.37	1,981.02	1,903.51	77.51	25.559		
11,000.00	10,878.89	10,740.51	10,706.19	40.19	38.52	-82.43	49.43	-539.51	1,983.49	1,905.65	77.83	25.484		
11,050.00	10,925.07	10,824.67	10,790.08	40.34	38.83	-83.20	49.84	-546.13	1,985.19	1,906.79	78.40	25.321		
11,100.00	10,969.42	10,916.98	10,882.24	40.49	39.16	-84.40	50.16	-551.29	1,985.53	1,906.53	78.99	25.135		
11,150.00	11,011.58	11,004.81	10,970.03	40.63	39.48	-85.84	50.34	-554.13	1,984.73	1,905.20	79.53	24.956		
11,200.00	11,051.24	11,087.37	11,052.58	40.75	39.76	-87.44	50.40	-554.97	1,983.11	1,903.11	80.00	24.788		
11,250.00	11,088.10	11,122.89	11,088.10	40.87	39.89	-88.31	50.40	-554.97	1,981.42	1,901.17	80.25	24.691		
11,300.00	11,121.88	11,156.66	11,121.88	40.97	40.00	-89.15	50.40	-554.97	1,980.22	1,899.74	80.48	24.604		
11,350.00	11,152.31	11,187.10	11,152.31	41.07	40.10	-89.90	50.40	-554.97	1,979.70	1,899.00	80.70	24.532		
11,357.51	11,156.58	11,208.63	11,156.58	41.08	40.18	-90.00	50.40	-554.97	1,979.69	1,898.90	80.79	24.505		
11,400.00	11,179.18	11,213.97	11,179.18	41.15	40.20	-90.52	50.40	-554.97	1,980.02	1,899.12	80.90	24.476		
11,450.00	11,202.27	11,237.06	11,202.27	41.21	40.28	-90.98	50.40	-554.97	1,981.32	1,900.25	81.07	24.440		
11,500.00	11,221.40	11,256.19	11,221.40	41.26	40.34	-91.25	50.40	-554.97	1,983.73	1,902.51	81.22	24.424		
11,550.00	11,236.45	11,271.23	11,236.45	41.31	40.39	-91.31	50.40	-554.97	1,987.34	1,905.99	81.34	24.431		
11,600.00	11,247.27	11,282.06	11,247.27	41.33	40.43	-91.12	50.40	-554.97	1,992.20	1,910.76	81.44	24.462		
11,650.00	11,253.81	11,288.60	11,253.81	41.35	40.45	-90.69	50.40	-554.97	1,998.36	1,916.85	81.51	24.516		
11,700.12	11,256.00	11,309.21	11,256.00	41.36	40.52	-90.00	50.40	-554.97	2,005.80	1,924.18	81.61	24.577		
11,800.00	11,256.00	11,309.21	11,256.00	41.37	40.52	-90.00	50.40	-554.97	2,024.26	1,942.60	81.66	24.788		
11,900.00	11,256.00	11,309.21	11,256.00	41.41	40.52	-90.00	50.40	-554.97	2,047.46	1,965.75	81.71	25.056		
12,000.00	11,256.00	11,309.21	11,256.00	41.49	40.52	-90.00	50.40	-554.97	2,075.23	1,993.47	81.76	25.381		
12,100.00	11,256.00	11,309.21	11,256.00	41.59	40.52	-90.00	50.40	-554.97	2,107.39	2,025.57	81.81	25.758		
12,200.00	11,256.00	11,309.21	11,256.00	41.71	40.52	-90.00	50.40	-554.97	2,143.73	2,061.87	81.86	26.187		
12,300.00	11,256.00	11,309.21	11,256.00	41.86	40.52	-90.00	50.40	-554.97	2,184.05	2,102.14	81.91	26.665		
12,400.00	11,256.00	11,309.21	11,256.00	42.02	40.52	-90.00	50.40	-554.97	2,228.13	2,146.17	81.95	27.188		
12,500.00	11,256.00	13,269.31	12,358.00	42.19	44.84	-119.10	1,172.83	-554.59	2,265.74	2,183.85	81.89	27.669		
12,600.00	11,256.00	13,369.31	12,358.00	42.38	44.99	-119.10	1,272.83	-554.55	2,265.74	2,183.46	82.28	27.536		
12,700.00	11,256.00	13,469.31	12,358.00	42.59	45.16	-119.10	1,372.83	-554.52	2,265.74	2,183.03	82.70	27.396		
12,800.00	11,256.00	13,569.31	12,358.00	42.80	45.34	-119.10	1,472.83	-554.49	2,265.74	2,182.59	83.15	27.249		
12,900.00	11,256.00	13,669.31	12,358.00	43.03	45.53	-119.10	1,572.83	-554.45	2,265.74	2,182.11	83.62	27.094		
13,000.00	11,256.00	13,769.31	12,358.00	43.27	45.73	-119.10	1,672.83	-554.42	2,265.74	2,181.61	84.12	26.934		
13,100.00	11,256.00	13,869.31	12,358.00	43.52	45.94	-119.10	1,772.83	-554.39	2,265.74	2,181.09	84.65	26.767		
13,200.00	11,256.00	13,969.31	12,358.00	43.78	46.17	-119.10	1,872.83	-554.35	2,265.74	2,180.54	85.20	26.595		
13,300.00	11,256.00	14,069.31	12,358.00	44.06	46.41	-119.10	1,972.83	-554.32	2,265.74	2,179.97	85.77	26.417		
13,400.00	11,256.00	14,169.31	12,358.00	44.34	46.65	-119.10	2,072.83	-554.28	2,265.74	2,179.37	86.36	26.235		
13,500.00	11,256.00	14,269.31	12,358.00	44.64	46.91	-119.10	2,172.83	-554.25	2,265.74	2,178.75	86.98	26.048		
13,600.00	11,256.00	14,369.31	12,358.00	44.94	47.18	-119.10	2,272.83	-554.22	2,265.74	2,178.11	87.62	25.857		
13,700.00	11,256.00	14,469.31	12,358.00	45.26	47.46	-119.10	2,372.83	-554.18	2,265.74	2,177.45	88.29	25.663		
13,800.00	11,256.00	14,569.31	12,358.00	45.59	47.76	-119.10	2,472.83	-554.15	2,265.73	2,176.76	88.97	25.465		
13,900.00	11,256.00	14,669.31	12,358.00	45.92	48.06	-119.10	2,572.83	-554.12	2,265.73	2,176.05	89.68	25.264		
14,000.00	11,256.00	14,769.31	12,358.00	46.27	48.37	-119.10	2,672.83	-554.08	2,265.73	2,175.33	90.41	25.061		
14,100.00	11,256.00	14,869.31	12,358.00	46.63	48.69	-119.10	2,772.83	-554.05	2,265.73	2,174.58	91.16	24.855		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Solomon Federal Com - 709H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.00	11,256.00	14,969.31	12,358.00	46.99	49.02	-119.10	2,872.83	-554.01	2,265.73	2,173.81	91.92	24.648		
14,300.00	11,256.00	15,069.31	12,358.00	47.37	49.36	-119.10	2,972.83	-553.98	2,265.73	2,173.02	92.71	24.439		
14,400.00	11,256.00	15,169.31	12,358.00	47.75	49.72	-119.10	3,072.83	-553.95	2,265.73	2,172.22	93.52	24.228		
14,500.00	11,256.00	15,269.31	12,358.00	48.15	50.08	-119.10	3,172.83	-553.91	2,265.73	2,171.39	94.34	24.016		
14,600.00	11,256.00	15,369.31	12,358.00	48.55	50.44	-119.10	3,272.83	-553.88	2,265.73	2,170.55	95.18	23.804		
14,700.00	11,256.00	15,469.31	12,358.00	48.96	50.82	-119.10	3,372.83	-553.85	2,265.73	2,169.69	96.04	23.591		
14,800.00	11,256.00	15,569.31	12,358.00	49.38	51.21	-119.10	3,472.83	-553.81	2,265.73	2,168.81	96.92	23.378		
14,900.00	11,256.00	15,669.31	12,358.00	49.80	51.60	-119.10	3,572.83	-553.78	2,265.73	2,167.92	97.81	23.164		
15,000.00	11,256.00	15,769.31	12,358.00	50.24	52.01	-119.10	3,672.83	-553.75	2,265.73	2,167.01	98.72	22.951		
15,100.00	11,256.00	15,869.31	12,358.00	50.68	52.42	-119.10	3,772.83	-553.71	2,265.73	2,166.09	99.64	22.738		
15,200.00	11,256.00	15,969.31	12,358.00	51.13	52.84	-119.10	3,872.83	-553.68	2,265.73	2,165.15	100.58	22.526		
15,300.00	11,256.00	16,069.31	12,358.00	51.59	53.26	-119.10	3,972.83	-553.64	2,265.73	2,164.19	101.54	22.314		
15,400.00	11,256.00	16,169.31	12,358.00	52.05	53.70	-119.10	4,072.83	-553.61	2,265.73	2,163.22	102.51	22.103		
15,500.00	11,256.00	16,269.31	12,358.00	52.52	54.14	-119.10	4,172.83	-553.58	2,265.73	2,162.24	103.49	21.893		
15,600.00	11,256.00	16,369.31	12,358.00	53.00	54.59	-119.10	4,272.83	-553.54	2,265.73	2,161.25	104.49	21.685		
15,700.00	11,256.00	16,469.31	12,358.00	53.48	55.04	-119.10	4,372.83	-553.51	2,265.73	2,160.24	105.50	21.477		
15,800.00	11,256.00	16,569.31	12,358.00	53.97	55.50	-119.10	4,472.83	-553.48	2,265.73	2,159.21	106.52	21.271		
15,900.00	11,256.00	16,669.31	12,358.00	54.47	55.97	-119.10	4,572.83	-553.44	2,265.73	2,158.18	107.55	21.066		
15,972.39	11,256.00	16,741.70	12,358.00	54.83	56.31	-119.10	4,645.22	-553.42	2,265.73	2,157.42	108.31	20.920		



Anticollision Report



Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Solomon Federal Com - 710H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference				Offset		Semi Major Axis		Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	90.05	-0.23	279.87	279.87					
100.00	100.00	100.00	100.00	0.13	0.13	90.05	-0.23	279.87	279.87	279.60	0.27	1,040.965		
200.00	200.00	200.00	200.00	0.49	0.49	90.05	-0.23	279.87	279.87	278.88	0.99	283.900		
300.00	300.00	300.00	300.00	0.85	0.85	90.05	-0.23	279.87	279.87	278.16	1.70	164.363		
400.00	400.00	400.00	400.00	1.21	1.21	90.05	-0.23	279.87	279.87	277.45	2.42	115.663		
500.00	500.00	500.00	500.00	1.57	1.57	90.05	-0.23	279.87	279.87	276.73	3.14	89.226		
600.00	600.00	600.00	600.00	1.93	1.93	90.05	-0.23	279.87	279.87	276.01	3.85	72.626		
700.00	700.00	700.00	700.00	2.29	2.29	90.05	-0.23	279.87	279.87	275.30	4.57	61.233		
800.00	800.00	800.00	800.00	2.64	2.64	90.05	-0.23	279.87	279.87	274.58	5.29	52.930		
900.00	900.00	900.00	900.00	3.00	3.00	90.05	-0.23	279.87	279.87	273.86	6.00	46.610		
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	90.05	-0.23	279.87	279.87	273.15	6.72	41.639		
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.05	-0.23	279.87	279.87	272.43	7.44	37.625		
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	90.05	-0.23	279.87	279.87	271.71	8.16	34.318		
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	90.05	-0.23	279.87	279.87	271.00	8.87	31.544		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	90.05	-0.23	279.87	279.87	270.28	9.59	29.186		
1,500.00	1,499.99	1,500.01	1,499.99	5.14	5.15	-8.01	-0.23	279.87	278.57	268.28	10.30	27.056		
1,600.00	1,599.91	1,600.09	1,599.91	5.48	5.51	-8.13	-0.23	279.87	274.68	263.69	11.00	24.982		
1,700.00	1,699.69	1,700.31	1,699.69	5.83	5.87	-8.35	-0.23	279.87	268.21	256.51	11.70	22.929		
1,800.00	1,799.27	1,800.73	1,799.27	6.17	6.23	-8.66	-0.23	279.87	259.16	246.76	12.40	20.897		
1,900.00	1,898.57	1,901.43	1,898.57	6.52	6.59	-9.10	-0.23	279.87	247.55	234.44	13.11	18.884		
2,000.00	1,997.54	2,002.46	1,997.54	6.87	6.95	-9.69	-0.23	279.87	233.39	219.57	13.82	16.889		
2,035.85	2,032.92	2,032.92	2,032.92	7.00	7.06	-9.95	-0.23	279.87	227.69	213.64	14.05	16.201		
2,100.00	2,096.18	2,103.82	2,096.18	7.23	7.32	-10.43	-0.23	279.87	217.23	202.70	14.53	14.949		
2,200.00	2,194.80	2,205.20	2,194.80	7.58	7.68	-11.29	-0.23	279.87	200.95	185.70	15.24	13.183		
2,300.00	2,293.42	2,306.58	2,293.42	7.94	8.04	-12.29	-0.23	279.87	184.72	168.76	15.96	11.575		
2,400.00	2,392.03	2,407.97	2,392.03	8.30	8.41	-13.49	-0.23	279.87	168.55	151.88	16.68	10.108		
2,500.00	2,490.65	2,509.35	2,490.65	8.66	8.77	-14.94	-0.23	279.87	152.48	135.08	17.39	8.766		
2,600.00	2,589.27	2,589.27	2,589.27	9.02	9.06	-16.74	-0.23	279.87	136.52	118.48	18.04	7.568		
2,700.00	2,687.89	2,687.89	2,687.89	9.39	9.41	-19.00	-0.23	279.87	120.72	101.97	18.75	6.438		
2,800.00	2,786.50	2,787.89	2,787.88	9.75	9.77	-22.10	-0.11	279.45	104.80	85.33	19.46	5.384		
2,900.00	2,885.12	2,888.14	2,888.09	10.12	10.11	-27.21	0.67	276.72	87.32	67.16	20.16	4.332		
3,000.00	2,983.74	2,986.55	2,986.38	10.48	10.46	-35.86	2.03	271.99	69.24	48.37	20.87	3.318		
3,100.00	3,082.36	3,084.18	3,083.87	10.85	10.80	-49.99	3.44	267.07	53.57	31.97	21.60	2.480		
3,200.00	3,180.97	3,181.80	3,181.36	11.22	11.14	-72.59	4.85	262.16	43.43	21.08	22.35	1.943		
3,254.74	3,234.95	3,235.23	3,234.72	11.42	11.32	-88.08	5.62	259.47	41.78	19.04	22.74	1.837 CC, ES, SF		
3,300.00	3,279.59	3,279.42	3,278.85	11.58	11.48	-100.99	6.25	257.24	42.91	19.87	23.04	1.862		
3,400.00	3,378.21	3,377.04	3,376.34	11.95	11.82	-124.42	7.66	252.33	52.31	28.63	23.69	2.209		
3,500.00	3,476.83	3,474.67	3,473.83	12.32	12.16	-139.25	9.07	247.41	67.61	43.26	24.35	2.777		
3,600.00	3,575.45	3,572.29	3,571.32	12.69	12.51	-148.32	10.48	242.50	85.70	60.68	25.03	3.425		
3,700.00	3,674.06	3,669.91	3,668.81	13.06	12.85	-154.17	11.89	237.58	105.16	79.44	25.72	4.089		
3,800.00	3,772.68	3,767.54	3,766.29	13.43	13.20	-158.18	13.29	232.67	125.35	98.93	26.42	4.745		
3,900.00	3,871.30	3,865.16	3,863.78	13.80	13.54	-161.07	14.70	227.75	145.96	118.84	27.12	5.382		
4,000.00	3,969.92	3,962.78	3,961.27	14.17	13.88	-163.24	16.11	222.84	166.84	139.02	27.82	5.997		
4,100.00	4,068.53	4,060.40	4,058.76	14.54	14.23	-164.93	17.52	217.92	187.91	159.38	28.53	6.586		
4,200.00	4,167.15	4,158.03	4,156.25	14.91	14.58	-166.28	18.93	213.01	209.09	179.86	29.24	7.152		
4,300.00	4,265.77	4,255.65	4,253.74	15.29	14.92	-167.38	20.33	208.09	230.37	200.43	29.94	7.693		
4,400.00	4,364.39	4,353.27	4,351.23	15.66	15.27	-168.30	21.74	203.18	251.72	221.06	30.65	8.212		
4,500.00	4,463.00	4,450.90	4,448.72	16.03	15.61	-169.07	23.15	198.26	273.11	241.75	31.36	8.708		
4,600.00	4,561.62	4,548.52	4,546.21	16.40	15.96	-169.73	24.56	193.35	294.55	262.48	32.07	9.184		
4,700.00	4,660.24	4,646.14	4,643.69	16.78	16.31	-170.30	25.97	188.43	316.02	283.24	32.78	9.640		
4,800.00	4,758.86	4,743.76	4,741.18	17.15	16.65	-170.80	27.37	183.52	337.52	304.02	33.50	10.077		
4,900.00	4,857.48	4,841.39	4,838.67	17.52	17.00	-171.24	28.78	178.60	359.04	324.83	34.21	10.496		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Solomon Federal Com - 710H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,000.00	4,956.09	4,939.01	4,936.16	17.89	17.35	-171.63	30.19	173.69	380.57	345.65	34.92	10.898		
5,100.00	5,054.71	5,036.63	5,033.65	18.27	17.70	-171.97	31.60	168.77	402.12	366.49	35.63	11.285		
5,200.00	5,153.33	5,134.26	5,131.14	18.64	18.04	-172.29	33.01	163.86	423.68	387.34	36.35	11.657		
5,300.00	5,251.95	5,231.88	5,228.63	19.02	18.39	-172.57	34.41	158.94	445.26	408.20	37.06	12.015		
5,400.00	5,350.56	5,329.50	5,326.12	19.39	18.74	-172.82	35.82	154.03	466.84	429.07	37.77	12.359		
5,500.00	5,449.18	5,427.12	5,423.61	19.76	19.09	-173.06	37.23	149.11	488.43	449.94	38.49	12.691		
5,600.00	5,547.80	5,524.75	5,521.10	20.14	19.44	-173.27	38.64	144.20	510.03	470.83	39.20	13.010		
5,700.00	5,646.42	5,622.37	5,618.58	20.51	19.79	-173.46	40.04	139.28	531.63	491.72	39.92	13.318		
5,800.00	5,745.03	5,719.99	5,716.07	20.89	20.13	-173.65	41.45	134.37	553.24	512.61	40.63	13.616		
5,900.00	5,843.65	5,817.62	5,813.56	21.26	20.48	-173.81	42.86	129.45	574.86	533.51	41.35	13.903		
6,000.00	5,942.27	5,915.24	5,911.05	21.63	20.83	-173.97	44.27	124.54	596.48	554.41	42.06	14.180		
6,100.00	6,040.89	6,012.86	6,008.54	22.01	21.18	-174.11	45.68	119.62	618.10	575.32	42.78	14.448		
6,200.00	6,139.50	6,110.48	6,106.03	22.38	21.53	-174.25	47.08	114.71	639.73	596.23	43.50	14.708		
6,300.00	6,238.12	6,208.85	6,204.26	22.76	21.88	-174.37	48.50	109.76	661.35	617.14	44.22	14.956		
6,400.00	6,336.74	6,327.69	6,323.02	23.13	22.31	-174.52	49.67	105.68	681.36	636.25	45.11	15.105		
6,500.00	6,435.36	6,440.03	6,435.36	23.51	22.70	-174.67	49.88	104.93	698.49	652.57	45.92	15.211		
6,600.00	6,533.98	6,538.65	6,533.98	23.88	23.05	-174.79	49.88	104.93	715.00	668.35	46.64	15.330		
6,700.00	6,632.59	6,637.27	6,632.59	24.26	23.40	-174.91	49.88	104.93	731.50	684.14	47.36	15.445		
6,800.00	6,731.21	6,735.89	6,731.21	24.63	23.75	-175.02	49.88	104.93	748.01	699.93	48.08	15.557		
6,900.00	6,829.83	6,834.51	6,829.83	25.01	24.10	-175.13	49.88	104.93	764.52	715.72	48.80	15.666		
7,000.00	6,928.45	6,933.12	6,928.45	25.38	24.45	-175.23	49.88	104.93	781.03	731.51	49.52	15.771		
7,100.00	7,027.06	7,031.74	7,027.06	25.76	24.80	-175.33	49.88	104.93	797.55	747.30	50.24	15.874		
7,200.00	7,125.68	7,130.36	7,125.68	26.13	25.15	-175.43	49.88	104.93	814.06	763.10	50.96	15.973		
7,300.00	7,224.30	7,228.98	7,224.30	26.51	25.50	-175.52	49.88	104.93	830.58	778.90	51.69	16.070		
7,400.00	7,322.92	7,327.59	7,322.92	26.89	25.85	-175.60	49.88	104.93	847.10	794.70	52.41	16.164		
7,500.00	7,421.53	7,426.21	7,421.53	27.26	26.20	-175.69	49.88	104.93	863.63	810.50	53.13	16.255		
7,600.00	7,520.15	7,524.83	7,520.15	27.64	26.55	-175.77	49.88	104.93	880.15	826.30	53.85	16.344		
7,700.00	7,618.77	7,623.45	7,618.77	28.01	26.90	-175.85	49.88	104.93	896.68	842.11	54.57	16.431		
7,800.00	7,717.39	7,722.06	7,717.39	28.39	27.25	-175.92	49.88	104.93	913.21	857.91	55.30	16.515		
7,900.00	7,816.01	7,820.68	7,816.01	28.76	27.60	-176.00	49.88	104.93	929.74	873.72	56.02	16.597		
8,000.00	7,914.62	7,919.30	7,914.62	29.14	27.95	-176.07	49.88	104.93	946.27	889.53	56.74	16.677		
8,100.00	8,013.24	8,017.92	8,013.24	29.52	28.30	-176.13	49.88	104.93	962.80	905.34	57.46	16.755		
8,200.00	8,111.86	8,116.53	8,111.86	29.89	28.65	-176.20	49.88	104.93	979.33	921.15	58.19	16.831		
8,300.00	8,210.48	8,215.15	8,210.48	30.27	29.00	-176.26	49.88	104.93	995.87	936.96	58.91	16.905		
8,400.00	8,309.09	8,313.77	8,309.09	30.64	29.35	-176.32	49.88	104.93	1,012.41	952.77	59.63	16.977		
8,500.00	8,407.71	8,412.39	8,407.71	31.02	29.71	-176.38	49.88	104.93	1,028.94	968.59	60.36	17.048		
8,600.00	8,506.33	8,511.01	8,506.33	31.40	30.06	-176.44	49.88	104.93	1,045.48	984.40	61.08	17.117		
8,700.00	8,604.95	8,609.62	8,604.95	31.77	30.41	-176.50	49.88	104.93	1,062.02	1,000.22	61.80	17.184		
8,800.00	8,703.56	8,708.24	8,703.56	32.15	30.76	-176.55	49.88	104.93	1,078.56	1,016.03	62.53	17.249		
8,900.00	8,802.18	8,806.86	8,802.18	32.52	31.11	-176.60	49.88	104.93	1,095.10	1,031.85	63.25	17.313		
9,000.00	8,900.80	8,905.48	8,900.80	32.90	31.46	-176.65	49.88	104.93	1,111.64	1,047.67	63.98	17.376		
9,100.00	8,999.42	9,004.09	8,999.42	33.28	31.81	-176.70	49.88	104.93	1,128.19	1,063.49	64.70	17.437		
9,200.00	9,098.03	9,102.71	9,098.03	33.65	32.16	-176.75	49.88	104.93	1,144.73	1,079.30	65.42	17.497		
9,300.00	9,196.65	9,201.33	9,196.65	34.03	32.51	-176.79	49.88	104.93	1,161.27	1,095.12	66.15	17.555		
9,400.00	9,295.27	9,300.05	9,295.27	34.41	32.87	-176.84	49.88	104.93	1,177.82	1,110.94	66.87	17.612		
9,500.00	9,393.89	9,401.44	9,393.89	34.78	33.23	-176.88	49.88	104.93	1,194.36	1,126.76	67.61	17.666		
9,600.00	9,492.51	9,502.82	9,492.51	35.16	33.59	-176.93	49.88	104.93	1,210.91	1,142.57	68.34	17.718		
9,700.00	9,591.12	9,604.20	9,591.12	35.54	33.95	-176.97	49.88	104.93	1,227.46	1,158.38	69.08	17.769		
9,800.00	9,689.74	9,705.58	9,689.74	35.91	34.31	-177.01	49.88	104.93	1,244.00	1,174.19	69.81	17.819		
9,900.00	9,788.36	9,806.97	9,788.36	36.29	34.67	-177.05	49.88	104.93	1,260.55	1,190.00	70.55	17.868		
10,000.00	9,886.98	9,908.35	9,886.98	36.67	35.03	-177.09	49.88	104.93	1,277.10	1,205.82	71.28	17.916		
10,081.23	9,967.08	9,971.76	9,967.08	36.97	35.26	-177.12	49.88	104.93	1,290.54	1,218.73	71.81	17.971		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Solomon Federal Com - 710H - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: O-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference				Offset			Semi Major Axis		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10.100.00	9,985.60	10,009.72	9,985.60	37.04	35.40	-177.13	49.88	104.93	1,293.61	1,221.59	72.02	17.962		
10.200.00	10,084.50	10,089.18	10,084.50	37.42	35.68	-177.17	49.88	104.93	1,308.38	1,235.71	72.67	18.004		
10.300.00	10,183.75	10,188.43	10,183.75	37.78	36.03	-177.20	49.88	104.93	1,320.56	1,247.17	73.39	17.993		
10.400.00	10,283.28	10,287.96	10,283.28	38.15	36.39	-177.23	49.88	104.93	1,330.15	1,256.03	74.11	17.948		
10.500.00	10,383.04	10,387.71	10,383.04	38.51	36.74	-177.25	49.88	104.93	1,337.12	1,262.30	74.82	17.870		
10.600.00	10,482.94	10,487.62	10,482.94	38.86	37.10	-177.26	49.88	104.93	1,341.49	1,265.96	75.53	17.761		
10.700.00	10,582.92	10,587.60	10,582.92	39.21	37.46	-177.27	49.88	104.93	1,343.24	1,267.01	76.23	17.620		
10.717.08	10,600.00	10,604.68	10,600.00	39.26	37.52	-79.25	49.88	104.93	1,343.28	1,266.93	76.35	17.593		
10.800.12	10,683.04	10,687.72	10,683.04	39.54	37.81	-79.25	49.88	104.93	1,343.28	1,266.36	76.92	17.463		
10.850.00	10,732.86	10,737.53	10,732.86	39.70	37.99	-79.40	49.88	104.93	1,342.88	1,265.62	77.26	17.381		
10.900.00	10,782.42	10,787.09	10,782.42	39.87	38.17	-79.79	49.88	104.93	1,341.69	1,264.10	77.60	17.290		
10.950.00	10,831.22	10,835.89	10,831.22	40.03	38.34	-80.42	49.88	104.93	1,339.79	1,261.86	77.93	17.192		
11.000.00	10,878.89	10,883.57	10,878.89	40.19	38.51	-81.27	49.88	104.93	1,337.29	1,259.03	78.26	17.088		
11.050.00	10,925.07	10,929.75	10,925.07	40.34	38.68	-82.31	49.88	104.93	1,334.34	1,255.76	78.57	16.982		
11.100.00	10,969.42	10,974.09	10,969.42	40.49	38.84	-83.51	49.88	104.93	1,331.14	1,252.26	78.88	16.876		
11.150.00	11,011.58	11,016.25	11,011.58	40.63	38.99	-84.80	49.88	104.93	1,327.91	1,248.73	79.17	16.772		
11.200.00	11,051.24	11,055.92	11,051.24	40.75	39.13	-86.14	49.88	104.93	1,324.89	1,245.44	79.45	16.675		
11.250.00	11,088.10	11,107.23	11,088.10	40.87	39.31	-87.47	49.88	104.93	1,322.36	1,242.59	79.77	16.577		
11.300.00	11,121.88	11,126.55	11,121.88	40.97	39.38	-88.73	49.88	104.93	1,320.58	1,240.61	79.97	16.513		
11.350.00	11,152.31	11,156.99	11,152.31	41.07	39.49	-89.85	49.88	104.93	1,319.81	1,239.60	80.20	16.456		
11.357.16	11,156.38	11,161.06	11,156.38	41.08	39.50	-90.00	49.88	104.93	1,319.79	1,239.56	80.23	16.450		
11.400.00	11,179.18	11,183.85	11,179.18	41.15	39.59	-90.79	49.88	104.93	1,320.29	1,239.88	80.41	16.419		
11.450.00	11,202.27	11,206.94	11,202.27	41.21	39.67	-91.48	49.88	104.93	1,322.25	1,241.65	80.60	16.405		
11.500.00	11,221.40	11,226.08	11,221.40	41.26	39.74	-91.88	49.88	104.93	1,325.87	1,245.10	80.76	16.416		
11.550.00	11,236.45	11,241.12	11,236.45	41.31	39.79	-91.96	49.88	104.93	1,331.27	1,250.37	80.90	16.455		
11.600.00	11,247.27	11,251.95	11,247.27	41.33	39.83	-91.68	49.88	104.93	1,338.54	1,257.53	81.01	16.523		
11.650.00	11,253.81	11,258.49	11,253.81	41.35	39.85	-91.03	49.88	104.93	1,347.69	1,266.61	81.08	16.621		
11.700.12	11,256.00	11,260.68	11,256.00	41.36	39.86	-90.00	49.88	104.93	1,358.71	1,277.58	81.13	16.748		
11.800.00	11,256.00	11,260.68	11,256.00	41.37	39.86	-90.00	49.88	104.93	1,385.84	1,304.66	81.17	17.072		
11.900.00	11,256.00	11,260.68	11,256.00	41.41	39.86	-90.00	49.88	104.93	1,419.54	1,338.33	81.21	17.479		
12.000.00	11,256.00	11,260.68	11,256.00	41.49	39.86	-90.00	49.88	104.93	1,459.33	1,378.08	81.24	17.962		
12.100.00	11,256.00	11,260.68	11,256.00	41.59	39.86	-90.00	49.88	104.93	1,504.72	1,423.45	81.27	18.516		
12.200.00	11,256.00	11,260.68	11,256.00	41.71	39.86	-90.00	49.88	104.93	1,555.23	1,473.94	81.28	19.133		
12.300.00	11,256.00	11,260.68	11,256.00	41.86	39.86	-90.00	49.88	104.93	1,610.36	1,529.07	81.30	19.809		
12.400.00	11,256.00	11,260.68	11,256.00	42.02	39.86	-90.00	49.88	104.93	1,669.68	1,588.37	81.30	20.537		
12.500.00	11,256.00	11,260.68	11,256.00	42.19	39.86	-90.00	49.88	104.93	1,732.73	1,651.43	81.31	21.311		
12.600.00	11,256.00	13,431.49	12,450.00	42.38	44.81	-132.14	1,272.61	105.34	1,779.74	1,702.13	77.61	22.932		
12.700.00	11,256.00	13,531.49	12,450.00	42.59	44.96	-132.14	1,372.61	105.38	1,779.74	1,701.63	78.11	22.785		
12.800.00	11,256.00	13,631.49	12,450.00	42.80	45.12	-132.14	1,472.61	105.41	1,779.74	1,701.10	78.64	22.632		
12.900.00	11,256.00	13,731.49	12,450.00	43.03	45.29	-132.14	1,572.61	105.44	1,779.74	1,700.55	79.19	22.474		
13.000.00	11,256.00	13,831.49	12,450.00	43.27	45.47	-132.14	1,672.61	105.48	1,779.74	1,699.97	79.77	22.310		
13.100.00	11,256.00	13,931.49	12,450.00	43.52	45.67	-132.14	1,772.61	105.51	1,779.74	1,699.36	80.38	22.142		
13.200.00	11,256.00	14,031.49	12,450.00	43.78	45.88	-132.14	1,872.61	105.55	1,779.74	1,698.73	81.01	21.970		
13.300.00	11,256.00	14,131.49	12,450.00	44.06	46.10	-132.14	1,972.61	105.58	1,779.74	1,698.08	81.66	21.794		
13.400.00	11,256.00	14,231.49	12,450.00	44.34	46.33	-132.14	2,072.61	105.61	1,779.74	1,697.40	82.34	21.614		
13.500.00	11,256.00	14,331.49	12,450.00	44.64	46.58	-132.14	2,172.61	105.65	1,779.74	1,696.70	83.04	21.431		
13.600.00	11,256.00	14,431.49	12,450.00	44.94	46.83	-132.14	2,272.61	105.68	1,779.74	1,695.97	83.77	21.246		
13.700.00	11,256.00	14,531.49	12,450.00	45.26	47.10	-132.14	2,372.61	105.71	1,779.74	1,695.22	84.52	21.058		
13.800.00	11,256.00	14,631.49	12,450.00	45.59	47.37	-132.14	2,472.61	105.75	1,779.74	1,694.45	85.29	20.868		
13.900.00	11,256.00	14,731.49	12,450.00	45.92	47.66	-132.14	2,572.61	105.78	1,779.74	1,693.67	86.07	20.677		
14.000.00	11,256.00	14,831.49	12,450.00	46.27	47.96	-132.14	2,672.61	105.81	1,779.74	1,692.85	86.88	20.484		
14.100.00	11,256.00	14,931.49	12,450.00	46.63	48.27	-132.14	2,772.61	105.85	1,779.74	1,692.02	87.71	20.290		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 507H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
 TVD Reference: KB=25' @ 3519.00usft (H&P 650)
 MD Reference: KB=25' @ 3519.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.14 Single User Db
 Offset TVD Reference: Offset Datum

Offset Design Solomon Federal Com - 710H - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Tooface (")	Offset Wellbore Centre +N-S (usft)	Offset Wellbore Centre +E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,200.00	11,256.00	15,031.49	12,450.00	46.99	48.59	-132.14	2,872.61	105.88	1,779.74	1,691.18	88.56	20.095	
14,300.00	11,256.00	15,131.49	12,450.00	47.37	48.91	-132.14	2,972.61	105.92	1,779.74	1,690.31	89.43	19.900	
14,400.00	11,256.00	15,231.49	12,450.00	47.75	49.25	-132.14	3,072.61	105.95	1,779.74	1,689.42	90.32	19.705	
14,500.00	11,256.00	15,331.49	12,450.00	48.15	49.60	-132.14	3,172.61	105.98	1,779.74	1,688.52	91.22	19.510	
14,600.00	11,256.00	15,431.49	12,450.00	48.55	49.96	-132.14	3,272.61	106.02	1,779.74	1,687.59	92.14	19.315	
14,700.00	11,256.00	15,531.49	12,450.00	48.96	50.32	-132.14	3,372.61	106.05	1,779.74	1,686.66	93.08	19.120	
14,800.00	11,256.00	15,631.49	12,450.00	49.38	50.70	-132.14	3,472.61	106.08	1,779.74	1,685.70	94.04	18.926	
14,900.00	11,256.00	15,731.49	12,450.00	49.80	51.08	-132.14	3,572.61	106.12	1,779.74	1,684.73	95.01	18.733	
15,000.00	11,256.00	15,831.49	12,450.00	50.24	51.47	-132.14	3,672.61	106.15	1,779.74	1,683.75	95.99	18.540	
15,100.00	11,256.00	15,931.49	12,450.00	50.68	51.87	-132.14	3,772.61	106.19	1,779.74	1,682.75	96.99	18.349	
15,200.00	11,256.00	16,031.49	12,450.00	51.13	52.28	-132.14	3,872.61	106.22	1,779.74	1,681.73	98.01	18.159	
15,300.00	11,256.00	16,131.49	12,450.00	51.59	52.70	-132.14	3,972.61	106.25	1,779.74	1,680.70	99.04	17.971	
15,400.00	11,256.00	16,231.49	12,450.00	52.05	53.12	-132.14	4,072.61	106.29	1,779.74	1,679.66	100.08	17.784	
15,500.00	11,256.00	16,331.49	12,450.00	52.52	53.56	-132.14	4,172.61	106.32	1,779.74	1,678.60	101.13	17.598	
15,600.00	11,256.00	16,431.49	12,450.00	53.00	54.00	-132.14	4,272.61	106.35	1,779.74	1,677.54	102.20	17.414	
15,700.00	11,256.00	16,531.49	12,450.00	53.48	54.44	-132.14	4,372.61	106.39	1,779.74	1,676.46	103.28	17.232	
15,800.00	11,256.00	16,631.49	12,450.00	53.97	54.90	-132.14	4,472.61	106.42	1,779.74	1,675.36	104.37	17.052	
15,900.00	11,256.00	16,731.49	12,450.00	54.47	55.36	-132.14	4,572.61	106.45	1,779.74	1,674.26	105.48	16.873	
15,972.39	11,256.00	16,803.88	12,450.00	54.83	55.69	-132.14	4,645.00	106.48	1,779.74	1,673.46	106.28	16.746	

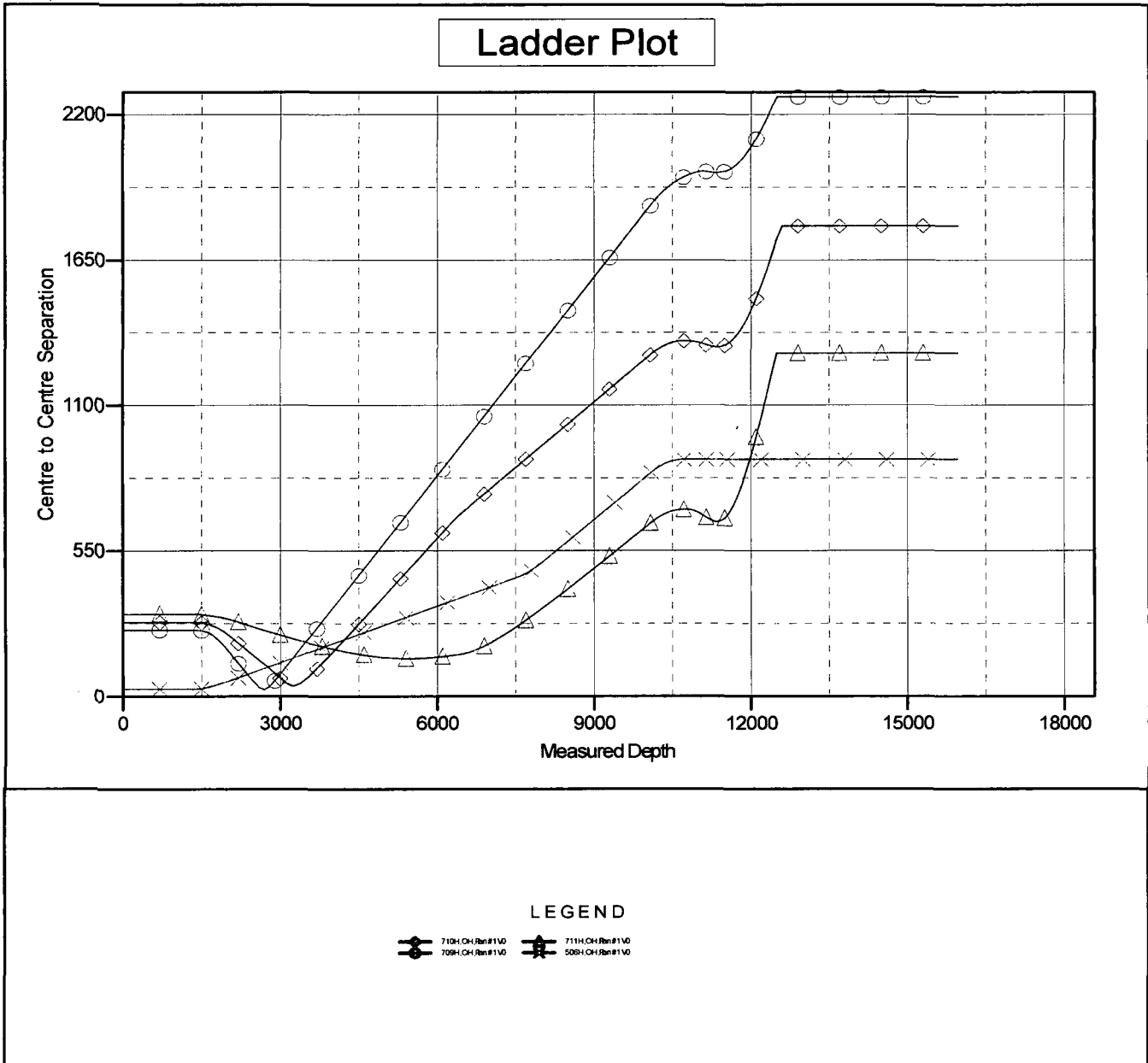
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB=25' @ 3519.00usft (H&P 650)
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: 507H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.47°



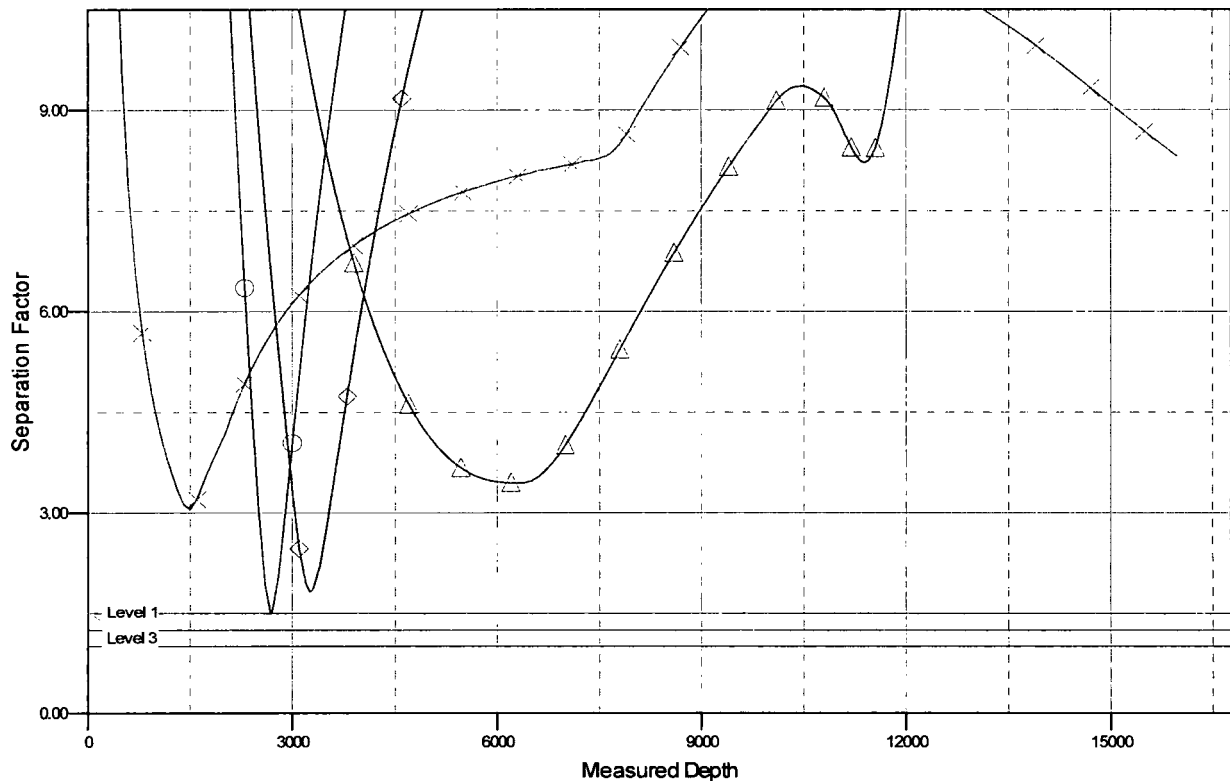
Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 507H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 507H
TVD Reference: KB=25' @ 3519.00usft (H&P 650)
MD Reference: KB=25' @ 3519.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB=25' @ 3519.00usft (H&P 650)
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: 507H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.47°

Separation Factor Plot



LEGEND

710H OH/Rbn#1 VD
 711H OH/Rbn#1 VD
 509H OH/Rbn#1 VD