

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Centennial Resource Production, LLC
LEASE NO.:	NMNM-117125
WELL NAME & NO.:	Sheba Federal Com 506H
SURFACE HOLE FOOTAGE:	0300' FSL & 1785' FEL
BOTTOM HOLE FOOTAGE	0330' FNL & 1225' FEL
LOCATION:	Section 22, T. 24 S., R 34 E., NMPPM
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 & 1785'/E
BOTTOM HOLE FOOTAGE	330'/N & 1225'/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 berthing 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 berthing 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

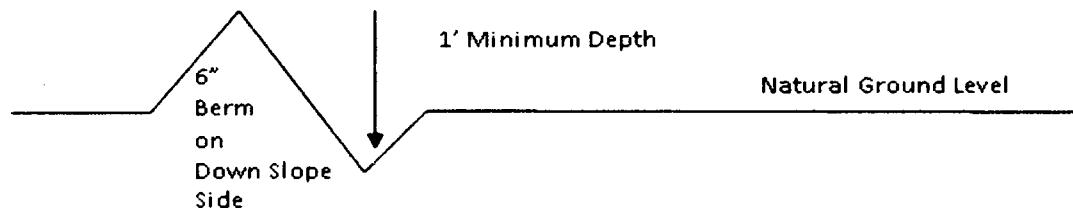
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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 intervals 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.

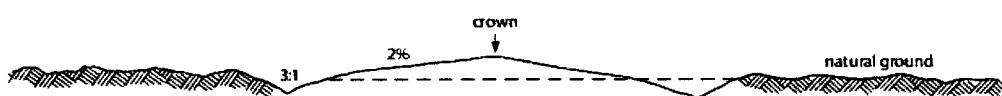
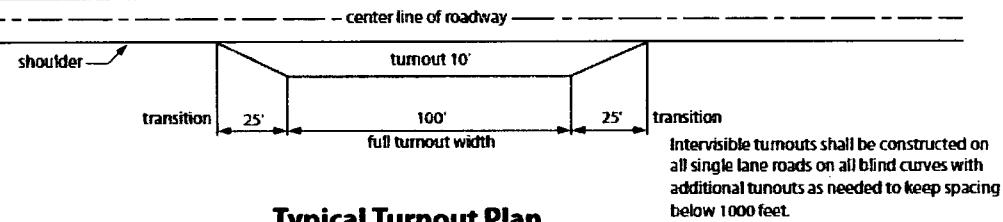
Public Access

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

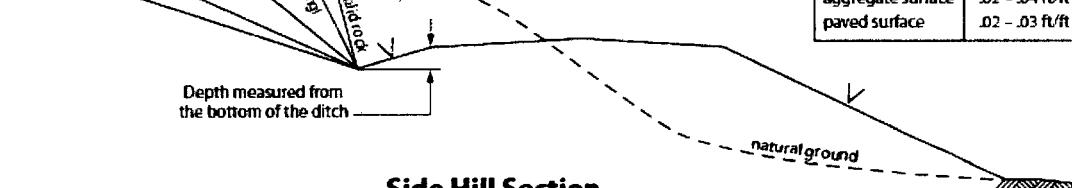
3. Redistribute topsoil
4. Revegetate slopes



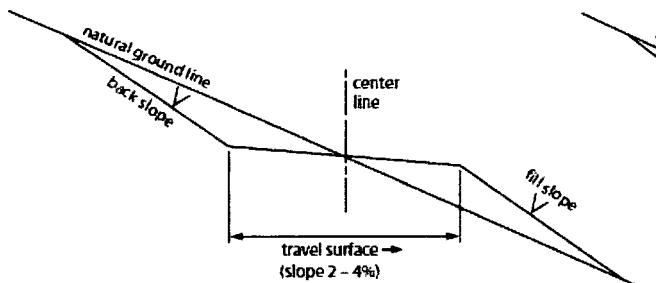
Level Ground Section

road type	crown
earth surface	.03 - .05 ft/ft
aggregate surface	.02 - .04 ft/ft
paved surface	.02 - .03 ft/ft

Side Hill Section



Typical Outsloped Section



Typical Inslope Section

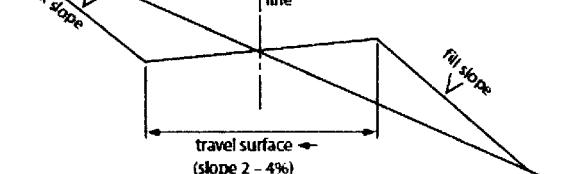


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.
without specific written approval granted by the Authorized Officer.

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.

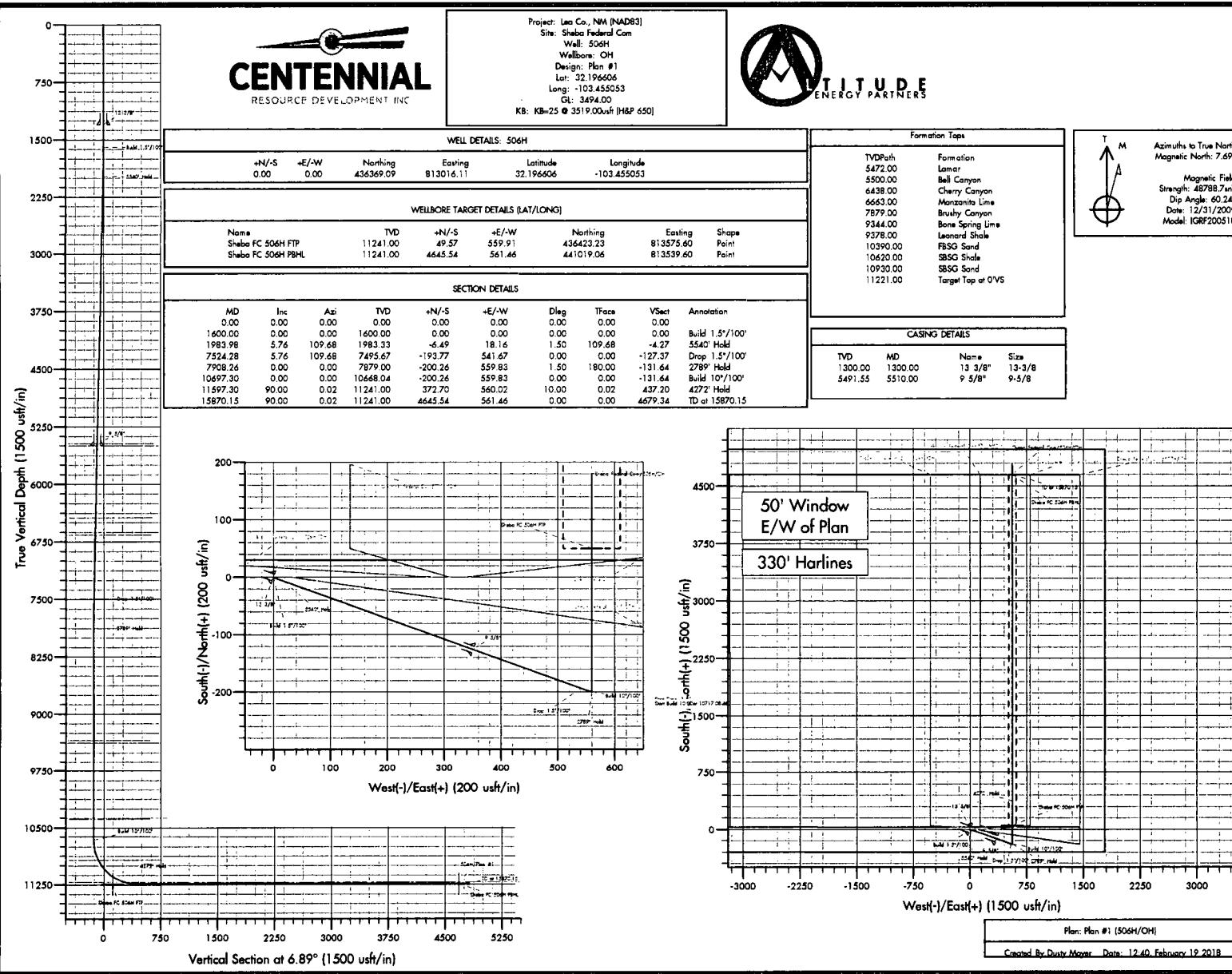
Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). 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 \times percent purity \times percent germination = pounds pure live seed





Planning Report



Database: EDM 5000.14 Single User Db
Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Sheba Federal Com
Well: 506H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 506H
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	506H				
Well Position	+N/S	0.00 usft	Northing:	436,369.09 usft	Latitude:
	+E/W	0.00 usft	Easting:	813,016.11 usft	Longitude:
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 (nT)
	IGRF200510	12/31/09	7.69	60.24	48,788.71122476

Design	Plan #1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:		Depth From (TVD) (usft)	+N/S (usft)	+E/W (usft)	Direction (°)
		0.00	0.00	0.00	6.89

Plan Survey Tool Program			Date	02/19/18
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1 0.00	15,870.15	Plan #1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-SI

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	0.00	
	1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	1,983.98	5.76	109.68	1,983.33	-6.49	18.16	1.50	1.50	0.00	0.00	109.68	
	7,524.28	5.76	109.68	7,495.67	-193.77	541.67	0.00	0.00	0.00	0.00	0.00	
	7,908.26	0.00	0.00	7,879.00	-200.26	559.83	1.50	-1.50	0.00	0.00	180.00	
	10,697.30	0.00	0.00	10,668.04	-200.26	559.83	0.00	0.00	0.00	0.00	0.00	
	11,597.30	90.00	0.02	11,241.00	372.70	560.02	10.00	10.00	0.00	0.00	0.02	
	15,870.15	90.00	0.02	11,241.00	4,645.54	561.46	0.00	0.00	0.00	0.00	0.00	Sheba FC 506H PBH

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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
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 1.5°/100'									
1,700.00	1.50	109.68	1,699.99	-0.44	1.23	-0.29	1.50	1.50	0.00
1,800.00	3.00	109.68	1,799.91	-1.76	4.93	-1.16	1.50	1.50	0.00
1,900.00	4.50	109.68	1,899.69	-3.97	11.09	-2.61	1.50	1.50	0.00
1,983.98	5.76	109.68	1,983.33	-6.49	18.16	-4.27	1.50	1.50	0.00
5540' Hold									
2,000.00	5.76	109.68	1,999.27	-7.04	19.67	-4.63	0.00	0.00	0.00
2,100.00	5.76	109.68	2,098.77	-10.42	29.12	-6.85	0.00	0.00	0.00
2,200.00	5.76	109.68	2,198.26	-13.80	38.57	-9.07	0.00	0.00	0.00
2,300.00	5.76	109.68	2,297.76	-17.18	48.02	-11.29	0.00	0.00	0.00
2,400.00	5.76	109.68	2,397.25	-20.56	57.47	-13.51	0.00	0.00	0.00
2,500.00	5.76	109.68	2,496.75	-23.94	66.92	-15.74	0.00	0.00	0.00
2,600.00	5.76	109.68	2,596.24	-27.32	76.37	-17.96	0.00	0.00	0.00
2,700.00	5.76	109.68	2,695.74	-30.70	85.82	-20.18	0.00	0.00	0.00
2,800.00	5.76	109.68	2,795.23	-34.08	95.26	-22.40	0.00	0.00	0.00
2,900.00	5.76	109.68	2,894.73	-37.46	104.71	-24.62	0.00	0.00	0.00
3,000.00	5.76	109.68	2,994.22	-40.84	114.16	-26.84	0.00	0.00	0.00
3,100.00	5.76	109.68	3,093.72	-44.22	123.61	-29.07	0.00	0.00	0.00
3,200.00	5.76	109.68	3,193.21	-47.60	133.06	-31.29	0.00	0.00	0.00
3,300.00	5.76	109.68	3,292.71	-50.98	142.51	-33.51	0.00	0.00	0.00
3,400.00	5.76	109.68	3,392.21	-54.36	151.96	-35.73	0.00	0.00	0.00
3,500.00	5.76	109.68	3,491.70	-57.74	161.41	-37.95	0.00	0.00	0.00
3,600.00	5.76	109.68	3,591.20	-61.12	170.86	-40.18	0.00	0.00	0.00
3,700.00	5.76	109.68	3,690.69	-64.50	180.31	-42.40	0.00	0.00	0.00
3,800.00	5.76	109.68	3,790.19	-67.88	189.76	-44.62	0.00	0.00	0.00
3,900.00	5.76	109.68	3,889.68	-71.26	199.21	-46.84	0.00	0.00	0.00
4,000.00	5.76	109.68	3,989.18	-74.64	208.66	-49.06	0.00	0.00	0.00
4,100.00	5.76	109.68	4,088.67	-78.02	218.10	-51.29	0.00	0.00	0.00
4,200.00	5.76	109.68	4,188.17	-81.40	227.55	-53.51	0.00	0.00	0.00
4,300.00	5.76	109.68	4,287.66	-84.78	237.00	-55.73	0.00	0.00	0.00
4,400.00	5.76	109.68	4,387.16	-88.16	246.45	-57.95	0.00	0.00	0.00
4,500.00	5.76	109.68	4,486.65	-91.54	255.90	-60.17	0.00	0.00	0.00
4,600.00	5.76	109.68	4,586.15	-94.92	265.35	-62.40	0.00	0.00	0.00
4,700.00	5.76	109.68	4,685.64	-98.30	274.80	-64.62	0.00	0.00	0.00
4,800.00	5.76	109.68	4,785.14	-101.68	284.25	-66.84	0.00	0.00	0.00

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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	5.76	109.68	4,884.63	-105.06	293.70	-69.06	0.00	0.00	0.00
5,000.00	5.76	109.68	4,984.13	-108.44	303.15	-71.28	0.00	0.00	0.00
5,100.00	5.76	109.68	5,083.62	-111.82	312.60	-73.51	0.00	0.00	0.00
5,200.00	5.76	109.68	5,183.12	-115.20	322.05	-75.73	0.00	0.00	0.00
5,300.00	5.76	109.68	5,282.61	-118.58	331.50	-77.95	0.00	0.00	0.00
5,400.00	5.76	109.68	5,382.11	-121.96	340.94	-80.17	0.00	0.00	0.00
5,490.35	5.76	109.68	5,472.00	-125.02	349.48	-82.18	0.00	0.00	0.00
Lamar									
5,500.00	5.76	109.68	5,481.60	-125.34	350.39	-82.39	0.00	0.00	0.00
5,510.00	5.76	109.68	5,491.55	-125.68	351.34	-82.62	0.00	0.00	0.00
9 5/8"									
5,518.49	5.76	109.68	5,500.00	-125.97	352.14	-82.80	0.00	0.00	0.00
Bell Canyon									
5,600.00	5.76	109.68	5,581.10	-128.72	359.84	-84.62	0.00	0.00	0.00
5,700.00	5.76	109.68	5,680.59	-132.10	369.29	-86.84	0.00	0.00	0.00
5,800.00	5.76	109.68	5,780.09	-135.48	378.74	-89.06	0.00	0.00	0.00
5,900.00	5.76	109.68	5,879.58	-138.86	388.19	-91.28	0.00	0.00	0.00
6,000.00	5.76	109.68	5,979.08	-142.24	397.64	-93.50	0.00	0.00	0.00
6,100.00	5.76	109.68	6,078.57	-145.62	407.09	-95.73	0.00	0.00	0.00
6,200.00	5.76	109.68	6,178.07	-149.00	416.54	-97.95	0.00	0.00	0.00
6,300.00	5.76	109.68	6,277.56	-152.38	425.99	-100.17	0.00	0.00	0.00
6,400.00	5.76	109.68	6,377.06	-155.76	435.44	-102.39	0.00	0.00	0.00
6,461.25	5.76	109.68	6,438.00	-157.83	441.22	-103.75	0.00	0.00	0.00
Cherry Canyon									
6,500.00	5.76	109.68	6,476.56	-159.14	444.89	-104.61	0.00	0.00	0.00
6,600.00	5.76	109.68	6,576.05	-162.52	454.34	-106.83	0.00	0.00	0.00
6,687.39	5.76	109.68	6,663.00	-165.48	462.59	-108.78	0.00	0.00	0.00
Manzanita Lime									
6,700.00	5.76	109.68	6,675.55	-165.90	463.78	-109.06	0.00	0.00	0.00
6,800.00	5.76	109.68	6,775.04	-169.28	473.23	-111.28	0.00	0.00	0.00
6,900.00	5.76	109.68	6,874.54	-172.66	482.68	-113.50	0.00	0.00	0.00
7,000.00	5.76	109.68	6,974.03	-176.04	492.13	-115.72	0.00	0.00	0.00
7,100.00	5.76	109.68	7,073.53	-179.42	501.58	-117.94	0.00	0.00	0.00
7,200.00	5.76	109.68	7,173.02	-182.80	511.03	-120.17	0.00	0.00	0.00
7,300.00	5.76	109.68	7,272.52	-186.18	520.48	-122.39	0.00	0.00	0.00
7,400.00	5.76	109.68	7,372.01	-189.56	529.93	-124.61	0.00	0.00	0.00
7,500.00	5.76	109.68	7,471.51	-192.94	539.38	-126.83	0.00	0.00	0.00
7,524.28	5.76	109.68	7,495.67	-193.77	541.67	-127.37	0.00	0.00	0.00
Drop 1.5°/100'									
7,600.00	4.62	109.68	7,571.07	-196.07	548.12	-128.89	1.50	-1.50	0.00
7,700.00	3.12	109.68	7,670.84	-198.35	554.49	-130.38	1.50	-1.50	0.00
7,800.00	1.62	109.68	7,770.75	-199.74	558.39	-131.30	1.50	-1.50	0.00
7,908.26	0.00	0.00	7,879.00	-200.26	559.83	-131.64	1.50	-1.50	0.00
2789' Hold - Brushy Canyon									
8,000.00	0.00	0.00	7,970.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,100.00	0.00	0.00	8,070.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,200.00	0.00	0.00	8,170.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,300.00	0.00	0.00	8,270.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,400.00	0.00	0.00	8,370.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,500.00	0.00	0.00	8,470.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,600.00	0.00	0.00	8,570.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,700.00	0.00	0.00	8,670.74	-200.26	559.83	-131.64	0.00	0.00	0.00
8,800.00	0.00	0.00	8,770.74	-200.26	559.83	-131.64	0.00	0.00	0.00



Planning Report



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Site:	Sheba Federal Com	North Reference:	True
Well:	506H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)
8,900.00	0.00	0.00	8,870.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,000.00	0.00	0.00	8,970.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,100.00	0.00	0.00	9,070.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,200.00	0.00	0.00	9,170.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,300.00	0.00	0.00	9,270.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,373.26	0.00	0.00	9,344.00	-200.26	559.83	-131.64	0.00	0.00	0.00
Bone Spring Lime									
9,400.00	0.00	0.00	9,370.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,407.26	0.00	0.00	9,378.00	-200.26	559.83	-131.64	0.00	0.00	0.00
Leonard Shale									
9,500.00	0.00	0.00	9,470.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,600.00	0.00	0.00	9,570.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,700.00	0.00	0.00	9,670.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,800.00	0.00	0.00	9,770.74	-200.26	559.83	-131.64	0.00	0.00	0.00
9,900.00	0.00	0.00	9,870.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,000.00	0.00	0.00	9,970.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,100.00	0.00	0.00	10,070.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,200.00	0.00	0.00	10,170.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,300.00	0.00	0.00	10,270.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,400.00	0.00	0.00	10,370.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,419.26	0.00	0.00	10,390.00	-200.26	559.83	-131.64	0.00	0.00	0.00
FBSG Sand									
10,500.00	0.00	0.00	10,470.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,600.00	0.00	0.00	10,570.74	-200.26	559.83	-131.64	0.00	0.00	0.00
10,649.26	0.00	0.00	10,620.00	-200.26	559.83	-131.64	0.00	0.00	0.00
SBSG Shale									
10,697.30	0.00	0.00	10,668.04	-200.26	559.83	-131.64	0.00	0.00	0.00
Build 10'/100'									
10,700.00	0.27	0.02	10,670.74	-200.25	559.83	-131.64	10.00	10.00	0.00
10,750.00	5.27	0.02	10,720.66	-197.84	559.83	-129.24	10.00	10.00	0.00
10,800.00	10.27	0.02	10,770.19	-191.08	559.83	-122.53	10.00	10.00	0.00
10,850.00	15.27	0.02	10,818.94	-180.03	559.84	-111.56	10.00	10.00	0.00
10,900.00	20.27	0.02	10,866.54	-164.78	559.84	-96.41	10.00	10.00	0.00
10,950.00	25.27	0.02	10,912.62	-145.43	559.85	-77.21	10.00	10.00	0.00
10,969.37	27.21	0.02	10,930.00	-136.87	559.85	-68.71	10.00	10.00	0.00
SBSG Sand									
11,000.00	30.27	0.02	10,956.85	-122.15	559.86	-54.09	10.00	10.00	0.00
11,050.00	35.27	0.02	10,998.88	-95.09	559.87	-27.23	10.00	10.00	0.00
11,100.00	40.27	0.02	11,038.39	-64.48	559.88	3.17	10.00	10.00	0.00
11,150.00	45.27	0.02	11,075.09	-30.53	559.89	36.87	10.00	10.00	0.00
11,200.00	50.27	0.02	11,108.68	6.48	559.90	73.61	10.00	10.00	0.00
11,250.00	55.27	0.02	11,138.92	46.27	559.91	113.12	10.00	10.00	0.00
11,300.00	60.27	0.02	11,165.58	88.56	559.93	155.10	10.00	10.00	0.00
11,350.00	65.27	0.02	11,188.45	133.00	559.94	199.23	10.00	10.00	0.00
11,400.00	70.27	0.02	11,207.36	179.27	559.96	245.16	10.00	10.00	0.00
11,445.47	74.82	0.02	11,221.00	222.64	559.97	288.22	10.00	10.00	0.00
Target Top at 0' VS									
11,450.00	75.27	0.02	11,222.17	227.01	559.97	292.56	10.00	10.00	0.00
11,500.00	80.27	0.02	11,232.76	275.86	559.99	341.06	10.00	10.00	0.00
11,550.00	85.27	0.02	11,239.05	325.45	560.01	390.29	10.00	10.00	0.00
11,597.30	90.00	0.02	11,241.00	372.70	560.02	437.20	10.00	10.00	0.00
4272' Hold									
11,600.00	90.00	0.02	11,241.00	375.39	560.02	439.88	0.00	0.00	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: 506H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 506H
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)
11,700.00	90.00	0.02	11,241.00	475.39	560.06	539.16	0.00	0.00	0.00
11,800.00	90.00	0.02	11,241.00	575.39	560.09	638.44	0.00	0.00	0.00
11,900.00	90.00	0.02	11,241.00	675.39	560.12	737.72	0.00	0.00	0.00
12,000.00	90.00	0.02	11,241.00	775.39	560.16	837.00	0.00	0.00	0.00
12,100.00	90.00	0.02	11,241.00	875.39	560.19	936.28	0.00	0.00	0.00
12,200.00	90.00	0.02	11,241.00	975.39	560.22	1,035.57	0.00	0.00	0.00
12,300.00	90.00	0.02	11,241.00	1,075.39	560.26	1,134.85	0.00	0.00	0.00
12,400.00	90.00	0.02	11,241.00	1,175.39	560.29	1,234.13	0.00	0.00	0.00
12,500.00	90.00	0.02	11,241.00	1,275.39	560.33	1,333.41	0.00	0.00	0.00
12,600.00	90.00	0.02	11,241.00	1,375.39	560.36	1,432.69	0.00	0.00	0.00
12,700.00	90.00	0.02	11,241.00	1,475.39	560.39	1,531.97	0.00	0.00	0.00
12,800.00	90.00	0.02	11,241.00	1,575.39	560.43	1,631.26	0.00	0.00	0.00
12,900.00	90.00	0.02	11,241.00	1,675.39	560.46	1,730.54	0.00	0.00	0.00
13,000.00	90.00	0.02	11,241.00	1,775.39	560.49	1,829.82	0.00	0.00	0.00
13,100.00	90.00	0.02	11,241.00	1,875.39	560.53	1,929.10	0.00	0.00	0.00
13,200.00	90.00	0.02	11,241.00	1,975.39	560.56	2,028.38	0.00	0.00	0.00
13,300.00	90.00	0.02	11,241.00	2,075.39	560.59	2,127.66	0.00	0.00	0.00
13,400.00	90.00	0.02	11,241.00	2,175.39	560.63	2,226.94	0.00	0.00	0.00
13,500.00	90.00	0.02	11,241.00	2,275.39	560.66	2,326.23	0.00	0.00	0.00
13,600.00	90.00	0.02	11,241.00	2,375.39	560.69	2,425.51	0.00	0.00	0.00
13,700.00	90.00	0.02	11,241.00	2,475.39	560.73	2,524.79	0.00	0.00	0.00
13,800.00	90.00	0.02	11,241.00	2,575.39	560.76	2,624.07	0.00	0.00	0.00
13,900.00	90.00	0.02	11,241.00	2,675.39	560.80	2,723.35	0.00	0.00	0.00
14,000.00	90.00	0.02	11,241.00	2,775.39	560.83	2,822.63	0.00	0.00	0.00
14,100.00	90.00	0.02	11,241.00	2,875.39	560.86	2,921.92	0.00	0.00	0.00
14,200.00	90.00	0.02	11,241.00	2,975.39	560.90	3,021.20	0.00	0.00	0.00
14,300.00	90.00	0.02	11,241.00	3,075.39	560.93	3,120.48	0.00	0.00	0.00
14,400.00	90.00	0.02	11,241.00	3,175.39	560.96	3,219.76	0.00	0.00	0.00
14,500.00	90.00	0.02	11,241.00	3,275.39	561.00	3,319.04	0.00	0.00	0.00
14,600.00	90.00	0.02	11,241.00	3,375.39	561.03	3,418.32	0.00	0.00	0.00
14,700.00	90.00	0.02	11,241.00	3,475.39	561.06	3,517.61	0.00	0.00	0.00
14,800.00	90.00	0.02	11,241.00	3,575.39	561.10	3,616.89	0.00	0.00	0.00
14,900.00	90.00	0.02	11,241.00	3,675.39	561.13	3,716.17	0.00	0.00	0.00
15,000.00	90.00	0.02	11,241.00	3,775.39	561.16	3,815.45	0.00	0.00	0.00
15,100.00	90.00	0.02	11,241.00	3,875.39	561.20	3,914.73	0.00	0.00	0.00
15,200.00	90.00	0.02	11,241.00	3,975.39	561.23	4,014.01	0.00	0.00	0.00
15,300.00	90.00	0.02	11,241.00	4,075.39	561.27	4,113.29	0.00	0.00	0.00
15,400.00	90.00	0.02	11,241.00	4,175.39	561.30	4,212.58	0.00	0.00	0.00
15,500.00	90.00	0.02	11,241.00	4,275.39	561.33	4,311.86	0.00	0.00	0.00
15,600.00	90.00	0.02	11,241.00	4,375.39	561.37	4,411.14	0.00	0.00	0.00
15,700.00	90.00	0.02	11,241.00	4,475.39	561.40	4,510.42	0.00	0.00	0.00
15,800.00	90.00	0.02	11,241.00	4,575.39	561.43	4,609.70	0.00	0.00	0.00
15,870.15	90.00	0.02	11,241.00	4,645.54	561.46	4,679.34	0.00	0.00	0.00

TD at 15870.15



Planning Report



Database: EDM 5000.14 Single User Db
Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Sheba Federal Com
Well: 506H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 506H
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

Design Targets**Target Name**

- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/S	+E/W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Sheba FC 506H PBHL	0.00	0.00	11,241.00	4,645.54	561.46	441,019.06	813,539.60	32.209375	-103.453238
- plan hits target center									
- Point									
Sheba FC 506H FTP	0.00	0.00	11,241.00	49.57	559.91	436,423.23	813,575.60	32.196742	-103.453243
- plan misses target center by 84.90usft at 11300.00usft MD (11165.58 TVD, 88.56 N, 559.93 E)									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,300.00	1,300.00	13 3/8"	13-3/8	17-1/2
5,510.00	5,491.55	9 5/8"	9-5/8	12-1/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,490.35	5,472.00	Lamar		0.00	
5,518.49	5,500.00	Bell Canyon		0.00	
6,461.25	6,438.00	Cherry Canyon		0.00	
6,687.39	6,663.00	Manzanita Lime		0.00	
7,908.26	7,879.00	Brushy Canyon		0.00	
9,373.26	9,344.00	Bone Spring Lime		0.00	
9,407.26	9,378.00	Leonard Shale		0.00	
10,419.26	10,390.00	FBSG Sand		0.00	
10,649.26	10,620.00	SBSG Shale		0.00	
10,969.37	10,930.00	SBSG Sand		0.00	
11,445.47	11,221.00	Target Top at 0'VS		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
1,600.00	1,600.00	0.00	0.00	Build 1.5°/100'
1,983.98	1,983.33	-6.49	18.16	5540' Hold
7,524.28	7,495.67	-193.77	541.67	Drop 1.5°/100'
7,908.26	7,879.00	-200.26	559.83	2789' Hold
10,697.30	10,668.04	-200.26	559.83	Build 10°/100'
11,597.30	11,241.00	372.70	560.02	4272' Hold
15,870.15	11,241.00	4,645.54	561.46	TD at 15870.15



Centennial Resource Development, Inc.

**Lea Co., NM (NAD83)
Sheba Federal Com
506H**

**OH
Plan #1**

Anticollision Report

19 February, 2018





CENTENNIAL
HOUSING ENERGY PARTNERS

Anticollision Report



Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 506H
Well Error: 0.00 usft
Reference Wellbore OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
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
Casing Method:	Not applied

Survey Tool Program			Date	02/19/18
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,870.15	Plan #1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Summary		Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance		Separation Factor	Warning
Site Name	Offset Well - Wellbore - Design			Between Centres (usft)	Between Ellipses (usft)		
Sheba Federal Com	507H - OH - Plan #1	1,400.00	1,400.00	30.05	20.46	3.134	CC, ES
	507H - OH - Plan #1	1,500.00	1,499.20	31.34	21.05	3.045	SF
	711H - OH - Plan #1	11,253.88	11,163.37	234.97	156.38	2.990	CC, ES, SF
Solomon Federal Com	709H - OH - Plan #1	3,207.41	3,206.99	57.45	35.14	2.575	CC, ES, SF
	710H - OH - Plan #1	4,077.53	4,068.19	100.02	71.51	3.508	CC
	710H - OH - Plan #1	4,100.00	4,109.60	100.08	71.34	3.483	ES
	710H - OH - Plan #1	4,200.00	4,189.23	101.74	72.37	3.464	SF

Offset Design Sheba Federal Com - 507H - 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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +E/N-S (usft)	+E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	89.99	0.00	30.05	30.05	29.78	0.27	111.775	
100.00	100.00	100.00	100.00	0.13	0.13	89.99	0.00	30.05	30.05	30.05	0.99	30.484	
200.00	200.00	200.00	200.00	0.49	0.49	89.99	0.00	30.05	30.05	29.07	0.99	30.484	
300.00	300.00	300.00	300.00	0.85	0.85	89.99	0.00	30.05	30.05	28.35	1.70	17.649	
400.00	400.00	400.00	400.00	1.21	1.21	89.99	0.00	30.05	30.05	27.63	2.42	12.419	
500.00	500.00	500.00	500.00	1.57	1.57	89.99	0.00	30.05	30.05	26.91	3.14	9.581	
600.00	600.00	600.00	600.00	1.93	1.93	89.99	0.00	30.05	30.05	26.20	3.85	7.798	
700.00	700.00	700.00	700.00	2.29	2.29	89.99	0.00	30.05	30.05	25.48	4.57	6.575	
800.00	800.00	800.00	800.00	2.64	2.64	89.99	0.00	30.05	30.05	24.76	5.29	5.683	
900.00	900.00	900.00	900.00	3.00	3.00	89.99	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	89.99	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	89.99	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	89.99	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	89.99	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	89.99	0.00	30.05	30.05	20.46	9.59	3.134 CC, ES	
1,500.00	1,500.00	1,499.20	1,499.19	5.15	5.14	90.32	-0.18	31.33	31.34	21.05	10.29	3.045 SF	
1,600.00	1,600.00	1,598.28	1,598.19	5.51	5.48	91.16	-0.71	35.15	35.20	24.22	10.98	3.207	
1,700.00	1,699.99	1,697.17	1,696.87	5.86	5.82	-17.99	-1.61	41.49	40.40	28.75	11.65	3.469	
1,800.00	1,799.91	1,795.92	1,795.21	6.20	6.16	-18.23	-2.85	50.35	45.68	33.38	12.30	3.714	

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: 506H
Well Error: 0.00 usft
Reference Wellbore OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
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
Sheba Federal Com - 507H - OH - Plan #1													Offset Well Error:	0.00 usft
Survey Program:		0-MWD+IFR1+MS												
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Semi Major Axis	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
1,900.00	1,899.69	1,894.54	1,893.16	6.54	6.50	-19.00	-4.45	61.71	51.04	38.09	12.95	3.942		
1,983.98	1,983.33	1,977.24	1,975.05	6.82	6.79	-19.93	-6.07	73.16	55.62	42.13	13.49	4.123		
2,000.00	1,999.27	1,993.01	1,990.63	6.88	6.85	-20.12	-6.40	75.54	56.54	42.95	13.59	4.159		
2,100.00	2,098.77	2,107.87	2,088.42	7.22	7.26	-21.05	-8.66	91.57	63.33	49.00	14.32	4.422		
2,200.00	2,198.26	2,191.88	2,186.79	7.57	7.55	-21.77	-10.97	107.94	70.37	55.40	14.96	4.702		
2,300.00	2,297.76	2,308.37	2,285.16	7.92	7.97	-22.35	-13.27	124.30	77.42	61.69	15.73	4.923		
2,400.00	2,397.25	2,391.37	2,383.53	8.27	8.27	-22.84	-15.58	140.67	84.47	68.10	16.37	5.160		
2,500.00	2,496.75	2,508.88	2,481.90	8.62	8.69	-23.26	-17.88	157.04	91.54	74.39	17.14	5.339		
2,600.00	2,596.24	2,609.13	2,580.27	8.97	9.06	-23.61	-20.19	173.40	98.60	80.74	17.86	5.521		
2,700.00	2,695.74	2,690.62	2,678.64	9.33	9.35	-23.92	-22.49	189.77	105.67	87.16	18.51	5.710		
2,800.00	2,795.23	2,809.63	2,777.00	9.68	9.79	-24.19	-24.80	206.14	112.74	93.45	19.29	5.844		
2,900.00	2,894.73	2,909.88	2,875.37	10.04	10.15	-24.43	-27.10	222.50	119.82	99.80	20.01	5.987		
3,000.00	2,994.22	2,989.86	2,973.74	10.39	10.44	-24.64	-29.41	238.87	126.89	106.23	20.66	6.142		
3,100.00	3,093.72	3,089.61	3,072.11	10.75	10.81	-24.83	-31.71	255.24	133.97	112.59	21.38	6.265		
3,200.00	3,193.21	3,189.36	3,170.48	11.10	11.18	-24.99	-34.02	271.60	141.05	118.94	22.11	6.380		
3,300.00	3,292.71	3,289.11	3,268.85	11.46	11.54	-25.15	-36.32	287.97	148.13	125.30	22.83	6.488		
3,400.00	3,392.21	3,388.86	3,367.22	11.82	11.91	-25.29	-38.63	304.34	155.21	131.65	23.56	6.589		
3,500.00	3,491.70	3,488.61	3,465.59	12.18	12.28	-25.41	-40.94	320.70	162.29	138.01	24.28	6.683		
3,600.00	3,591.20	3,588.35	3,563.96	12.54	12.65	-25.53	-43.24	337.07	169.37	144.36	25.01	6.772		
3,700.00	3,690.69	3,688.10	3,662.33	12.90	13.02	-25.64	-45.55	353.43	176.46	150.71	25.74	6.855		
3,800.00	3,790.19	3,787.85	3,760.70	13.26	13.39	-25.74	-47.85	369.80	183.54	157.07	26.47	6.934		
3,900.00	3,889.68	3,887.60	3,859.07	13.62	13.76	-25.83	-50.16	386.17	190.62	163.42	27.20	7.008		
4,000.00	3,989.18	3,987.35	3,957.44	13.98	14.12	-25.91	-52.46	402.53	197.71	169.78	27.93	7.078		
4,100.00	4,088.67	4,087.10	4,055.81	14.34	14.50	-25.99	-54.77	418.90	204.79	176.13	28.66	7.145		
4,200.00	4,188.17	4,186.84	4,154.18	14.70	14.87	-26.07	-57.07	435.27	211.88	182.48	29.40	7.208		
4,300.00	4,287.66	4,286.59	4,252.55	15.06	15.24	-26.14	-59.38	451.63	218.96	188.83	30.13	7.268		
4,400.00	4,387.16	4,386.34	4,350.92	15.42	15.61	-26.20	-61.68	468.00	226.05	195.19	30.86	7.325		
4,500.00	4,486.65	4,486.09	4,449.29	15.78	15.98	-26.26	-63.99	484.37	233.13	201.54	31.60	7.379		
4,600.00	4,586.15	4,585.84	4,547.66	16.15	16.35	-26.32	-66.29	500.73	240.22	207.89	32.33	7.430		
4,700.00	4,685.64	4,685.59	4,646.02	16.51	16.72	-26.37	-68.60	517.10	247.31	214.24	33.06	7.479		
4,800.00	4,785.14	4,785.33	4,744.39	16.87	17.09	-26.42	-70.90	533.47	254.39	220.59	33.80	7.526		
4,900.00	4,884.63	4,885.08	4,842.76	17.23	17.47	-26.47	-73.21	549.83	261.48	226.95	34.54	7.571		
5,000.00	4,984.13	4,984.83	4,941.13	17.60	17.84	-26.52	-75.51	566.20	268.57	233.30	35.27	7.614		
5,100.00	5,083.62	5,084.58	5,039.50	17.96	18.21	-26.56	-77.82	582.57	275.66	239.65	36.01	7.655		
5,200.00	5,183.12	5,184.33	5,137.87	18.32	18.58	-26.60	-80.13	598.93	282.74	246.00	36.74	7.695		
5,300.00	5,282.61	5,284.08	5,236.24	18.68	18.96	-26.64	-82.43	615.30	289.83	252.35	37.48	7.733		
5,400.00	5,382.11	5,383.82	5,334.61	19.05	19.33	-26.68	-84.74	631.67	296.92	258.70	38.22	7.769		
5,500.00	5,481.60	5,483.57	5,432.98	19.41	19.70	-26.71	-87.04	648.03	304.01	265.05	38.96	7.804		
5,600.00	5,581.10	5,583.32	5,531.35	19.77	20.07	-26.75	-89.35	664.40	311.09	271.40	39.69	7.837		
5,700.00	5,680.59	5,683.07	5,629.72	20.14	20.45	-26.78	-91.65	680.76	318.18	277.75	40.43	7.870		
5,800.00	5,780.09	5,782.82	5,728.09	20.50	20.82	-26.81	-93.96	697.13	325.27	284.10	41.17	7.901		
5,900.00	5,879.58	5,882.57	5,826.46	20.86	21.19	-26.84	-96.26	713.50	332.36	290.45	41.91	7.931		
6,000.00	5,979.08	5,982.31	5,924.83	21.23	21.57	-26.87	-98.57	729.86	339.45	296.80	42.65	7.960		
6,100.00	6,078.57	6,082.06	6,023.20	21.59	21.94	-26.89	-100.87	746.23	346.53	303.15	43.38	7.988		
6,200.00	6,178.07	6,181.81	6,121.57	21.96	22.32	-26.92	-103.18	762.60	353.62	309.50	44.12	8.014		
6,300.00	6,277.56	6,281.56	6,219.94	22.32	22.69	-26.95	-105.48	778.96	360.71	315.85	44.86	8.040		
6,400.00	6,377.06	6,381.31	6,318.31	22.68	23.06	-26.97	-107.79	795.33	367.80	322.20	45.60	8.066		
6,500.00	6,476.56	6,481.06	6,416.68	23.05	23.44	-26.99	-110.09	811.70	374.89	328.55	46.34	8.090		
6,600.00	6,576.05	6,580.80	6,515.04	23.41	23.81	-27.02	-112.40	828.06	381.98	334.90	47.08	8.113		
6,700.00	6,675.55	6,680.55	6,613.41	23.78	24.19	-27.04	-114.71	844.43	389.07	341.25	47.82	8.136		
6,800.00	6,775.04	6,780.30	6,711.78	24.14	24.56	-27.06	-117.01	860.80	396.15	347.60	48.56	8.158		
6,900.00	6,874.54	6,880.05	6,810.15	24.51	24.93	-27.08	-119.32	877.16	403.24	353.94	49.30	8.179		

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Sheba Federal Com - 507H - 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)	Offset		Semi Major Axis			Distance					Warning	
		Reference	Offset	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
						(*)	+N-S (usft)	+E-W (usft)	(usft)	(usft)			
7,000.00	6,974.03	6,979.80	6,908.52	24.87	25.31	-27.10	-121.62	893.53	410.33	360.29	50.04	8.200	
7,100.00	7,073.53	7,079.55	7,006.89	25.24	25.68	-27.12	-123.93	909.90	417.42	366.64	50.78	8.220	
7,200.00	7,173.02	7,179.29	7,105.26	25.60	26.06	-27.13	-126.23	926.26	424.51	372.99	51.52	8.240	
7,300.00	7,272.52	7,279.04	7,203.63	25.96	26.43	-27.15	-128.54	942.63	431.60	379.34	52.26	8.259	
7,400.00	7,372.01	7,378.79	7,302.00	26.33	26.81	-27.17	-130.84	959.00	438.69	385.69	53.00	8.277	
7,500.00	7,471.51	7,478.54	7,400.37	26.69	27.18	-27.19	-133.15	975.36	445.78	392.04	53.74	8.295	
7,524.28	7,495.67	7,502.76	7,424.26	26.78	27.27	-27.19	-133.71	979.34	447.50	393.58	53.92	8.299	
7,600.00	7,571.07	7,578.24	7,498.69	27.06	27.56	-27.20	-135.45	991.72	453.53	399.05	54.48	8.325	
7,700.00	7,670.84	7,677.72	7,596.80	27.42	27.93	-27.10	-137.75	1,008.04	463.54	408.32	55.21	8.395	
7,800.00	7,770.75	7,776.92	7,694.63	27.78	28.30	-26.87	-140.04	1,024.32	475.87	419.93	55.94	8.506	
7,908.26	7,879.00	7,883.92	7,800.15	28.15	28.70	83.17	-142.52	1,041.88	491.85	435.14	56.72	8.672	
8,000.00	7,970.74	7,974.39	7,889.37	28.46	29.04	83.61	-144.61	1,056.72	506.57	449.21	57.36	8.831	
8,100.00	8,070.74	8,073.01	7,986.62	28.80	29.41	84.06	-146.89	1,072.90	522.65	464.59	58.06	9.001	
8,200.00	8,170.74	8,171.63	8,083.88	29.14	29.79	84.49	-149.17	1,089.08	538.76	479.99	58.77	9.167	
8,300.00	8,270.74	8,270.25	8,181.13	29.48	30.16	84.89	-151.45	1,105.26	554.90	495.42	59.47	9.330	
8,400.00	8,370.74	8,368.86	8,278.39	29.82	30.53	85.26	-153.72	1,121.44	571.06	510.88	60.18	9.489	
8,500.00	8,470.74	8,467.48	8,375.64	30.16	30.90	85.62	-156.00	1,137.63	587.24	526.35	60.88	9.645	
8,600.00	8,570.74	8,566.10	8,472.90	30.50	31.27	85.96	-158.28	1,153.81	603.44	541.85	61.59	9.798	
8,700.00	8,670.74	8,664.72	8,570.15	30.85	31.64	86.28	-160.56	1,169.99	619.67	557.37	62.30	9.947	
8,800.00	8,770.74	8,763.34	8,667.41	31.19	32.01	86.58	-162.84	1,186.17	635.91	572.90	63.01	10.093	
8,900.00	8,870.74	8,861.95	8,764.66	31.53	32.38	86.87	-165.12	1,202.35	652.16	588.45	63.71	10.236	
9,000.00	8,970.74	8,960.57	8,861.91	31.87	32.75	87.14	-167.40	1,218.53	668.44	604.01	64.42	10.376	
9,100.00	9,070.74	9,059.19	8,959.17	32.22	33.12	87.41	-169.68	1,234.71	684.72	619.59	65.13	10.513	
9,200.00	9,170.74	9,157.81	9,056.42	32.56	33.49	87.65	-171.96	1,250.89	701.03	635.18	65.84	10.647	
9,300.00	9,270.74	9,256.42	9,153.68	32.90	33.87	87.89	-174.24	1,267.07	717.34	650.79	66.55	10.779	
9,400.00	9,370.74	9,355.04	9,250.93	33.25	34.24	88.12	-176.52	1,283.25	733.66	666.40	67.26	10.908	
9,500.00	9,470.74	9,453.66	9,348.19	33.59	34.61	88.34	-178.80	1,299.44	750.00	682.02	67.97	11.034	
9,600.00	9,570.74	9,552.28	9,445.44	33.94	34.98	88.55	-181.07	1,315.62	766.34	697.66	68.68	11.157	
9,700.00	9,670.74	9,650.89	9,542.70	34.28	35.35	88.75	-183.35	1,331.80	782.70	713.30	69.40	11.279	
9,800.00	9,770.74	9,749.51	9,639.95	34.63	35.72	88.94	-185.63	1,347.98	799.06	728.95	70.11	11.398	
9,900.00	9,870.74	9,848.13	9,737.20	34.97	36.09	89.12	-187.91	1,364.16	815.43	744.61	70.82	11.514	
10,000.00	9,970.74	9,946.75	9,834.46	35.32	36.47	89.30	-190.19	1,380.34	831.81	760.28	71.53	11.628	
10,100.00	10,070.74	10,045.36	9,931.71	35.67	36.84	89.47	-192.47	1,396.52	848.20	775.95	72.25	11.740	
10,200.00	10,170.74	10,162.08	10,046.96	36.01	37.27	89.65	-195.05	1,414.84	863.94	790.85	73.09	11.821	
10,300.00	10,270.74	10,290.14	10,173.95	36.36	37.75	89.81	-197.34	1,431.09	876.62	802.67	73.95	11.854	
10,400.00	10,370.74	10,419.17	10,302.39	36.71	38.22	89.92	-199.04	1,443.19	886.00	811.25	74.76	11.851	
10,500.00	10,470.74	10,548.88	10,431.85	37.05	38.68	89.99	-200.15	1,451.02	892.04	816.55	75.50	11.816	
10,600.00	10,570.74	10,678.98	10,561.90	37.40	39.13	90.02	-200.64	1,454.50	894.72	818.55	76.17	11.747	
10,697.30	10,668.04	10,785.12	10,668.04	37.74	39.49	90.03	-200.66	1,454.69	894.86	818.05	76.81	11.650	
10,700.00	10,670.74	10,787.82	10,670.74	37.75	39.50	90.01	-200.66	1,454.69	894.86	818.03	76.83	11.648	
10,750.00	10,720.66	10,837.86	10,720.75	37.92	39.66	90.08	-199.42	1,454.69	894.86	817.70	77.16	11.597	
10,800.00	10,770.19	10,888.01	10,770.58	38.09	39.83	90.17	-193.94	1,454.69	894.87	817.37	77.49	11.548	
10,850.00	10,818.94	10,938.28	10,819.86	38.26	39.99	90.25	-184.09	1,454.70	894.87	817.06	77.81	11.500	
10,900.00	10,866.54	10,988.65	10,868.19	38.42	40.15	90.33	-169.92	1,454.70	894.88	816.75	78.12	11.454	
10,950.00	10,912.62	11,039.15	10,915.19	38.58	40.31	90.41	-151.53	1,454.71	894.88	816.46	78.43	11.411	
11,000.00	10,956.85	11,089.74	10,960.49	38.73	40.46	90.48	-129.01	1,454.72	894.89	816.18	78.71	11.369	
11,050.00	10,998.88	11,140.44	11,003.70	38.86	40.60	90.55	-102.53	1,454.72	894.90	815.91	78.99	11.329	
11,100.00	11,038.39	11,191.24	11,044.49	38.99	40.73	90.62	-72.27	1,454.73	894.91	815.67	79.25	11.293	
11,150.00	11,075.09	11,242.14	11,082.50	39.11	40.85	90.68	-38.46	1,454.75	894.92	815.43	79.49	11.258	
11,200.00	11,108.68	11,293.12	11,117.42	39.22	40.96	90.74	-1.34	1,454.76	894.94	815.22	79.71	11.227	
11,250.00	11,138.92	11,344.17	11,148.94	39.31	41.06	90.79	38.80	1,454.77	894.95	815.02	79.92	11.198	
11,300.00	11,165.58	11,395.30	11,176.81	39.40	41.14	90.83	81.65	1,454.79	894.96	814.85	80.11	11.172	

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



Anticollision Report



Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Sheba Federal Com - 507H - 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				
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	Warning
11,350.00	11,188.45	11,446.49	11,200.77	39.48	41.21	90.87	126.86	1,454.80	894.96	814.69	80.28	11.149	
11,400.00	11,207.36	11,497.73	11,220.62	39.55	41.26	90.90	174.08	1,454.82	894.97	814.55	80.42	11.128	
11,450.00	11,222.17	11,549.01	11,236.19	39.61	41.30	90.93	222.93	1,454.83	894.98	814.43	80.55	11.111	
11,500.00	11,232.76	11,600.32	11,247.33	39.65	41.33	90.95	273.00	1,454.85	894.98	814.32	80.66	11.096	
11,550.00	11,239.05	11,651.66	11,253.95	39.69	41.35	90.96	323.88	1,454.87	894.99	814.24	80.75	11.084	
11,597.30	11,241.00	11,700.23	11,256.00	39.72	41.36	90.96	372.40	1,454.88	894.99	814.18	80.81	11.075	
11,600.00	11,241.00	11,703.00	11,255.99	39.72	41.36	90.96	375.17	1,454.88	894.99	814.17	80.81	11.075	
11,633.52	11,241.00	11,736.45	11,256.00	39.74	41.36	90.96	408.62	1,454.89	894.99	814.13	80.85	11.069	
11,700.00	11,241.00	11,802.92	11,256.00	39.77	41.37	90.96	475.09	1,454.92	894.99	814.05	80.94	11.057	
11,800.00	11,241.00	11,902.92	11,256.00	39.84	41.42	90.96	575.09	1,454.95	894.99	813.89	81.10	11.036	
11,900.00	11,241.00	12,002.92	11,256.00	39.93	41.49	90.96	675.09	1,454.98	894.99	813.70	81.28	11.011	
12,000.00	11,241.00	12,102.92	11,256.00	40.04	41.59	90.96	775.09	1,455.02	894.99	813.49	81.49	10.982	
12,100.00	11,241.00	12,202.92	11,256.00	40.16	41.72	90.96	875.09	1,455.05	894.98	813.25	81.74	10.950	
12,200.00	11,241.00	12,302.92	11,256.00	40.30	41.86	90.96	975.09	1,455.08	894.98	812.98	82.00	10.914	
12,300.00	11,241.00	12,402.92	11,256.00	40.45	42.02	90.96	1,075.09	1,455.12	894.98	812.68	82.30	10.874	
12,400.00	11,241.00	12,502.92	11,256.00	40.62	42.20	90.96	1,175.09	1,455.15	894.98	812.36	82.63	10.832	
12,500.00	11,241.00	12,602.92	11,256.00	40.79	42.39	90.96	1,275.09	1,455.18	894.98	812.01	82.98	10.786	
12,600.00	11,241.00	12,702.92	11,256.00	40.99	42.59	90.96	1,375.09	1,455.22	894.98	811.63	83.36	10.737	
12,700.00	11,241.00	12,802.92	11,256.00	41.19	42.81	90.96	1,475.09	1,455.25	894.98	811.22	83.76	10.685	
12,800.00	11,241.00	12,902.92	11,256.00	41.41	43.04	90.96	1,575.09	1,455.28	894.98	810.79	84.19	10.631	
12,900.00	11,241.00	13,002.92	11,256.00	41.65	43.28	90.96	1,675.09	1,455.32	894.98	810.34	84.65	10.573	
13,000.00	11,241.00	13,102.92	11,256.00	41.89	43.53	90.96	1,775.09	1,455.35	894.98	809.86	85.13	10.514	
13,100.00	11,241.00	13,202.92	11,256.00	42.15	43.79	90.96	1,875.09	1,455.38	894.98	809.35	85.63	10.451	
13,200.00	11,241.00	13,302.92	11,256.00	42.42	44.07	90.96	1,975.09	1,455.42	894.98	808.82	86.16	10.387	
13,300.00	11,241.00	13,402.92	11,256.00	42.70	44.35	90.96	2,075.09	1,455.45	894.98	808.27	86.72	10.321	
13,400.00	11,241.00	13,502.92	11,256.00	42.99	44.65	90.96	2,175.09	1,455.48	894.98	807.69	87.29	10.253	
13,500.00	11,241.00	13,602.92	11,256.00	43.30	44.95	90.96	2,275.09	1,455.52	894.98	807.09	87.89	10.183	
13,600.00	11,241.00	13,702.92	11,256.00	43.62	45.27	90.96	2,375.09	1,455.55	894.98	806.47	88.51	10.111	
13,700.00	11,241.00	13,802.92	11,256.00	43.94	45.60	90.96	2,475.09	1,455.58	894.98	805.82	89.16	10.038	
13,800.00	11,241.00	13,902.92	11,256.00	44.28	45.93	90.96	2,575.09	1,455.62	894.98	805.16	89.82	9.964	
13,900.00	11,241.00	14,002.92	11,256.00	44.63	46.28	90.96	2,675.09	1,455.65	894.98	804.47	90.51	9.888	
14,000.00	11,241.00	14,102.92	11,256.00	44.99	46.64	90.96	2,775.09	1,455.68	894.98	803.76	91.22	9.811	
14,100.00	11,241.00	14,202.92	11,256.00	45.36	47.00	90.96	2,875.09	1,455.72	894.98	803.03	91.95	9.734	
14,200.00	11,241.00	14,302.92	11,256.00	45.74	47.38	90.96	2,975.09	1,455.75	894.98	802.29	92.69	9.655	
14,300.00	11,241.00	14,402.92	11,256.00	46.13	47.76	90.96	3,075.09	1,455.78	894.98	801.52	93.46	9.576	
14,400.00	11,241.00	14,502.92	11,256.00	46.52	48.16	90.96	3,175.09	1,455.82	894.98	800.74	94.24	9.496	
14,500.00	11,241.00	14,602.92	11,256.00	46.93	48.56	90.96	3,275.09	1,455.85	894.98	799.93	95.05	9.416	
14,600.00	11,241.00	14,702.92	11,256.00	47.35	48.97	90.96	3,375.09	1,455.88	894.98	799.11	95.87	9.336	
14,700.00	11,241.00	14,802.92	11,256.00	47.77	49.39	90.96	3,475.09	1,455.92	894.98	798.27	96.71	9.255	
14,800.00	11,241.00	14,902.92	11,256.00	48.20	49.82	90.96	3,575.09	1,455.95	894.98	797.42	97.56	9.174	
14,900.00	11,241.00	15,002.92	11,256.00	48.64	50.25	90.96	3,675.09	1,455.98	894.98	796.55	98.43	9.092	
15,000.00	11,241.00	15,102.92	11,256.00	49.09	50.69	90.96	3,775.09	1,456.02	894.98	795.66	99.32	9.011	
15,100.00	11,241.00	15,202.92	11,256.00	49.55	51.14	90.96	3,875.09	1,456.05	894.98	794.76	100.22	8.930	
15,200.00	11,241.00	15,302.92	11,256.00	50.01	51.60	90.96	3,975.09	1,456.08	894.98	793.84	101.14	8.849	
15,300.00	11,241.00	15,402.92	11,256.00	50.48	52.06	90.96	4,075.09	1,456.12	894.98	792.91	102.07	8.768	
15,400.00	11,241.00	15,502.92	11,256.00	50.96	52.54	90.96	4,175.09	1,456.15	894.98	791.96	103.02	8.687	
15,500.00	11,241.00	15,602.92	11,256.00	51.45	53.01	90.96	4,275.09	1,456.19	894.98	791.00	103.98	8.607	
15,600.00	11,241.00	15,702.92	11,256.00	51.94	53.50	90.96	4,375.09	1,456.22	894.98	790.02	104.95	8.527	
15,700.00	11,241.00	15,802.92	11,256.00	52.44	53.99	90.96	4,475.09	1,456.25	894.98	789.04	105.94	8.448	
15,800.00	11,241.00	15,902.92	11,256.00	52.95	54.49	90.96	4,575.09	1,456.29	894.98	788.04	106.94	8.369	
15,870.15	11,241.00	15,973.07	11,256.00	53.30	54.84	90.96	4,645.24	1,456.31	894.98	787.33	107.65	8.314	

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: 506H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
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

Sheba Federal Com - 711H - OH - Plan #1												Offset Site Error:	0.00 usft
												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis			Distance					Warning	
		Reference	Offset	Reference	Offset	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	90.04	-0.23	339.96	339.96	339.69	0.27	1,264.476	
100.00	100.00	100.00	100.00	0.13	0.13	90.04	-0.23	339.96	339.96	338.97	0.99	344.858	
200.00	200.00	200.00	200.00	0.49	0.49	90.04	-0.23	339.96	339.96	338.26	1.70	199.654	
300.00	300.00	300.00	300.00	0.85	0.85	90.04	-0.23	339.96	339.96	337.54	2.42	140.498	
400.00	400.00	400.00	400.00	1.21	1.21	90.04	-0.23	339.96	339.96	336.82	3.14	108.384	
500.00	500.00	500.00	500.00	1.57	1.57	90.04	-0.23	339.96	339.96	333.24	6.72	50.579	
600.00	600.00	600.00	600.00	1.93	1.93	90.04	-0.23	339.96	339.96	336.11	3.85	88.219	
700.00	700.00	700.00	700.00	2.29	2.29	90.04	-0.23	339.96	339.96	335.39	4.57	74.381	
800.00	800.00	800.00	800.00	2.64	2.64	90.04	-0.23	339.96	339.96	334.67	5.29	64.295	
900.00	900.00	900.00	900.00	3.00	3.00	90.04	-0.23	339.96	339.96	333.96	6.00	56.618	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	90.04	-0.23	339.96	339.96	333.24	6.72	50.579	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.04	-0.23	339.96	339.96	332.52	7.44	45.704	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	90.04	-0.23	339.96	339.96	331.80	8.16	41.686	
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	90.04	-0.23	339.96	339.96	331.09	8.87	38.318	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	90.04	-0.23	339.96	339.96	330.37	9.59	35.453	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	90.04	-0.23	339.96	339.96	329.65	10.31	32.986	
1,600.00	1,600.00	1,591.85	1,591.85	5.51	5.48	90.02	-0.11	341.06	341.15	330.17	10.98	31.059	
1,700.00	1,699.99	1,683.64	1,683.57	5.86	5.79	-19.78	0.25	344.35	343.51	331.87	11.64	29.515	
1,800.00	1,799.91	1,775.37	1,775.13	6.20	6.11	-20.07	0.85	349.82	345.79	333.52	12.28	28.166	
1,900.00	1,899.69	1,867.01	1,866.44	6.54	6.43	-20.52	1.68	357.47	348.02	335.11	12.91	26.954	
1,983.98	1,983.33	1,949.57	1,948.60	6.82	6.72	-21.07	2.57	365.63	349.33	335.85	13.48	25.913	
2,000.00	1,999.27	1,965.58	1,964.52	6.88	6.77	-21.18	2.75	367.22	349.42	335.83	13.59	25.710	
2,100.00	2,098.77	2,065.48	2,063.92	7.22	7.13	-21.91	3.83	377.13	350.04	335.76	14.28	24.507	
2,200.00	2,198.26	2,165.38	2,163.33	7.57	7.48	-22.64	4.91	387.04	350.71	335.74	14.98	23.414	
2,300.00	2,297.76	2,265.28	2,262.73	7.92	7.83	-23.36	5.99	396.95	351.45	335.77	15.68	22.416	
2,400.00	2,397.25	2,365.17	2,362.13	8.27	8.19	-24.08	7.07	406.85	352.23	335.85	16.38	21.503	
2,500.00	2,496.75	2,465.07	2,461.53	8.62	8.54	-24.79	8.15	416.76	353.07	335.99	17.09	20.665	
2,600.00	2,596.24	2,564.97	2,560.93	8.97	8.90	-25.50	9.23	426.67	353.97	336.18	17.79	19.894	
2,700.00	2,695.74	2,664.87	2,660.33	9.33	9.25	-26.21	10.31	436.58	354.92	336.42	18.50	19.183	
2,800.00	2,795.23	2,764.77	2,759.73	9.68	9.61	-26.92	11.39	446.49	355.93	336.71	19.21	18.526	
2,900.00	2,894.73	2,864.67	2,859.13	10.04	9.97	-27.62	12.47	456.39	356.99	337.06	19.93	17.916	
3,000.00	2,994.22	2,964.57	2,958.53	10.39	10.33	-28.31	13.55	466.30	358.10	337.46	20.64	17.350	
3,100.00	3,093.72	3,064.47	3,057.93	10.75	10.69	-29.00	14.63	476.21	359.26	337.91	21.36	16.823	
3,200.00	3,193.21	3,164.37	3,157.34	11.10	11.04	-29.69	15.71	486.12	360.48	338.41	22.07	16.332	
3,300.00	3,292.71	3,264.27	3,256.74	11.46	11.40	-30.37	16.79	496.02	361.75	338.96	22.79	15.873	
3,400.00	3,392.21	3,364.17	3,356.14	11.82	11.76	-31.05	17.87	505.93	363.06	339.56	23.51	15.444	
3,500.00	3,491.70	3,464.07	3,455.54	12.18	12.12	-31.72	18.96	515.84	364.43	340.20	24.23	15.042	
3,600.00	3,591.20	3,563.97	3,554.94	12.54	12.48	-32.39	20.04	525.75	365.85	340.90	24.95	14.664	
3,700.00	3,690.69	3,663.87	3,654.34	12.90	12.84	-33.05	21.12	535.66	367.32	341.65	25.67	14.309	
3,800.00	3,790.19	3,763.77	3,753.74	13.26	13.21	-33.71	22.20	545.56	368.84	342.44	26.39	13.975	
3,900.00	3,889.68	3,863.67	3,853.14	13.62	13.57	-34.36	23.28	555.47	370.40	343.29	27.12	13.660	
4,000.00	3,989.18	3,963.56	3,952.54	13.98	13.93	-35.00	24.36	565.38	372.02	344.18	27.84	13.363	
4,100.00	4,088.67	4,063.46	4,051.94	14.34	14.29	-35.64	25.44	575.29	373.67	345.11	28.56	13.082	
4,200.00	4,188.17	4,163.36	4,151.34	14.70	14.65	-36.28	26.52	585.20	375.38	346.09	29.29	12.817	
4,300.00	4,287.66	4,263.26	4,250.75	15.06	15.01	-36.90	27.60	595.10	377.13	347.12	30.01	12.566	
4,400.00	4,387.16	4,363.16	4,350.15	15.42	15.37	-37.53	28.68	605.01	378.93	348.19	30.74	12.327	
4,500.00	4,486.65	4,463.06	4,449.55	15.78	15.74	-38.14	29.76	614.92	380.77	349.30	31.46	12.101	
4,600.00	4,586.15	4,562.96	4,548.95	16.15	16.10	-38.75	30.84	624.83	382.65	350.46	32.19	11.887	
4,700.00	4,685.64	4,662.86	4,648.35	16.51	16.46	-39.36	31.92	634.74	384.58	351.66	32.92	11.683	
4,800.00	4,785.14	4,762.76	4,747.75	16.87	16.82	-39.96	33.00	644.64	386.55	352.91	33.64	11.489	
4,900.00	4,884.63	4,862.66	4,847.15	17.23	17.19	-40.55	34.08	654.55	388.56	354.19	34.37	11.305	
5,000.00	4,984.13	4,962.56	4,946.55	17.60	17.55	-41.14	35.16	664.46	390.62	355.52	35.10	11.129	

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	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					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre (+N-S (usft))	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.00	5,083.62	5,062.46	5,045.95	17.96	17.91	-41.72	36.25	674.37	392.71	356.88	35.83	10.961	
5,200.00	5,183.12	5,162.36	5,145.35	18.32	18.27	-42.29	37.33	684.28	394.84	358.29	36.56	10.801	
5,300.00	5,282.61	5,262.26	5,244.75	18.68	18.64	-42.86	38.41	694.18	397.02	359.73	37.28	10.648	
5,400.00	5,382.11	5,362.16	5,344.16	19.05	19.00	-43.42	39.49	704.09	399.23	361.21	38.01	10.502	
5,500.00	5,481.60	5,462.05	5,443.56	19.41	19.36	-43.97	40.57	714.00	401.48	362.73	38.74	10.363	
5,600.00	5,581.10	5,561.95	5,542.96	19.77	19.73	-44.52	41.65	723.91	403.76	364.29	39.47	10.229	
5,700.00	5,680.59	5,661.85	5,642.36	20.14	20.09	-45.06	42.73	733.82	406.08	365.88	40.20	10.101	
5,800.00	5,780.09	5,761.75	5,741.76	20.50	20.45	-45.60	43.81	743.72	408.44	367.51	40.93	9.979	
5,900.00	5,879.58	5,861.65	5,841.16	20.86	20.82	-46.13	44.89	753.63	410.84	369.18	41.66	9.862	
6,000.00	5,979.08	5,961.55	5,940.56	21.23	21.18	-46.66	45.97	763.54	413.27	370.88	42.39	9.749	
6,100.00	6,078.57	6,061.45	6,039.96	21.59	21.54	-47.17	47.05	773.45	415.73	372.61	43.12	9.641	
6,200.00	6,178.07	6,169.80	6,147.85	21.96	21.94	-47.77	48.13	783.29	417.47	373.58	43.90	9.510	
6,300.00	6,277.56	6,280.89	6,258.71	22.32	22.34	-48.55	48.89	790.31	416.65	371.99	44.66	9.329	
6,400.00	6,377.06	6,391.71	6,369.47	22.68	22.73	-49.50	49.31	794.12	413.23	367.83	45.40	9.102	
6,500.00	6,476.56	6,501.20	6,476.56	23.05	23.11	-50.61	49.39	794.88	407.41	361.29	46.12	8.834	
6,600.00	6,576.05	6,601.70	6,576.05	23.41	23.46	-51.72	49.39	794.88	401.09	354.26	46.83	8.565	
6,700.00	6,675.55	6,702.21	6,675.55	23.78	23.81	-52.86	49.39	794.88	394.94	347.39	47.55	8.306	
6,800.00	6,775.04	6,802.71	6,775.04	24.14	24.16	-54.03	49.39	794.88	388.94	340.68	48.26	8.059	
6,900.00	6,874.54	6,903.22	6,874.54	24.51	24.51	-55.24	49.39	794.88	383.11	334.13	48.98	7.822	
7,000.00	6,974.03	7,003.72	6,974.03	24.87	24.86	-56.49	49.39	794.88	377.46	327.77	49.69	7.596	
7,100.00	7,073.53	7,104.23	7,073.53	25.24	25.21	-57.77	49.39	794.88	371.99	321.58	50.41	7.379	
7,200.00	7,173.02	7,204.73	7,173.02	25.60	25.56	-59.09	49.39	794.88	366.72	315.59	51.13	7.173	
7,300.00	7,272.52	7,305.24	7,272.52	25.96	25.91	-60.45	49.39	794.88	361.65	309.80	51.84	6.976	
7,400.00	7,372.01	7,405.74	7,372.01	26.33	26.26	-61.85	49.39	794.88	356.79	304.23	52.56	6.788	
7,500.00	7,471.51	7,506.24	7,471.51	26.69	26.61	-63.28	49.39	794.88	352.15	298.87	53.28	6.609	
7,524.28	7,495.67	7,517.92	7,495.67	26.78	26.65	-63.64	49.39	794.88	351.05	297.64	53.41	6.573	
7,600.00	7,571.07	7,606.68	7,571.07	27.06	26.96	-64.60	49.39	794.88	348.05	294.06	54.00	6.446	
7,700.00	7,670.84	7,706.91	7,670.84	27.42	27.31	-65.58	49.39	794.88	345.20	290.49	54.71	6.310	
7,800.00	7,770.75	7,807.00	7,770.75	27.78	27.66	-66.18	49.39	794.88	343.51	288.09	55.42	6.199	
7,908.26	7,879.00	7,901.25	7,879.00	28.15	27.99	-63.27	49.39	794.88	342.89	286.77	56.12	6.110	
8,000.00	7,970.74	8,007.01	7,970.74	28.46	28.36	-63.27	49.39	794.88	342.89	286.09	56.80	6.037	
8,100.00	8,070.74	8,107.01	8,070.74	28.80	28.71	-43.27	49.39	794.88	342.89	285.40	57.49	5.964	
8,200.00	8,170.74	8,207.01	8,170.74	29.14	29.06	-43.27	49.39	794.88	342.89	284.71	58.18	5.894	
8,300.00	8,270.74	8,307.01	8,270.74	29.48	29.41	-43.27	49.39	794.88	342.89	284.02	58.87	5.825	
8,400.00	8,370.74	8,407.01	8,370.74	29.82	29.76	-43.27	49.39	794.88	342.89	283.33	59.56	5.757	
8,500.00	8,470.74	8,507.01	8,470.74	30.16	30.11	-43.27	49.39	794.88	342.89	282.64	60.25	5.691	
8,600.00	8,570.74	8,607.01	8,570.74	30.50	30.46	-43.27	49.39	794.88	342.89	281.95	60.94	5.626	
8,700.00	8,670.74	8,707.01	8,670.74	30.85	30.81	-43.27	49.39	794.88	342.89	281.25	61.64	5.563	
8,800.00	8,770.74	8,807.01	8,770.74	31.19	31.17	-43.27	49.39	794.88	342.89	280.56	62.33	5.501	
8,900.00	8,870.74	8,907.01	8,870.74	31.53	31.52	-43.27	49.39	794.88	342.89	279.87	63.02	5.441	
9,000.00	8,970.74	9,007.01	8,970.74	31.87	31.87	-43.27	49.39	794.88	342.89	279.17	63.72	5.382	
9,100.00	9,070.74	9,107.01	9,070.74	32.22	32.22	-43.27	49.39	794.88	342.89	278.48	64.41	5.323	
9,200.00	9,170.74	9,207.01	9,170.74	32.56	32.57	-43.27	49.39	794.88	342.89	277.78	65.11	5.267	
9,300.00	9,270.74	9,307.01	9,270.74	32.90	32.93	-43.27	49.39	794.88	342.89	277.09	65.80	5.211	
9,400.00	9,370.74	9,407.01	9,370.74	33.25	33.28	-43.27	49.39	794.88	342.89	276.39	66.50	5.156	
9,500.00	9,470.74	9,507.01	9,470.74	33.59	33.63	-43.27	49.39	794.88	342.89	275.70	67.19	5.103	
9,600.00	9,570.74	9,607.01	9,570.74	33.94	33.98	-43.27	49.39	794.88	342.89	275.00	67.89	5.051	
9,700.00	9,670.74	9,707.01	9,670.74	34.28	34.34	-43.27	49.39	794.88	342.89	274.30	68.59	4.999	
9,800.00	9,770.74	9,807.01	9,770.74	34.63	34.69	-43.27	49.39	794.88	342.89	273.60	69.28	4.949	
9,900.00	9,870.74	9,907.01	9,870.74	34.97	35.04	-43.27	49.39	794.88	342.89	272.91	69.98	4.900	
10,000.00	9,970.74	10,007.01	9,970.74	35.32	35.40	-43.27	49.39	794.88	342.89	272.21	70.68	4.851	
10,100.00	10,070.74	10,107.01	10,070.74	35.67	35.75	-43.27	49.39	794.88	342.89	271.51	71.38	4.804	

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: 506H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
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
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis			Distance					Warning	
		Reference	Offset	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
+N/S (usft)	+E/W (usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/S (usft)	+E/W (usft)	(usft)	(usft)	(usft)		
10,200.00	10,170.74	10,207.01	10,170.74	36.01	36.10	43.27	49.39	794.88	342.89	270.81	72.08	4.757	
10,300.00	10,270.74	10,307.01	10,270.74	36.36	36.46	43.27	49.39	794.88	342.89	270.11	72.78	4.711	
10,400.00	10,370.74	10,407.01	10,370.74	36.71	36.81	43.27	49.39	794.88	342.89	269.41	73.48	4.667	
10,500.00	10,470.74	10,507.01	10,470.74	37.05	37.16	43.27	49.39	794.88	342.89	268.71	74.18	4.622	
10,600.00	10,570.74	10,607.01	10,570.74	37.40	37.52	43.27	49.39	794.88	342.89	268.01	74.88	4.579	
10,697.30	10,668.04	10,709.71	10,668.04	37.74	37.88	43.27	49.39	794.88	342.89	267.31	75.58	4.537	
10,700.00	10,670.74	10,707.01	10,670.74	37.75	37.87	43.26	49.39	794.88	342.88	267.30	75.58	4.537	
10,750.00	10,720.66	10,742.91	10,720.66	37.92	38.00	43.66	49.39	794.88	341.13	265.25	75.88	4.496	
10,800.00	10,770.19	10,807.56	10,770.19	38.09	38.23	44.79	49.39	794.88	336.26	259.99	76.28	4.408	
10,850.00	10,818.94	10,841.19	10,818.94	38.26	38.35	46.70	49.39	794.88	328.45	251.89	76.56	4.290	
10,900.00	10,866.54	10,888.78	10,866.54	38.42	38.52	49.46	49.39	794.88	317.98	241.09	76.88	4.136	
10,950.00	10,912.62	10,934.87	10,912.62	38.58	38.68	53.13	49.39	794.88	305.28	228.09	77.19	3.955	
11,000.00	10,956.85	10,979.10	10,956.85	38.73	38.84	57.76	49.39	794.88	290.96	213.48	77.48	3.755	
11,050.00	10,998.88	11,021.13	10,998.88	38.86	38.99	63.33	49.39	794.88	275.87	198.12	77.75	3.548	
11,100.00	11,038.39	11,060.64	11,038.39	38.99	39.13	69.69	49.39	794.88	261.14	183.14	78.00	3.348	
11,150.00	11,075.09	11,102.67	11,075.09	39.11	39.27	76.52	49.39	794.88	248.21	169.97	78.24	3.172	
11,200.00	11,108.68	11,130.93	11,108.68	39.22	39.37	83.33	49.39	794.88	238.87	160.45	78.41	3.046	
11,250.00	11,138.92	11,161.17	11,138.92	39.31	39.48	89.56	49.39	794.88	234.99	156.41	78.58	2.991	
11,253.88	11,141.12	11,163.37	11,141.12	39.32	39.49	90.00	49.39	794.88	234.97	156.38	78.59	2.990 CC, ES, SF	
11,300.00	11,165.58	11,187.83	11,165.58	39.40	39.58	94.72	49.39	794.88	238.20	159.48	78.72	3.026	
11,350.00	11,188.45	11,210.70	11,188.45	39.48	39.66	98.46	49.39	794.88	249.37	170.54	78.83	3.163	
11,400.00	11,207.36	11,229.61	11,207.36	39.55	39.72	100.56	49.39	794.88	268.44	189.51	78.93	3.401	
11,450.00	11,222.17	11,244.42	11,222.17	39.61	39.78	100.88	49.39	794.88	294.50	215.49	79.01	3.728	
11,500.00	11,232.76	11,255.01	11,232.76	39.65	39.81	99.25	49.39	794.88	326.29	247.22	79.06	4.127	
11,550.00	11,239.05	11,261.30	11,239.05	39.69	39.84	95.53	49.39	794.88	362.46	283.35	79.10	4.582	
11,597.30	11,241.00	11,263.25	11,241.00	39.72	39.84	90.00	49.39	794.88	399.61	320.49	79.12	5.051	
11,600.00	11,241.00	11,263.25	11,241.00	39.72	39.84	90.00	49.39	794.88	401.79	322.67	79.12	5.078	
11,700.00	11,241.00	11,263.25	11,241.00	39.77	39.84	90.00	49.39	794.88	486.44	407.29	79.15	6.146	
11,800.00	11,241.00	11,263.25	11,241.00	39.84	39.84	90.00	49.39	794.88	576.03	496.86	79.17	7.276	
11,900.00	11,241.00	11,263.25	11,241.00	39.93	39.84	90.00	49.39	794.88	668.57	589.38	79.19	8.442	
12,000.00	11,241.00	11,263.25	11,241.00	40.04	39.84	90.00	49.39	794.88	763.01	683.79	79.22	9.632	
12,100.00	11,241.00	11,263.25	11,241.00	40.16	39.84	90.00	49.39	794.88	858.70	779.46	79.24	10.837	
12,200.00	11,241.00	11,263.25	11,241.00	40.30	39.84	90.00	49.39	794.88	955.27	876.01	79.26	12.052	
12,300.00	11,241.00	11,263.25	11,241.00	40.45	39.84	90.00	49.39	794.88	1,052.49	973.21	79.28	13.275	
12,400.00	11,241.00	11,263.25	11,241.00	40.62	39.84	90.00	49.39	794.88	1,150.18	1,070.88	79.30	14.504	
12,500.00	11,241.00	13,375.26	12,373.00	40.79	44.54	168.27	1,275.31	795.29	1,156.13	1,101.88	54.25	21.311	
12,600.00	11,241.00	13,475.26	12,373.00	40.99	44.69	168.27	1,375.31	795.32	1,156.13	1,101.32	54.81	21.095	
12,700.00	11,241.00	13,575.26	12,373.00	41.19	44.86	168.27	1,475.31	795.36	1,156.13	1,100.73	55.40	20.868	
12,800.00	11,241.00	13,675.26	12,373.00	41.41	45.04	168.27	1,575.31	795.39	1,156.13	1,100.09	56.04	20.632	
12,900.00	11,241.00	13,775.26	12,373.00	41.65	45.23	168.27	1,675.31	795.43	1,156.13	1,099.42	56.71	20.388	
13,000.00	11,241.00	13,875.26	12,373.00	41.89	45.44	168.27	1,775.31	795.46	1,156.13	1,098.72	57.41	20.138	
13,100.00	11,241.00	13,975.26	12,373.00	42.15	45.65	168.27	1,875.31	795.49	1,156.13	1,097.98	58.15	19.883	
13,200.00	11,241.00	14,075.26	12,373.00	42.42	45.88	168.27	1,975.31	795.53	1,156.13	1,097.21	58.92	19.623	
13,300.00	11,241.00	14,175.26	12,373.00	42.70	46.12	168.27	2,075.31	795.56	1,156.13	1,096.41	59.72	19.360	
13,400.00	11,241.00	14,275.26	12,373.00	42.99	46.37	168.27	2,175.31	795.59	1,156.13	1,095.58	60.55	19.094	
13,500.00	11,241.00	14,375.26	12,373.00	43.30	46.63	168.27	2,275.31	795.63	1,156.13	1,094.72	61.41	18.827	
13,600.00	11,241.00	14,475.26	12,373.00	43.62	46.90	168.27	2,375.31	795.66	1,156.13	1,093.83	62.30	18.559	
13,700.00	11,241.00	14,575.26	12,373.00	43.94	47.19	168.27	2,475.31	795.69	1,156.13	1,092.92	63.21	18.291	
13,800.00	11,241.00	14,675.26	12,373.00	44.28	47.48	168.27	2,575.31	795.73	1,156.13	1,091.98	64.15	18.023	
13,900.00	11,241.00	14,775.26	12,373.00	44.63	47.79	168.27	2,675.31	795.76	1,156.13	1,091.02	65.11	17.757	
14,000.00	11,241.00	14,875.26	12,373.00	44.99	48.10	168.27	2,775.31	795.79	1,156.13	1,090.03	66.09	17.492	
14,100.00	11,241.00	14,975.26	12,373.00	45.36	48.43	168.27	2,875.31	795.83	1,156.13	1,089.03	67.10	17.229	

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: 506H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
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					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre +N-S (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,200.00	11,241.00	15,075.26	12,373.00	45.74	48.76	168.27	2,975.31	795.86	1,156.13	1,088.00	68.13	16.969	
14,300.00	11,241.00	15,175.26	12,373.00	46.13	49.11	168.27	3,075.31	795.90	1,156.13	1,086.95	69.18	16.712	
14,400.00	11,241.00	15,275.26	12,373.00	46.52	49.46	168.27	3,175.31	795.93	1,156.13	1,085.88	70.25	16.458	
14,500.00	11,241.00	15,375.26	12,373.00	46.93	49.82	168.27	3,275.31	795.96	1,156.13	1,084.80	71.33	16.208	
14,600.00	11,241.00	15,475.26	12,373.00	47.35	50.19	168.27	3,375.31	796.00	1,156.13	1,083.69	72.44	15.961	
14,700.00	11,241.00	15,575.26	12,373.00	47.77	50.58	168.27	3,475.31	796.03	1,156.13	1,082.57	73.56	15.718	
14,800.00	11,241.00	15,675.26	12,373.00	48.20	50.96	168.27	3,575.31	796.06	1,156.13	1,081.44	74.69	15.478	
14,900.00	11,241.00	15,775.26	12,373.00	48.64	51.36	168.27	3,675.31	796.10	1,156.13	1,080.28	75.84	15.243	
15,000.00	11,241.00	15,875.26	12,373.00	49.09	51.77	168.27	3,775.31	796.13	1,156.13	1,079.12	77.01	15.013	
15,100.00	11,241.00	15,975.26	12,373.00	49.55	52.18	168.27	3,875.31	796.16	1,156.13	1,077.94	78.19	14.786	
15,200.00	11,241.00	16,075.26	12,373.00	50.01	52.61	168.27	3,975.31	796.20	1,156.13	1,076.74	79.38	14.564	
15,300.00	11,241.00	16,175.26	12,373.00	50.48	53.03	168.27	4,075.31	796.23	1,156.13	1,075.54	80.59	14.346	
15,400.00	11,241.00	16,275.26	12,373.00	50.96	53.47	168.27	4,175.31	796.26	1,156.13	1,074.32	81.81	14.132	
15,500.00	11,241.00	16,375.26	12,373.00	51.45	53.92	168.27	4,275.31	796.30	1,156.13	1,073.09	83.04	13.923	
15,600.00	11,241.00	16,475.26	12,373.00	51.94	54.37	168.27	4,375.31	796.33	1,156.13	1,071.85	84.28	13.718	
15,700.00	11,241.00	16,575.26	12,373.00	52.44	54.83	168.27	4,475.31	796.37	1,156.13	1,070.60	85.53	13.517	
15,800.00	11,241.00	16,675.26	12,373.00	52.95	55.29	168.27	4,575.31	796.40	1,156.13	1,069.33	86.79	13.320	
15,870.15	11,241.00	16,745.41	12,373.00	53.30	55.62	168.27	4,645.46	796.42	1,156.13	1,068.44	87.69	13.185	

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Sheba Federal Com
Site Error: 0.00 usft
Reference Well: 506H
Well Error: 0.00 usft
Reference Wellbore OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
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

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
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis			Distance					Warning	
		Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	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	90.02	-0.12	279.92	279.92				
100.00	100.00	100.00	100.00	0.13	0.13	90.02	-0.12	279.92	279.92	279.65	0.27	1.041.154	
200.00	200.00	200.00	200.00	0.49	0.49	90.02	-0.12	279.92	279.92	278.93	0.99	283.951	
300.00	300.00	300.00	300.00	0.85	0.85	90.02	-0.12	279.92	279.92	278.22	1.70	164.393	
400.00	400.00	400.00	400.00	1.21	1.21	90.02	-0.12	279.92	279.92	277.50	2.42	115.684	
500.00	500.00	500.00	500.00	1.57	1.57	90.02	-0.12	279.92	279.92	276.78	3.14	89.242	
600.00	600.00	600.00	600.00	1.93	1.93	90.02	-0.12	279.92	279.92	276.06	3.85	72.639	
700.00	700.00	700.00	700.00	2.29	2.29	90.02	-0.12	279.92	279.92	275.35	4.57	61.244	
800.00	800.00	800.00	800.00	2.64	2.64	90.02	-0.12	279.92	279.92	274.63	5.29	52.940	
900.00	900.00	900.00	900.00	3.00	3.00	90.02	-0.12	279.92	279.92	273.91	6.00	46.619	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	90.02	-0.12	279.92	279.92	273.20	6.72	41.646	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.02	-0.12	279.92	279.92	272.48	7.44	37.632	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	90.02	-0.12	279.92	279.92	271.76	8.16	34.324	
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	90.02	-0.12	279.92	279.92	271.05	8.87	31.550	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	90.02	-0.12	279.92	279.92	270.33	9.59	29.191	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	90.02	-0.12	279.92	279.92	269.61	10.31	27.161	
1,600.00	1,600.00	1,607.86	1,607.85	5.51	5.53	90.00	-0.02	278.40	278.51	267.47	11.04	25.231	
1,700.00	1,699.99	1,715.46	1,715.35	5.86	5.90	-19.87	0.26	273.85	273.06	261.31	11.74	23.251	
1,800.00	1,799.91	1,822.35	1,821.97	6.20	6.27	-20.34	0.73	266.35	262.36	249.93	12.43	21.106	
1,900.00	1,899.69	1,921.96	1,921.20	6.54	6.62	-21.10	1.28	257.70	247.61	234.50	13.11	18.885	
1,983.98	1,983.33	2,004.65	2,003.58	6.82	6.91	-22.00	1.73	250.51	233.38	219.69	13.68	17.055	
2,000.00	1,999.27	2,020.40	2,019.26	6.88	6.96	-22.18	1.82	249.14	230.51	216.71	13.79	16.710	
2,100.00	2,098.77	2,118.67	2,117.16	7.22	7.31	-23.44	2.35	240.59	212.65	198.18	14.48	14.690	
2,200.00	2,198.26	2,216.95	2,215.07	7.57	7.66	-24.93	2.89	232.04	194.91	179.75	15.16	12.857	
2,300.00	2,297.76	2,315.23	2,312.97	7.92	8.00	-26.72	3.43	223.49	177.33	161.48	15.85	11.189	
2,400.00	2,397.25	2,413.50	2,410.87	8.27	8.35	-28.89	3.96	214.94	159.95	143.41	16.54	9.670	
2,500.00	2,496.75	2,511.78	2,508.77	8.62	8.70	-31.59	4.50	206.39	142.85	125.61	17.24	8.288	
2,600.00	2,596.24	2,610.05	2,606.67	8.97	9.05	-35.01	5.04	197.84	126.14	108.21	17.93	7.033	
2,700.00	2,695.74	2,708.33	2,704.58	9.33	9.40	-39.44	5.57	189.29	110.00	91.37	18.64	5.902	
2,800.00	2,795.23	2,808.61	2,802.48	9.68	9.75	-45.32	6.11	180.74	94.73	75.38	19.35	4.896	
2,900.00	2,894.73	2,904.88	2,900.38	10.04	10.10	-53.31	6.64	172.19	80.81	60.75	20.06	4.028	
3,000.00	2,994.22	3,003.16	2,998.28	10.39	10.46	-64.24	7.18	163.64	69.07	48.28	20.79	3.322	
3,100.00	3,093.72	3,101.43	3,096.18	10.75	10.81	-78.75	7.72	155.09	60.78	39.26	21.53	2.824	
3,200.00	3,193.21	3,200.29	3,194.09	11.10	11.16	-96.17	8.25	146.55	57.46	35.21	22.26	2.582	
3,207.41	3,200.58	3,206.99	3,201.34	11.13	11.19	-97.51	8.29	145.91	57.45	35.14	22.31	2.575 CC, ES, SF	
3,300.00	3,292.71	3,302.01	3,291.99	11.46	11.53	-113.83	8.79	138.00	59.94	36.97	22.98	2.609	
3,400.00	3,392.21	3,403.74	3,389.89	11.82	11.89	-128.86	9.33	129.45	67.59	43.91	23.67	2.855	
3,500.00	3,491.70	3,505.46	3,487.79	12.18	12.26	-140.29	9.86	120.90	78.91	54.54	24.37	3.238	
3,600.00	3,591.20	3,607.19	3,585.69	12.54	12.63	-148.66	10.40	112.35	92.57	67.50	25.07	3.693	
3,700.00	3,690.69	3,708.91	3,683.60	12.90	12.99	-154.81	10.94	103.80	107.68	81.91	25.77	4.178	
3,800.00	3,780.19	3,789.37	3,781.50	13.26	13.28	-159.43	11.47	95.25	123.71	97.30	26.41	4.685	
3,900.00	3,889.68	3,887.64	3,879.40	13.62	13.64	-162.97	12.01	86.70	140.35	113.24	27.11	5.178	
4,000.00	3,989.18	3,985.92	3,977.30	13.98	13.99	-165.76	12.55	78.15	157.40	129.59	27.81	5.660	
4,100.00	4,088.67	4,084.19	4,075.20	14.34	14.35	-168.00	13.08	69.60	174.74	146.23	28.51	6.128	
4,200.00	4,188.17	4,182.47	4,173.11	14.70	14.70	-169.84	13.62	61.05	192.30	163.08	29.22	6.581	
4,300.00	4,287.66	4,280.75	4,271.01	15.06	15.06	-171.37	14.16	52.50	210.02	180.09	29.93	7.018	
4,400.00	4,387.16	4,379.02	4,368.91	15.42	15.41	-172.66	14.69	43.95	227.86	197.22	30.64	7.438	
4,500.00	4,486.65	4,477.30	4,466.81	15.78	15.77	-173.76	15.23	35.40	245.79	214.45	31.34	7.842	
4,600.00	4,586.15	4,575.57	4,564.71	16.15	16.12	-174.72	15.77	26.85	263.80	231.75	32.05	8.230	
4,700.00	4,685.64	4,673.85	4,662.62	16.51	16.48	-175.55	16.30	18.30	281.88	249.11	32.76	8.603	
4,800.00	4,785.14	4,772.13	4,760.52	16.87	16.83	-176.28	16.84	9.76	300.00	266.52	33.48	8.962	
4,900.00	4,884.63	4,870.40	4,858.42	17.23	17.19	-176.93	17.38	1.21	318.17	283.98	34.19	9.307	

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



Anticollision Report



Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	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	4,984.13	4,968.68	4,956.32	17.60	17.55	-177.51	17.91	-7.34	336.37	301.47	34.90	9.638		
5,100.00	5,083.62	5,066.95	5,054.22	17.96	17.90	-178.02	18.45	-15.89	354.60	318.99	35.61	9.957		
5,200.00	5,183.12	5,165.23	5,152.12	18.32	18.26	-178.49	18.99	-24.44	372.86	336.53	36.32	10.265		
5,300.00	5,282.61	5,263.51	5,250.03	18.68	18.61	-178.92	19.52	-32.99	391.13	354.10	37.04	10.561		
5,400.00	5,382.11	5,361.78	5,347.93	19.05	18.97	-179.30	20.06	-41.54	409.43	371.68	37.75	10.846		
5,500.00	5,481.60	5,460.06	5,445.83	19.41	19.33	-179.66	20.60	-50.09	427.74	389.28	38.46	11.121		
5,600.00	5,581.10	5,558.33	5,543.73	19.77	19.68	-179.98	21.13	-58.64	446.07	406.89	39.18	11.386		
5,700.00	5,680.59	5,656.61	5,641.63	20.14	20.04	-179.72	21.67	-67.19	464.41	424.52	39.89	11.642		
5,800.00	5,780.09	5,754.89	5,739.54	20.50	20.40	-179.44	22.21	-75.74	482.77	442.16	40.61	11.889		
5,900.00	5,879.58	5,853.16	5,837.44	20.86	20.75	-179.19	22.74	-84.29	501.13	459.81	41.32	12.128		
6,000.00	5,979.08	5,951.44	5,935.34	21.23	21.11	-178.95	23.28	-92.84	519.50	477.46	42.04	12.359		
6,100.00	6,078.57	6,049.71	6,033.24	21.59	21.46	-178.73	23.82	-101.39	537.88	495.13	42.75	12.582		
6,200.00	6,178.07	6,147.99	6,131.14	21.96	21.82	-178.52	24.35	-109.94	556.26	512.80	43.47	12.798		
6,300.00	6,277.56	6,246.27	6,229.05	22.32	22.18	-178.33	24.89	-118.49	574.66	530.48	44.18	13.007		
6,400.00	6,377.06	6,344.54	6,326.95	22.68	22.53	-178.15	25.43	-127.04	593.06	548.16	44.90	13.209		
6,500.00	6,476.56	6,442.82	6,424.85	23.05	22.89	-177.98	25.96	-135.58	611.46	565.85	45.61	13.406		
6,600.00	6,576.05	6,541.09	6,522.75	23.41	23.25	-177.82	26.50	-144.13	629.87	583.54	46.33	13.596		
6,700.00	6,675.55	6,639.37	6,620.65	23.78	23.61	-177.66	27.04	-152.68	648.28	601.24	47.04	13.780		
6,800.00	6,775.04	6,737.65	6,718.56	24.14	23.96	-177.52	27.57	-161.23	666.70	618.94	47.76	13.959		
6,900.00	6,874.54	6,835.92	6,816.46	24.51	24.32	-177.39	28.11	-165.78	685.12	636.65	48.48	14.133		
7,000.00	6,974.03	6,934.20	6,914.36	24.87	24.68	-177.26	28.65	-178.33	703.55	654.36	49.19	14.302		
7,100.00	7,073.53	7,032.47	7,012.26	25.24	25.03	-177.14	29.18	-186.88	721.98	672.07	49.91	14.466		
7,200.00	7,173.02	7,130.75	7,110.16	25.60	25.39	-177.02	29.72	-195.43	740.41	689.78	50.63	14.625		
7,300.00	7,272.52	7,229.03	7,208.07	25.96	25.75	-176.91	30.26	-203.98	758.84	707.50	51.34	14.780		
7,400.00	7,372.01	7,327.30	7,305.97	26.33	26.10	-176.80	30.79	-212.53	777.28	725.22	52.06	14.930		
7,500.00	7,471.51	7,425.58	7,403.87	26.69	26.46	-176.70	31.33	-221.08	795.72	742.94	52.78	15.077		
7,524.28	7,495.67	7,449.44	7,427.64	26.78	26.55	-176.68	31.46	-223.15	800.20	747.25	52.95	15.112		
7,600.00	7,571.07	7,523.99	7,501.90	27.06	26.82	-176.62	31.87	-229.64	813.42	759.93	53.49	15.206		
7,700.00	7,670.84	7,622.81	7,600.35	27.42	27.18	-176.53	32.41	-238.24	828.63	774.42	54.21	15.285		
7,800.00	7,770.75	7,721.99	7,699.16	27.78	27.54	-176.42	32.95	-246.86	841.25	786.32	54.93	15.316		
7,908.26	7,879.00	7,829.70	7,806.45	28.15	27.93	-174.01	33.54	-256.23	851.99	796.30	55.69	15.298		
8,000.00	7,970.74	7,921.09	7,897.50	28.46	28.26	-174.13	34.03	-264.18	859.80	803.47	56.33	15.263		
8,100.00	8,070.74	8,020.71	7,996.74	28.80	28.63	-174.25	34.58	-272.85	868.32	811.29	57.03	15.225		
8,200.00	8,170.74	8,120.33	8,095.98	29.14	28.99	-174.37	35.12	-281.52	876.65	819.11	57.73	15.188		
8,300.00	8,270.74	8,219.95	8,195.22	29.48	29.35	-174.49	35.67	-290.18	885.37	826.94	58.43	15.151		
8,400.00	8,370.74	8,319.57	8,294.46	29.82	29.71	-174.60	36.21	-298.85	893.91	834.77	59.14	15.116		
8,500.00	8,470.74	8,419.19	8,393.70	30.16	30.07	-174.72	36.75	-307.52	902.44	842.60	59.84	15.081		
8,600.00	8,570.74	8,518.81	8,492.94	30.50	30.44	-174.83	37.30	-316.18	910.98	850.44	60.54	15.047		
8,700.00	8,670.74	8,618.42	8,592.18	30.85	30.80	-174.94	37.84	-324.85	919.52	858.28	61.24	15.014		
8,800.00	8,770.74	8,718.04	8,691.42	31.19	31.16	-175.04	38.39	-333.52	928.07	866.12	61.95	14.982		
8,900.00	8,870.74	8,817.66	8,790.66	31.53	31.52	-175.15	38.93	-342.18	936.62	873.97	62.65	14.950		
9,000.00	8,970.74	8,917.28	8,889.90	31.87	31.89	-175.25	39.47	-350.85	945.17	881.81	63.35	14.919		
9,100.00	9,070.74	9,016.90	8,989.14	32.22	32.25	-175.35	40.02	-359.51	953.72	889.66	64.06	14.888		
9,200.00	9,170.74	9,116.52	9,088.38	32.56	32.61	-175.45	40.56	-368.18	962.28	897.52	64.76	14.858		
9,300.00	9,270.74	9,216.14	9,187.62	32.90	32.97	-175.55	41.11	-376.85	970.84	905.37	65.47	14.829		
9,400.00	9,370.74	9,315.76	9,286.86	33.25	33.34	-175.65	41.65	-385.51	979.40	913.23	66.17	14.801		
9,500.00	9,470.74	9,415.38	9,386.10	33.59	33.70	-175.74	42.19	-394.18	987.97	921.09	66.88	14.772		
9,600.00	9,570.74	9,515.00	9,485.34	33.94	34.06	-175.83	42.74	-402.85	996.54	928.95	67.59	14.745		
9,700.00	9,670.74	9,614.62	9,584.58	34.28	34.42	-175.92	43.28	-411.51	1,005.11	936.82	68.29	14.718		
9,800.00	9,770.74	9,714.24	9,683.82	34.63	34.79	-176.01	43.83	-420.18	1,013.68	944.68	69.00	14.691		
9,900.00	9,870.74	9,813.86	9,783.06	34.97	35.15	-176.10	44.37	-428.84	1,022.26	952.55	69.70	14.665		
10,000.00	9,970.74	9,913.48	9,882.30	35.32	35.51	-176.19	44.91	-437.51	1,030.83	960.42	70.41	14.640		

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: 506H
Well Error: 0.00 usft
Reference Wellbore OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
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				Distance								Offset Well Error:	
Reference		Offset		Semi Major Axis									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
+N/S (usft)	+E/W (usft)	+N/S (usft)	+E/W (usft)	(usft)	(usft)	(°)	+N/S (usft)	+E/W (usft)	(usft)	(usft)			
10,100.00	10,070.74	10,013.10	9,981.54	35.67	35.87	-76.27	45.46	-446.18	1,039.41	968.29	71.12	14.615	
10,200.00	10,170.74	10,112.72	10,080.78	36.01	36.24	-76.36	46.00	-454.84	1,048.00	976.17	71.83	14.590	
10,300.00	10,270.74	10,212.34	10,180.02	36.36	36.60	-76.44	46.55	-463.51	1,056.58	984.05	72.54	14.566	
10,400.00	10,370.74	10,311.95	10,279.26	36.71	36.96	-76.52	47.09	-472.18	1,065.17	991.92	73.24	14.543	
10,500.00	10,470.74	10,411.57	10,378.50	37.05	37.33	-76.60	47.63	-480.84	1,073.76	999.81	73.95	14.520	
10,600.00	10,570.74	10,511.19	10,477.74	37.40	37.69	-76.68	48.18	-489.51	1,082.35	1,007.69	74.66	14.497	
10,697.30	10,668.04	10,608.13	10,574.31	37.74	38.04	-76.76	48.71	-497.94	1,090.71	1,015.36	75.35	14.475	
10,700.00	10,670.74	10,610.81	10,576.98	37.75	38.05	-76.75	48.72	-498.17	1,090.94	1,015.57	75.37	14.474	
10,750.00	10,720.66	10,660.56	10,626.54	37.92	38.23	-76.55	48.99	-502.50	1,094.69	1,018.96	75.72	14.456	
10,800.00	10,770.19	10,709.93	10,675.73	38.09	38.41	-76.66	49.26	-506.80	1,097.45	1,021.38	76.07	14.427	
10,850.00	10,818.94	10,761.40	10,726.99	38.26	38.60	-77.10	49.54	-511.26	1,099.28	1,022.85	76.43	14.382	
10,900.00	10,866.54	10,827.88	10,793.28	38.42	38.84	-78.12	49.86	-516.30	1,099.78	1,022.89	76.89	14.303	
10,950.00	10,912.62	10,892.38	10,857.67	38.58	39.07	-79.51	50.10	-520.08	1,098.86	1,021.54	77.32	14.212	
11,000.00	10,956.85	10,954.33	10,919.57	38.73	39.30	-81.21	50.26	-522.69	1,096.83	1,019.11	77.72	14.113	
11,050.00	10,998.88	11,013.22	10,978.44	38.86	39.51	-83.15	50.36	-524.25	1,094.02	1,015.94	78.08	14.011	
11,100.00	11,038.39	11,068.55	11,033.76	38.99	39.70	-85.24	50.40	-524.88	1,090.83	1,012.42	78.41	13.912	
11,150.00	11,075.09	11,109.88	11,075.09	39.11	39.84	-87.01	50.40	-524.92	1,087.82	1,009.14	78.67	13.827	
11,200.00	11,108.68	11,143.47	11,108.68	39.22	39.96	-88.53	50.40	-524.92	1,085.70	1,006.80	78.91	13.760	
11,250.00	11,138.92	11,173.71	11,138.92	39.31	40.06	-89.89	50.40	-524.92	1,084.84	1,005.72	79.12	13.712	
11,254.56	11,141.51	11,176.30	11,141.51	39.32	40.07	-90.00	50.40	-524.92	1,084.83	1,005.70	79.13	13.709	
11,300.00	11,165.58	11,200.37	11,165.58	39.40	40.15	-91.01	50.40	-524.92	1,085.51	1,006.21	79.31	13.688	
11,350.00	11,188.45	11,223.24	11,188.45	39.48	40.23	-91.83	50.40	-524.92	1,088.00	1,008.53	79.47	13.690	
11,400.00	11,207.36	11,242.15	11,207.36	39.55	40.29	-92.30	50.40	-524.92	1,092.50	1,012.89	79.61	13.723	
11,450.00	11,222.17	11,256.96	11,222.17	39.61	40.34	-92.38	50.40	-524.92	1,099.17	1,019.44	79.73	13.786	
11,500.00	11,232.76	11,267.55	11,232.76	39.65	40.38	-92.02	50.40	-524.92	1,108.09	1,028.27	79.81	13.883	
11,550.00	11,239.05	11,273.84	11,239.05	39.69	40.40	-91.20	50.40	-524.92	1,119.24	1,039.37	79.87	14.013	
11,597.30	11,241.00	11,275.79	11,241.00	39.72	40.41	-90.00	50.40	-524.92	1,131.80	1,051.90	79.90	14.165	
11,600.00	11,241.00	11,275.79	11,241.00	39.72	40.41	-90.00	50.40	-524.92	1,132.57	1,052.67	79.90	14.175	
11,700.00	11,241.00	11,275.79	11,241.00	39.77	40.41	-90.00	50.40	-524.92	1,165.24	1,085.31	79.93	14.578	
11,800.00	11,241.00	11,275.79	11,241.00	39.84	40.41	-90.00	50.40	-524.92	1,205.35	1,125.38	79.96	15.074	
11,900.00	11,241.00	11,275.79	11,241.00	39.93	40.41	-90.00	50.40	-524.92	1,252.17	1,172.18	79.99	15.654	
12,000.00	11,241.00	11,275.79	11,241.00	40.04	40.41	-90.00	50.40	-524.92	1,304.99	1,224.97	80.02	16.308	
12,100.00	11,241.00	11,275.79	11,241.00	40.16	40.41	-90.00	50.40	-524.92	1,363.11	1,283.06	80.05	17.028	
12,200.00	11,241.00	11,275.79	11,241.00	40.30	40.41	-90.00	50.40	-524.92	1,425.88	1,345.80	80.08	17.806	
12,300.00	11,241.00	11,275.79	11,241.00	40.45	40.41	-90.00	50.40	-524.92	1,492.72	1,412.61	80.11	18.634	
12,400.00	11,241.00	13,272.23	12,358.00	40.62	44.85	-135.84	1,175.76	-524.54	1,557.09	1,486.59	70.51	22.083	
12,500.00	11,241.00	13,372.23	12,358.00	40.79	45.00	-135.84	1,275.76	-524.50	1,557.09	1,486.19	70.91	21.960	
12,600.00	11,241.00	13,472.23	12,358.00	40.99	45.16	-135.84	1,375.76	-524.47	1,557.09	1,485.76	71.33	21.829	
12,700.00	11,241.00	13,572.23	12,358.00	41.19	45.34	-135.84	1,475.76	-524.44	1,557.09	1,485.30	71.79	21.690	
12,800.00	11,241.00	13,672.23	12,358.00	41.41	45.53	-135.84	1,575.76	-524.40	1,557.09	1,484.82	72.28	21.543	
12,900.00	11,241.00	13,772.23	12,358.00	41.65	45.73	-135.84	1,675.76	-524.37	1,557.09	1,484.30	72.80	21.390	
13,000.00	11,241.00	13,872.23	12,358.00	41.89	45.95	-135.84	1,775.76	-524.34	1,557.09	1,483.75	73.34	21.231	
13,100.00	11,241.00	13,972.23	12,358.00	42.15	46.17	-135.84	1,875.76	-524.30	1,557.09	1,483.18	73.92	21.065	
13,200.00	11,241.00	14,072.23	12,358.00	42.42	46.41	-135.84	1,975.76	-524.27	1,557.09	1,482.57	74.52	20.895	
13,300.00	11,241.00	14,172.23	12,358.00	42.70	46.66	-135.84	2,075.76	-524.23	1,557.09	1,481.94	75.15	20.720	
13,400.00	11,241.00	14,272.23	12,358.00	42.99	46.92	-135.84	2,175.76	-524.20	1,557.09	1,481.29	75.81	20.541	
13,500.00	11,241.00	14,372.23	12,358.00	43.30	47.19	-135.84	2,275.76	-524.17	1,557.09	1,480.61	76.49	20.357	
13,600.00	11,241.00	14,472.23	12,358.00	43.62	47.47	-135.84	2,375.76	-524.13	1,557.09	1,479.90	77.19	20.171	
13,700.00	11,241.00	14,572.23	12,358.00	43.94	47.76	-135.84	2,475.76	-524.10	1,557.09	1,479.17	77.93	19.982	
13,800.00	11,241.00	14,672.23	12,358.00	44.28	48.07	-135.84	2,575.76	-524.07	1,557.09	1,478.41	78.68	19.790	
13,900.00	11,241.00	14,772.23	12,358.00	44.63	48.38	-135.84	2,675.76	-524.03	1,557.09	1,477.63	79.46	19.596	
14,000.00	11,241.00	14,872.23	12,358.00	44.99	48.70	-135.84	2,775.76	-524.00	1,557.09	1,476.83	80.26	19.401	

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: 506H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference:
TVD Reference: Well 506H
MD Reference: KB=25 @ 3519.00usft (H&P 650)
North Reference: KB=25 @ 3519.00usft (H&P 650)
Survey Calculation Method: True
Output errors are at: Minimum Curvature
Database: 2.00 sigma
Offset TVD Reference: EDM 5000.14 Single User Db
Offset Datum: 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
Measured Depth (usft)	Vertical Depth (usft)	Offset		Semi Major Axis			Distance					Warning	
		Reference	Offset	Reference	Offset	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	
14,100.00	11,241.00	14,972.23	12,358.00	45.36	49.03	-135.84	2,875.76	-523.97	1,557.09	1,476.01	81.08	19.204	
14,200.00	11,241.00	15,072.23	12,358.00	45.74	49.37	-135.84	2,975.76	-523.93	1,557.09	1,475.17	81.93	19.006	
14,300.00	11,241.00	15,172.23	12,358.00	46.13	49.73	-135.84	3,075.76	-523.90	1,557.09	1,474.30	82.79	18.808	
14,400.00	11,241.00	15,272.23	12,358.00	46.52	50.09	-135.84	3,175.76	-523.86	1,557.09	1,473.42	83.67	18.609	
14,500.00	11,241.00	15,372.23	12,358.00	46.93	50.45	-135.84	3,275.76	-523.83	1,557.09	1,472.52	84.58	18.411	
14,600.00	11,241.00	15,472.23	12,358.00	47.35	50.83	-135.84	3,375.76	-523.80	1,557.09	1,471.60	85.50	18.212	
14,700.00	11,241.00	15,572.23	12,358.00	47.77	51.22	-135.84	3,475.76	-523.76	1,557.09	1,470.66	86.44	18.014	
14,800.00	11,241.00	15,672.23	12,358.00	48.20	51.61	-135.84	3,575.76	-523.73	1,557.09	1,469.70	87.39	17.817	
14,900.00	11,241.00	15,772.23	12,358.00	48.64	52.02	-135.84	3,675.76	-523.70	1,557.09	1,468.73	88.37	17.621	
15,000.00	11,241.00	15,872.23	12,358.00	49.09	52.43	-135.84	3,775.76	-523.66	1,557.09	1,467.74	89.36	17.425	
15,100.00	11,241.00	15,972.23	12,358.00	49.55	52.85	-135.84	3,875.76	-523.63	1,557.09	1,466.73	90.36	17.231	
15,200.00	11,241.00	16,072.23	12,358.00	50.01	53.27	-135.84	3,975.76	-523.60	1,557.09	1,465.71	91.39	17.039	
15,300.00	11,241.00	16,172.23	12,358.00	50.48	53.71	-135.84	4,075.76	-523.56	1,557.09	1,464.67	92.42	16.848	
15,400.00	11,241.00	16,272.23	12,358.00	50.96	54.15	-135.84	4,175.76	-523.53	1,557.09	1,463.62	93.47	16.658	
15,500.00	11,241.00	16,372.23	12,358.00	51.45	54.60	-135.84	4,275.76	-523.49	1,557.09	1,462.56	94.54	16.471	
15,600.00	11,241.00	16,472.23	12,358.00	51.94	55.05	-135.84	4,375.76	-523.46	1,557.09	1,461.48	95.62	16.285	
15,700.00	11,241.00	16,572.23	12,358.00	52.44	55.52	-135.84	4,475.76	-523.43	1,557.09	1,460.39	96.71	16.101	
15,800.00	11,241.00	16,672.23	12,358.00	52.95	55.99	-135.84	4,575.76	-523.39	1,557.09	1,459.28	97.81	15.920	
15,870.15	11,241.00	16,742.38	12,358.00	53.30	56.32	-135.84	4,645.90	-523.37	1,557.09	1,458.50	98.59	15.794	

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	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				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
+N/S (usft)	+E/W (usft)	(usft)	(usft)	(usft)	(usft)	(")	+N/S (usft)	+E/W (usft)	(usft)	(usft)			
0.00	0.00	0.00	0.00	0.00	0.00	90.04	-0.22	309.92	309.92	0.27	1.152.739		
100.00	100.00	100.00	100.00	0.13	0.13	90.04	-0.22	309.92	309.92	0.99	314.384		
200.00	200.00	200.00	200.00	0.49	0.49	90.04	-0.22	309.92	309.92	308.93	182.012		
300.00	300.00	300.00	300.00	0.85	0.85	90.04	-0.22	309.92	309.92	308.22	2.42	128.082	
400.00	400.00	400.00	400.00	1.21	1.21	90.04	-0.22	309.92	309.92	307.50	3.14	98.806	
500.00	500.00	500.00	500.00	1.57	1.57	90.04	-0.22	309.92	309.92	306.78	4.57	67.808	
600.00	600.00	600.00	600.00	1.93	1.93	90.04	-0.22	309.92	309.92	306.07	5.29	58.614	
700.00	700.00	700.00	700.00	2.29	2.29	90.04	-0.22	309.92	309.92	305.35	6.00	51.615	
800.00	800.00	800.00	800.00	2.64	2.64	90.04	-0.22	309.92	309.92	304.63	7.72	46.110	
900.00	900.00	900.00	900.00	3.00	3.00	90.04	-0.22	309.92	309.92	303.91	9.44	41.665	
1,000.00	1,000.00	1,000.00	1,000.00	3.35	3.35	90.04	-0.22	309.92	309.92	303.20	10.31	38.002	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	90.04	-0.22	309.92	309.92	302.48	11.73	34.932	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	90.04	-0.22	309.92	309.92	301.76	12.42	32.320	
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	90.04	-0.22	309.92	309.92	301.05	14.53	28.116	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	90.04	-0.22	309.92	309.92	300.33	15.23	24.550	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	90.04	-0.22	309.92	309.92	299.61	16.90	22.776	
1,600.00	1,600.00	1,600.00	1,600.00	5.51	5.51	90.04	-0.22	309.92	309.92	298.90	18.69	21.003	
1,700.00	1,699.99	1,700.01	1,699.99	5.86	5.87	-19.73	-0.22	309.92	308.69	296.96	21.21	19.345	
1,800.00	1,799.91	1,800.09	1,799.91	6.20	6.23	-20.00	-0.22	309.92	304.99	292.57	22.840		
1,900.00	1,899.69	1,900.31	1,899.69	6.54	6.59	-20.46	-0.22	309.92	298.86	285.73	24.46		
1,983.98	1,983.33	1,983.33	1,983.33	6.82	6.89	-21.01	-0.22	309.92	291.83	278.12	25.21		
2,000.00	1,999.27	2,000.73	1,999.27	6.88	6.95	-21.13	-0.22	309.92	290.33	276.50	26.56		
2,100.00	2,098.77	2,101.23	2,098.77	7.22	7.31	-21.86	-0.22	309.92	280.98	266.46	27.840		
2,200.00	2,198.26	2,201.74	2,198.26	7.57	7.67	-22.65	-0.22	309.92	271.69	256.46	29.500		
2,300.00	2,297.76	2,302.24	2,297.76	7.92	8.03	-23.49	-0.22	309.92	262.45	246.51	31.141		
2,400.00	2,397.25	2,402.75	2,397.25	8.27	8.39	-24.40	-0.22	309.92	253.27	236.63	32.750		
2,500.00	2,496.75	2,503.25	2,496.75	8.62	8.75	-25.37	-0.22	309.92	244.16	226.80	34.645		
2,600.00	2,596.24	2,603.76	2,596.24	8.97	9.11	-26.42	-0.22	309.92	235.12	217.06	36.206		
2,700.00	2,695.74	2,695.74	2,695.74	9.33	9.44	-27.55	-0.22	309.92	226.17	207.42	37.780		
2,800.00	2,795.23	2,798.77	2,798.77	9.68	9.80	-28.88	-0.05	309.32	216.78	197.32	39.360		
2,900.00	2,894.73	2,903.09	2,903.03	10.04	10.17	-30.70	0.86	306.15	205.21	185.06	40.940		
3,000.00	2,994.22	3,003.22	3,003.03	10.39	10.51	-32.94	2.28	301.20	192.14	171.29	42.520		
3,100.00	3,093.72	3,102.06	3,101.73	10.75	10.86	-35.48	3.70	296.22	179.32	157.77	44.100		
3,200.00	3,193.21	3,200.89	3,200.43	11.10	11.20	-38.41	5.13	291.25	166.90	144.64	45.680		
3,300.00	3,292.71	3,300.27	3,299.13	11.46	11.55	-41.80	6.55	286.27	154.98	132.02	47.250		
3,400.00	3,392.21	3,401.44	3,397.83	11.82	11.91	-45.72	7.98	281.30	143.68	120.01	48.830		
3,500.00	3,491.70	3,502.61	3,496.52	12.18	12.26	-50.28	9.40	276.32	133.17	108.78	50.410		
3,600.00	3,591.20	3,603.77	3,595.22	12.54	12.62	-55.58	10.83	271.34	123.65	98.53	52.000		
3,700.00	3,690.69	3,704.94	3,693.92	12.90	12.97	-61.67	12.25	266.37	115.36	89.51	53.590		
3,800.00	3,790.19	3,806.10	3,792.62	13.26	13.33	-68.61	13.68	261.39	108.58	82.01	55.180		
3,900.00	3,889.68	3,907.27	3,891.32	13.62	13.69	-76.32	15.10	256.42	103.61	76.31	56.770		
4,000.00	3,989.18	4,008.44	3,990.02	13.98	14.05	-84.62	16.53	251.44	100.71	72.69	58.350		
4,077.53	4,066.31	4,068.19	4,066.54	14.26	14.26	-91.27	17.63	247.58	100.02	71.51	59.510		
4,100.00	4,088.67	4,109.60	4,088.71	14.34	14.40	-93.21	17.96	246.46	100.08	71.34	60.500		
4,200.00	4,188.17	4,189.23	4,187.41	14.70	14.69	-101.71	19.38	241.49	101.74	72.37	61.460		
4,300.00	4,287.66	4,288.07	4,286.11	15.06	15.04	-109.78	20.81	236.51	105.60	75.53	62.410		
4,400.00	4,387.16	4,386.90	4,384.81	15.42	15.39	-117.15	22.23	231.53	111.42	80.65	63.220		
4,500.00	4,486.65	4,485.74	4,483.51	15.78	15.74	-123.71	23.66	226.56	118.92	87.46	64.780		
4,600.00	4,586.15	4,584.57	4,582.21	16.15	16.09	-129.44	25.08	221.58	127.80	95.64	66.160		
4,700.00	4,685.64	4,683.40	4,680.91	16.51	16.44	-134.39	26.51	216.61	137.79	104.94	67.974		
4,800.00	4,785.14	4,782.24	4,779.60	16.87	16.79	-138.66	27.93	211.63	148.67	115.12	69.431		
4,900.00	4,884.63	4,881.07	4,878.30	17.23	17.14	-142.33	29.36	206.65	160.27	126.02	71.467		

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



Anticollision Report



Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	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					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Hightside Toolface (")	Offset Wellbore Centre (+N-S (usft))	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,984.13	4,979.91	4,977.00	17.60	17.49	-145.50	30.78	201.68	172.42	137.47	34.95	4.933	
5,100.00	5,083.62	5,078.74	5,075.70	17.96	17.85	-148.25	32.21	196.70	185.04	149.38	35.66	5.189	
5,200.00	5,183.12	5,177.57	5,174.40	18.32	18.20	-150.64	33.63	191.73	198.02	161.66	36.36	5.446	
5,300.00	5,282.61	5,276.41	5,273.10	18.68	18.55	-152.74	35.06	185.75	211.30	174.23	37.07	5.700	
5,400.00	5,382.11	5,375.24	5,371.80	19.05	18.90	-154.59	36.49	181.77	224.83	187.05	37.78	5.952	
5,500.00	5,481.60	5,474.08	5,470.49	19.41	19.26	-156.23	37.91	176.80	238.56	200.08	38.48	6.199	
5,600.00	5,581.10	5,572.91	5,569.19	19.77	19.61	-157.69	39.34	171.82	252.46	213.27	39.19	6.442	
5,700.00	5,680.59	5,671.74	5,667.89	20.14	19.96	-158.99	40.76	166.85	266.51	226.61	39.90	6.679	
5,800.00	5,780.09	5,770.58	5,766.59	20.50	20.32	-160.17	42.19	161.87	280.68	240.07	40.61	6.911	
5,900.00	5,879.58	5,869.41	5,865.29	20.86	20.67	-161.23	43.61	156.89	294.96	253.63	41.32	7.138	
6,000.00	5,979.08	5,968.25	5,963.99	21.23	21.02	-162.20	45.04	151.92	309.32	267.29	42.03	7.359	
6,100.00	6,078.57	6,067.08	6,062.68	21.59	21.38	-163.08	46.46	146.94	323.77	281.02	42.75	7.574	
6,200.00	6,178.07	6,165.92	6,161.38	21.96	21.73	-163.88	47.89	141.97	338.28	294.82	43.46	7.784	
6,300.00	6,277.56	6,270.51	6,265.86	22.32	22.10	-164.63	49.24	137.25	352.36	308.14	44.23	7.967	
6,400.00	6,377.06	6,379.46	6,374.78	22.68	22.49	-165.21	49.87	135.06	364.02	319.01	45.02	8.087	
6,500.00	6,476.56	6,481.23	6,476.56	23.05	22.85	-165.61	49.89	134.98	373.81	328.07	45.74	8.172	
6,600.00	6,576.05	6,580.73	6,576.05	23.41	23.20	-165.99	49.89	134.98	383.54	337.09	46.46	8.256	
6,700.00	6,675.55	6,680.22	6,675.55	23.78	23.56	-166.34	49.89	134.98	393.29	346.12	47.17	8.338	
6,800.00	6,775.04	6,779.72	6,775.04	24.14	23.91	-166.68	49.89	134.98	403.05	355.17	47.88	8.417	
6,900.00	6,874.54	6,879.21	6,874.54	24.51	24.26	-167.00	49.89	134.98	412.83	364.23	48.60	8.495	
7,000.00	6,974.03	6,978.71	6,974.03	24.87	24.61	-167.30	49.89	134.98	422.61	373.30	49.31	8.570	
7,100.00	7,073.53	7,078.20	7,073.53	25.24	24.97	-167.60	49.89	134.98	432.41	382.39	50.03	8.644	
7,200.00	7,173.02	7,177.70	7,173.02	25.60	25.32	-167.87	49.89	134.98	442.22	391.48	50.74	8.715	
7,300.00	7,272.52	7,277.19	7,272.52	25.96	25.67	-168.14	49.89	134.98	452.04	400.58	51.45	8.785	
7,400.00	7,372.01	7,376.69	7,372.01	26.33	26.02	-168.40	49.89	134.98	461.87	409.70	52.17	8.853	
7,500.00	7,471.51	7,476.18	7,471.51	26.69	26.38	-168.64	49.89	134.98	471.70	418.82	52.89	8.919	
7,524.28	7,495.67	7,500.35	7,495.67	26.78	26.46	-168.70	49.89	134.98	474.09	421.04	53.06	8.935	
7,600.00	7,571.07	7,575.75	7,571.07	27.06	26.73	-168.88	49.89	134.98	480.82	427.22	53.60	8.970	
7,700.00	7,670.84	7,675.52	7,670.84	27.42	27.09	-169.05	49.89	134.98	487.45	433.13	54.31	8.975	
7,800.00	7,770.75	7,775.43	7,770.75	27.78	27.44	-169.16	49.89	134.98	491.51	436.49	55.02	8.933	
7,908.26	7,879.00	7,883.68	7,879.00	28.15	27.83	-169.51	49.89	134.98	493.02	437.24	55.78	8.638	
8,000.00	7,970.74	7,975.41	7,970.74	28.46	28.15	-169.51	49.89	134.98	493.02	436.60	56.42	8.738	
8,100.00	8,070.74	8,075.41	8,070.74	28.80	28.51	-169.51	49.89	134.98	493.02	435.91	57.12	8.632	
8,200.00	8,170.74	8,175.41	8,170.74	29.14	28.86	-169.51	49.89	134.98	493.02	435.21	57.81	8.528	
8,300.00	8,270.74	8,275.41	8,270.74	29.48	29.22	-169.51	49.89	134.98	493.02	434.52	58.51	8.427	
8,400.00	8,370.74	8,375.41	8,370.74	29.82	29.57	-169.51	49.89	134.98	493.02	433.82	59.20	8.328	
8,500.00	8,470.74	8,475.41	8,470.74	30.16	29.93	-169.51	49.89	134.98	493.02	433.12	59.90	8.231	
8,600.00	8,570.74	8,575.41	8,570.74	30.50	30.29	-169.51	49.89	134.98	493.02	432.43	60.59	8.136	
8,700.00	8,670.74	8,675.41	8,670.74	30.85	30.64	-169.51	49.89	134.98	493.02	431.73	61.29	8.044	
8,800.00	8,770.74	8,775.41	8,770.74	31.19	31.00	-169.51	49.89	134.98	493.02	431.03	61.99	7.953	
8,900.00	8,870.74	8,875.41	8,870.74	31.53	31.35	-169.51	49.89	134.98	493.02	430.33	62.69	7.865	
9,000.00	8,970.74	8,975.41	8,970.74	31.87	31.71	-169.51	49.89	134.98	493.02	429.64	63.39	7.778	
9,100.00	9,070.74	9,075.41	9,070.74	32.22	32.07	-169.51	49.89	134.98	493.02	428.94	64.08	7.693	
9,200.00	9,170.74	9,175.41	9,170.74	32.56	32.42	-169.51	49.89	134.98	493.02	428.24	64.78	7.610	
9,300.00	9,270.74	9,275.41	9,270.74	32.90	32.78	-169.51	49.89	134.98	493.02	427.54	65.48	7.529	
9,400.00	9,370.74	9,375.41	9,370.74	33.25	33.14	-169.51	49.89	134.98	493.02	426.84	66.18	7.449	
9,500.00	9,470.74	9,475.41	9,470.74	33.59	33.49	-169.51	49.89	134.98	493.02	426.14	66.88	7.371	
9,600.00	9,570.74	9,575.41	9,570.74	33.94	33.85	-169.51	49.89	134.98	493.02	425.44	67.59	7.295	
9,700.00	9,670.74	9,675.41	9,670.74	34.28	34.20	-169.51	49.89	134.98	493.02	424.74	68.29	7.220	
9,800.00	9,770.74	9,775.41	9,770.74	34.63	34.56	-169.51	49.89	134.98	493.02	424.03	68.99	7.146	
9,900.00	9,870.74	9,875.41	9,870.74	34.97	34.92	-169.51	49.89	134.98	493.02	423.33	69.69	7.075	
10,000.00	9,970.74	9,975.41	9,970.74	35.32	35.27	-169.51	49.89	134.98	493.02	422.63	70.39	7.004	

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	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
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis			Distance					Warning	
				Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
						(")	+N/S (usft)	+E/W (usft)	(usft)	(usft)			
10,100.00	10,070.74	10,075.41	10,070.74	35.67	35.63	-59.51	49.89	134.98	493.02	421.93	71.09	6.935	
10,200.00	10,170.74	10,175.41	10,170.74	36.01	35.99	-59.51	49.89	134.98	493.02	421.22	71.80	6.867	
10,300.00	10,270.74	10,275.41	10,270.74	36.36	36.34	-59.51	49.89	134.98	493.02	420.52	72.50	6.800	
10,400.00	10,370.74	10,375.41	10,370.74	36.71	36.70	-59.51	49.89	134.98	493.02	419.82	73.20	6.735	
10,500.00	10,470.74	10,475.41	10,470.74	37.05	37.06	-59.51	49.89	134.98	493.02	419.12	73.91	6.671	
10,600.00	10,570.74	10,575.41	10,570.74	37.40	37.41	-59.51	49.89	134.98	493.02	418.41	74.61	6.608	
10,697.30	10,668.04	10,672.72	10,668.04	37.74	37.76	-59.51	49.89	134.98	493.02	417.73	75.30	6.548	
10,700.00	10,670.74	10,675.41	10,670.74	37.75	37.77	-59.53	49.89	134.98	493.02	417.70	75.31	6.546	
10,750.00	10,720.66	10,725.34	10,720.66	37.92	37.95	-59.88	49.89	134.98	491.80	416.13	75.66	6.500	
10,800.00	10,770.19	10,774.87	10,770.19	38.09	38.13	-60.85	49.89	134.98	488.43	412.42	76.01	6.426	
10,850.00	10,818.94	10,823.61	10,818.94	38.26	38.30	-62.45	49.89	134.98	483.08	406.73	76.35	6.328	
10,900.00	10,866.54	10,871.21	10,866.54	38.42	38.47	-64.66	49.89	134.98	476.01	399.34	76.67	6.208	
10,950.00	10,912.62	10,917.30	10,912.62	38.58	38.63	-67.44	49.89	134.98	467.61	390.63	76.99	6.074	
11,000.00	10,956.85	10,961.53	10,956.85	38.73	38.79	-70.74	49.89	134.98	458.38	381.09	77.29	5.931	
11,050.00	10,998.88	11,003.56	10,998.88	38.86	38.94	-74.45	49.89	134.98	448.94	371.35	77.58	5.787	
11,100.00	11,038.39	11,043.07	11,038.39	38.99	39.08	-78.41	49.89	134.98	440.02	362.15	77.86	5.651	
11,150.00	11,075.09	11,079.76	11,075.09	39.11	39.21	-82.43	49.89	134.98	432.45	354.32	78.13	5.535	
11,200.00	11,108.68	11,113.36	11,108.68	39.22	39.33	-86.28	49.89	134.98	427.13	348.75	78.38	5.449	
11,250.00	11,138.92	11,143.60	11,138.92	39.31	39.44	-89.73	49.89	134.98	424.95	346.33	78.62	5.405	
11,254.21	11,141.31	11,145.99	11,141.31	39.32	39.45	-90.00	49.89	134.98	424.93	346.30	78.63	5.404	
11,300.00	11,165.58	11,170.26	11,165.58	39.40	39.54	-92.59	49.89	134.98	426.70	347.87	78.83	5.413	
11,350.00	11,188.45	11,206.87	11,188.45	39.48	39.67	-94.69	49.89	134.98	433.01	353.94	79.07	5.476	
11,400.00	11,207.36	11,212.04	11,207.36	39.55	39.69	-95.88	49.89	134.98	444.23	365.06	79.17	5.611	
11,450.00	11,222.17	11,226.85	11,222.17	39.61	39.74	-96.05	49.89	134.98	460.42	381.13	79.29	5.807	
11,500.00	11,232.76	11,237.43	11,232.76	39.65	39.78	-95.14	49.89	134.98	481.35	401.97	79.37	6.064	
11,550.00	11,239.05	11,243.73	11,239.05	39.69	39.80	-93.06	49.89	134.98	506.54	427.12	79.41	6.378	
11,597.30	11,241.00	11,245.68	11,241.00	39.72	39.81	-90.00	49.89	134.98	533.73	454.31	79.42	6.720	
11,600.00	11,241.00	11,245.68	11,241.00	39.72	39.81	-90.00	49.89	134.98	535.36	455.94	79.42	6.741	
11,700.00	11,241.00	11,245.68	11,241.00	39.77	39.81	-90.00	49.89	134.98	601.45	522.05	79.40	7.575	
11,800.00	11,241.00	11,245.68	11,241.00	39.84	39.81	-90.00	49.89	134.98	675.92	596.54	79.38	8.515	
11,900.00	11,241.00	11,245.68	11,241.00	39.93	39.81	-90.00	49.89	134.98	756.31	676.95	79.36	9.530	
12,000.00	11,241.00	11,245.68	11,241.00	40.04	39.81	-90.00	49.89	134.98	840.91	761.56	79.35	10.598	
12,100.00	11,241.00	11,245.68	11,241.00	40.16	39.81	-90.00	49.89	134.98	928.58	849.24	79.34	11.704	
12,200.00	11,241.00	11,245.68	11,241.00	40.30	39.81	-90.00	49.89	134.98	1,018.52	939.19	79.33	12.839	
12,300.00	11,241.00	11,245.68	11,241.00	40.45	39.81	-90.00	49.89	134.98	1,110.19	1,030.86	79.33	13.995	
12,400.00	11,241.00	11,245.68	11,241.00	40.62	39.81	-90.00	49.89	134.98	1,203.18	1,123.85	79.33	15.167	
12,500.00	11,241.00	13,434.41	12,450.00	40.79	44.81	-160.63	1,275.54	135.39	1,281.50	1,222.23	59.27	21.621	
12,600.00	11,241.00	13,534.41	12,450.00	40.99	44.96	-160.63	1,375.54	135.43	1,281.50	1,221.67	59.84	21.417	
12,700.00	11,241.00	13,634.41	12,450.00	41.19	45.12	-160.63	1,475.54	135.46	1,281.50	1,221.07	60.44	21.204	
12,800.00	11,241.00	13,734.41	12,450.00	41.41	45.29	-160.63	1,575.54	135.49	1,281.50	1,220.43	61.07	20.984	
12,900.00	11,241.00	13,834.41	12,450.00	41.65	45.48	-160.63	1,675.54	135.53	1,281.50	1,219.76	61.74	20.757	
13,000.00	11,241.00	13,934.41	12,450.00	41.89	45.68	-160.63	1,775.54	135.56	1,281.50	1,219.06	62.44	20.524	
13,100.00	11,241.00	14,034.41	12,450.00	42.15	45.89	-160.63	1,875.54	135.60	1,281.50	1,218.33	63.17	20.287	
13,200.00	11,241.00	14,134.41	12,450.00	42.42	46.11	-160.63	1,975.54	135.63	1,281.50	1,217.57	63.93	20.046	
13,300.00	11,241.00	14,234.41	12,450.00	42.70	46.34	-160.63	2,075.54	135.66	1,281.50	1,216.78	64.72	19.801	
13,400.00	11,241.00	14,334.41	12,450.00	42.99	46.58	-160.63	2,175.54	135.70	1,281.50	1,215.97	65.53	19.555	
13,500.00	11,241.00	14,434.41	12,450.00	43.30	46.84	-160.63	2,275.54	135.73	1,281.50	1,215.12	66.38	19.306	
13,600.00	11,241.00	14,534.41	12,450.00	43.62	47.10	-160.63	2,375.54	135.76	1,281.50	1,214.25	67.25	19.057	
13,700.00	11,241.00	14,634.41	12,450.00	43.94	47.38	-160.63	2,475.54	135.80	1,281.50	1,213.36	68.14	18.807	
13,800.00	11,241.00	14,734.41	12,450.00	44.28	47.67	-160.63	2,575.54	135.83	1,281.50	1,212.44	69.06	18.557	
13,900.00	11,241.00	14,834.41	12,450.00	44.63	47.97	-160.63	2,675.54	135.86	1,281.50	1,211.50	70.00	18.307	
14,000.00	11,241.00	14,934.41	12,450.00	44.99	48.28	-160.63	2,775.54	135.90	1,281.50	1,210.54	70.96	18.059	

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	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					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbore Centre (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,100.00	11,241.00	15,034.41	12,450.00	45.36	48.60	-160.63	2,875.54	135.93	1,281.50	1,209.56	71.95	17.812	
14,200.00	11,241.00	15,134.41	12,450.00	45.74	48.92	-160.63	2,975.54	135.96	1,281.50	1,208.55	72.95	17.567	
14,300.00	11,241.00	15,234.41	12,450.00	46.13	49.26	-160.63	3,075.54	136.00	1,281.50	1,207.53	73.97	17.324	
14,400.00	11,241.00	15,334.41	12,450.00	46.52	49.61	-160.63	3,175.54	136.03	1,281.50	1,206.49	75.02	17.083	
14,500.00	11,241.00	15,434.41	12,450.00	46.93	49.97	-160.63	3,275.54	136.07	1,281.50	1,205.43	76.08	16.845	
14,600.00	11,241.00	15,534.41	12,450.00	47.35	50.33	-160.63	3,375.54	136.10	1,281.50	1,204.35	77.15	16.610	
14,700.00	11,241.00	15,634.41	12,450.00	47.77	50.71	-160.63	3,475.54	136.13	1,281.50	1,203.26	78.25	16.378	
14,800.00	11,241.00	15,734.41	12,450.00	48.20	51.09	-160.63	3,575.54	136.17	1,281.50	1,202.15	79.36	16.149	
14,900.00	11,241.00	15,834.41	12,450.00	48.64	51.49	-160.63	3,675.54	136.20	1,281.50	1,201.02	80.48	15.923	
15,000.00	11,241.00	15,934.41	12,450.00	49.09	51.89	-160.63	3,775.54	136.23	1,281.50	1,199.88	81.62	15.701	
15,100.00	11,241.00	16,034.41	12,450.00	49.55	52.30	-160.63	3,875.54	136.27	1,281.50	1,198.73	82.77	15.482	
15,200.00	11,241.00	16,134.41	12,450.00	50.01	52.71	-160.63	3,975.54	136.30	1,281.50	1,197.56	83.94	15.267	
15,300.00	11,241.00	16,234.41	12,450.00	50.48	53.14	-160.63	4,075.54	136.33	1,281.50	1,196.38	85.12	15.055	
15,400.00	11,241.00	16,334.41	12,450.00	50.96	53.57	-160.63	4,175.54	136.37	1,281.50	1,195.19	86.31	14.848	
15,500.00	11,241.00	16,434.41	12,450.00	51.45	54.01	-160.63	4,275.54	136.40	1,281.50	1,193.99	87.51	14.643	
15,600.00	11,241.00	16,534.41	12,450.00	51.94	54.46	-160.63	4,375.54	136.44	1,281.50	1,192.77	88.73	14.443	
15,700.00	11,241.00	16,634.41	12,450.00	52.44	54.91	-160.63	4,475.54	136.47	1,281.50	1,191.55	89.95	14.246	
15,800.00	11,241.00	16,734.41	12,450.00	52.95	55.37	-160.63	4,575.54	136.50	1,281.50	1,190.31	91.19	14.053	
15,870.15	11,241.00	16,804.55	12,450.00	53.30	55.70	-160.63	4,645.68	136.53	1,281.50	1,189.44	92.06	13.920	

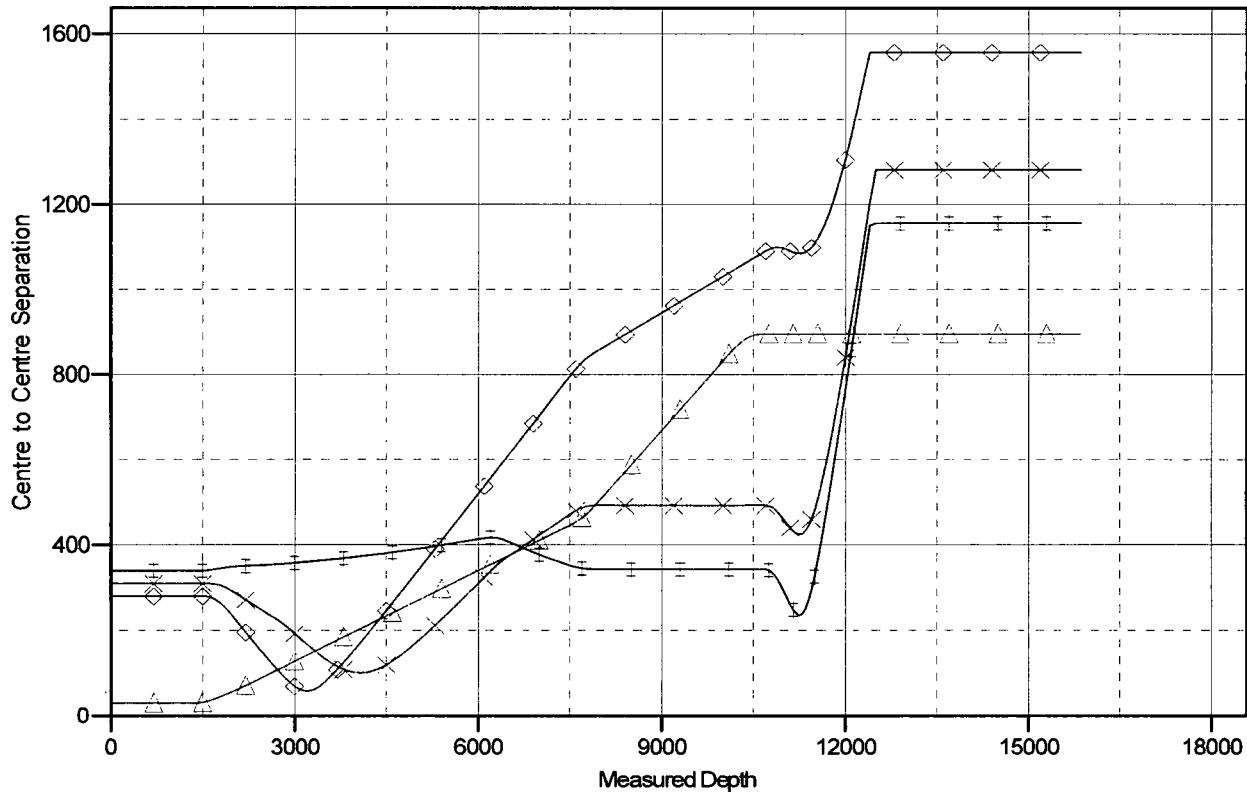
Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Reference Site: Sheba Federal Com
 Site Error: 0.00 usft
 Reference Well: 506H
 Well Error: 0.00 usft
 Reference Wellbore: OH
 Reference Design: Plan #1

Local Co-ordinate Reference: Well 506H
 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: 506H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.47°

Ladder Plot



LEGEND

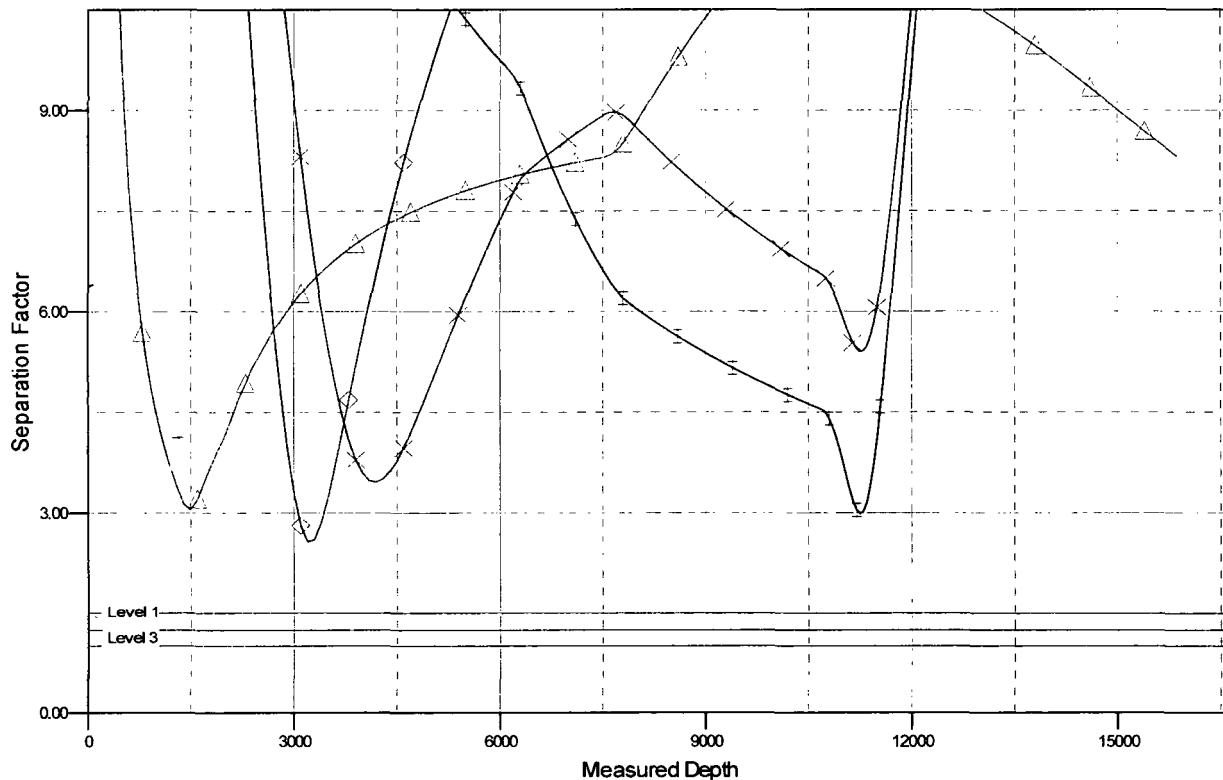
506H OH Run#1V0
 709H OH Run#1V0
 710H OH Run#1V0
 711H OH Run#1V0

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 506H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25 @ 3519.00usft (H&P 650)
Reference Site:	Sheba Federal Com	MD Reference:	KB=25 @ 3519.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	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: 506H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.47°

Separation Factor Plot



LEGEND

507H OH Run#1V0 709H OH Run#1V0
 711H OH Run#1V0 710H OH Run#1V0