ON SITE DATE: 04/03/2013

## Surface Use Plan of Operations

# HOBBS OCD

## Introduction

## OCT 1 3 2015

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what was submitted in this surface use plan. If any other surface disturbance is approved, a BLM approved sundry notice or right of way application will be acquired prior to any new surface disturbance.

Before any surface disturbance is created, stakes or flagging will be installed to mark boundaries of permitted areas of disturbance, including soils storage areas. As necessary, slope, grade, and other construction control stakes will be placed to ensure construction in accordance with the surface use plan. All boundary markers will be maintained in place until final construction cleanup is completed. If disturbance boundary markers are disturbed or knocked down, they will be replaced before construction proceeds.

If terms and conditions are attached to the approved APD and amend any of the proposed actions in this surface use plan, we will adhere to the terms and conditions.

## 1. Existing Roads

a. The existing access road route to the proposed project is depicted on Exhibit 2A. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of this surface use plan..

b. The existing access road route to the proposed project does cross lease boundaries and a BLM road right-of-way will be acquired from the BLM prior to construction activities.

c. The operator will improve or maintain existing roads in a condition the same as or better than before operations begin. The operator will repair pot holes, clear ditches, repair the crown, etc. All existing structures on the entire access route such as cattleguards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.

d. We will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.

### 2. New or Reconstructed Access Roads

a. An access road will be needed for this proposed project. See the survey plat for the location of the access road.

b. The length of access road needed to be constructed for this proposed project is about 1673 feet.

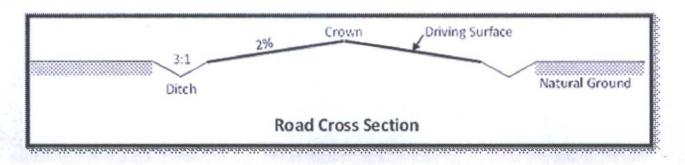
c. The maximum driving width of the access road will be 14 feet. The maximum width of surface disturbance when constructing the access road will not exceed 25 feet. All areas outside of the driving surface will be revegetated.

d. The access road will be constructed with 6 inches of compacted Caliche.

e. When the road travels on fairly level ground, the road will be crowned and ditched with a 2% slope from the tip of the road crown to the edge of the driving surface. The ditches will be 3 feet wide with 3:1 slopes. See Road Cross Section diagram below.

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f. The access road will be constructed with a ditch on each side of the road.

g. The maximum grade for the access road will be 2 percent.

h. No turnouts will be constructed on the proposed access road.

i. No cattleguards will be installed for this proposed access road.

j. Since the proposed access road crosses lease boundaries, a right-of-way will be required for this access road. A right-of-way grant will be applied for through the BLM. The access road will not be constructed until an approved BLM right-of-way grant is acquired.

k. No culverts will be constructed for this proposed access road.

1. No low water crossings will be constructed for the access road.

m. Since the access road is on level ground, no lead-off ditches will be constructed for the proposed access road.

n. Newly constructed or reconstructed roads, on surface under the jurisdiction of the Bureau of Land Management, will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well-constructed and safe road.

## 3. Location of Existing Wells

a. Exhibit 3 of the APD depicts all known wells within a one mile radius of the proposed well.

b. There is no other information regarding wells within a one mile radius.

## 4. Location of Existing and/or Proposed Production Facilities

a. All permanent, lasting more than 6 months, above ground structures including but not limited to pumpjacks, storage tanks, barrels, pipeline risers, meter housing, etc. that are not subject to safety requirements will be painted a non-reflective paint color, Shale Green, from the BLM Standard Environmental Colors chart, unless another color is required in the APD Conditions of Approval.

b. If any type of production facilities are located on the well pad, they will be strategically placed to allow for maximum interim reclamation, recontouring, and revegetation of the well location.

c. A production facility is proposed to be installed on the proposed well location. Production from the well will be processed on site in the production facility. Exhibit 2B depicts the location of the production facilities as they relate to the well and well pad.

d. The proposed production facility will have a secondary containment structure that is constructed to hold the capacity of 1-1/2 times the largest tank, plus freeboard to account for percipitation, unless more stringent protective requirements are deemed necessary.

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e. Exhibit 2C depicts the production facility as well.

If any plans change regarding the production facility or other infrastructure (pipeline, electric line, etc.), we will submit a sundry notice or right of way (if applicable) prior to installation or construction.

#### Additional Pipeline(s)

We propose to install 5 additional pipeline(s):

1. Buried Produced Water pipeline:

a. We plan to install a 8 inch buried poly pipeline from the proposed well to existing sales line. The proposed length of the pipeline will be 8798 feet. The working pressure of the pipeline will be about 125 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

b. Exhibit 5 depicts the proposed Produced Water pipeline route.

c. Since the proposed pipeline crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed pipeline.

2. Buried Produced Water pipeline:

a. We plan to install a 8 inch buried poly pipeline from the proposed well to existing sales line. The proposed length of the pipeline will be 8798 feet. The working pressure of the pipeline will be about 125 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

b. Exhibit 5 depicts the proposed Produced Water pipeline route.

c. Since the proposed pipeline crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed pipeline.

3. Buried Gas Lift pipeline:

a. We plan to install a 8 inch buried steel pipeline from the proposed well to existing sales line. The proposed length of the pipeline will be 8798 feet. The working pressure of the pipeline will be about 125 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

b. Exhibit 5 depicts the proposed Gas Lift pipeline route.

c. Since the proposed pipeline crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed pipeline.

4. Buried Gas Sales pipeline:

a. We plan to install a 12 inch buried steel pipeline from the proposed well to existing sales line. The proposed length of the pipeline will be 8800 feet. The working pressure of the pipeline will be about 125 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

b. Exhibit 5 depicts the proposed Gas Sales pipeline route.

c. Since the proposed pipeline crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed pipeline.

5. Buried Oil pipeline:

a. We plan to install a 4 inch buried steel pipeline from the proposed well to existing sales line. The proposed length of the pipeline will be 8803 feet. The working pressure of the pipeline will be about 125 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

b. Exhibit 5 depicts the proposed Oil pipeline route.

c. Since the proposed pipeline crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed pipeline.

#### **Electric Line(s)**

a. We plan to install an overhead electric line for the proposed well. The proposed length of the electric line will be 8798 feet. Exhibit 5 depicts the location of the proposed electric line route. The electric line will be construction to provide protection from raptor electrocution.

b. Since the proposed electric line crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed electric line.

## 5. Location and Types of Water

a. The location of the water well is as follows: This location will be drilled using a combination of water mud systems (outlined in the drilling program) The water will be obtained from commercial water stations in the area and hauled to location by trucks or poly pipelines using existing and proposed roads depicted on the proposed existing access road maps In these cases where a poly pipeline is used to transport fresh water for drilling purposes\_ proper authorizations will be secured by the contractor.

b. Exhibit 5 depicts the proposed route for a 8 inch poly temporary (<90 days) water pipeline supplying water for drilling operations.

## 6. Construction Material

a. Caliche utilized for the drilling pad will be obtained either from an existing approved mineral pit, or by

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benching into a hill, which will allow the pad to be level with existing caliche from the cut, or extracted by "Flipping" the well location. A mineral material permit will be obtained from BLM prior to excavating any caliche on Federal Lands. Amount will vary for each pad. The procedure for "Flipping" a well location is as follows:

\*

-An adequate amount of topsoil/root zone (usually top 6 inches of soil) will be stripped from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram/survey plat. -An area will be used within the proposed well site dimensions to excavate caliche.

Subsoil will be removed and stockpiled within the surveyed well pad dimensions.

-Once caliche/surfacing mineral is found, the mineral material will be excavated and stock piled within the approved drilling pad dimensions.

-Then, subsoil will be pushed back in the excavated hole and caliche will be spread accordingly across the entire well pad and road (if available).

-Neither caliche, nor subsoil will be stock piled outside of the well pad dimensions. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat.

\*

In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit or other established mineral pit. A BLM mineral material permit will be acquired prior to obtaining any mineral material from BLM pits or federal land.

## 7. Methods for Handling Waste

a. Drilling fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility.

b. Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around the well site will be collected for disposal.

c. Human waste and grey water will be properly contained and disposed of properly at a state approved disposal facility.

d. After drilling and completion operations, trash, chemicals, salts, frac sand and other waste material will be removed and disposed of properly at a state approved disposal facility.

e. The well will be drilled utilizing a closed loop system. Drill cutting will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

## 8. Ancillary Facilities

a. No ancillary facilities will be needed for this proposed project.

## 9. Well Site Layout

a. The following information is presented in the well site survey plat or diagram:

i. reasonable scale (near 1":50')

ii. well pad dimensions

iii. well pad orientation

iv. drilling rig components

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v. proposed access road

vi. elevations of all points

vii. topsoil stockpile

viii. reserve pit location/dimensions if applicable

ix. other disturbances needed (flare pit, stinger, frac farm pad, etc.)

x. existing structures within the 600' x 600' archaeoligical surveyed area (pipelines, electric lines, well pads, etc

b. The proposed drilling pad was staked and surveyed by a professional surveyor. The attached survey plat of the well site depicts the drilling pad layout as staked.

c. A title of a well site diagram is Exhibit 4. This diagram depicts the Rig Layout.

d. Topsoil Salvaging

i. Grass, forbs, and small woody vegetation, such as mesquite will be excavated as the topsoil is removed. Large woody vegetation will be stripped and stored separately and respread evenly on the site following topsoil respreading. Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location and along the perimeter of the access road to control run-on and run-off, to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

## **10. Plans for Surface Reclamation**

## **Reclamation Objectives**

i. The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil; control erosion; and minimize habitat and forage loss, visual impact, and weed infestation, during the life of the well or facilities.

ii. The long-term objective of final reclamation is to return the land to a condition similar to what existed prior to disturbance. This includes restoration of the landform and natural vegetative community, hydrologic systems, visual resources, and wildlife habitats. To ensure that the long-term objective will be reached through human and natural processes, actions will be taken to ensure standards are met for site stability, visual quality, hydrological functioning, and vegetative productivity.

iii. The BLM will be notified at least 3 days prior to commencement of any reclamation procedures.

iv. If circumstances allow, interim reclamation and/or final reclamation actions will be completed no later than 6 months from when the final well on the location has been completed or plugged. We will gain written permission from the BLM if more time is needed.

v. Interim reclamation will be performed on the well site after the well is drilled and completed. Exhibit 2C depicts the location and dimensions of the planned interim reclamation for the well site.

#### Interim Reclamation Procedures (If performed)

1. Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production.

2. In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.

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3. The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

4. Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

5. Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.

6. The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

#### Final Reclamation (well pad, buried pipelines, etc.)

1. Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment.

2. All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.

3. All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

4. After all the disturbed areas have been properly prepared, the areas will be seeded with the proper BLM seed mixture, free of noxious weeds. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

5. Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding area.

6. All unused equipment and structures including pipelines, electric line poles, tanks, etc. that serviced the well will be removed.

7. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion is controlled.

## 11. Surface Ownership

a. The surface ownership of the proposed project is Federal and State.

### **12. Other Information**

a. Representatives responsible for ensuring compliance of the surface use plan are listed below:

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Land and Right of Way

Mr. James Barwis Rights of Way and Lease Operations Representative EOG Resources, Inc. P.O. Box 2267 Midland TX 79702 (432) 686-3791 Office (303) 882-1480 Cell

Drilling

\*

Mr. Steve Munsell Drilling Engineer EOG Resources, Inc. P.O. Box 2267 Midland TX 79702 (432) 686-3609 Office (432) 894-1256 Cell

Operations

\* Gary Smith Operations Manager

EOG Resources, Inc. P.O. Box 2267 Midland TX 79702 (432) 686-3740 Office (432) 557-9208 Cell

Regulatory

\*

Mr. Stan Wagner Regulatory Analyst EOG Resources, Inc. P.O. Box 2267 Midland TX 79702 (432) 686-3689 Office

## 13. Maps and Diagrams

Exhibit 2A - Existing Road Exhibit 3 - Wells Within One Mile Exhibit 2B - Production Facilities Diagram Exhibit 2C - Additional Production Facilities Diagram Exhibit 5 - Produced Water Pipeline

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Exhibit 5 - Produced Water Pipeline Exhibit 5 - Gas Lift Pipeline Exhibit 5 - Gas Sales Pipeline Exhibit 5 - Oil Pipeline Exhibit 5 - Electric Line Exhibit 5 - Drilling Water Pipeline Exhibit 4 - Well Site Diagram Exhibit 2C - Interim Reclamation

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## **OPERATOR CERTIFICATION**

I certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal Laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true, and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this ZZnd day of January, 2015.

Name: Stan Wagner Position: Regulatory Specialist Address: P.O. Box 2267, Midland, TX 79702 Telephone: (432) 686-3689 Email: stan wagner@eogresources.com Field Representative (if not above signatory): James Barwis Address: P.O. Box 2267, Midland, TX 79702 Telephone: (432) 686-3791 office; (303) 882-1480 cell

Signed flan Wa

EXTRA COPIES



## **EOG Resources - Midland**

Lea County, NM (NAD 27 NME) Streetcar 15 Fed #7H

OH Plan #3

# **Anticollision Report**

28 September, 2015



### EOG Resources, Inc.

Anticollision Report

0.0	14,298.1 Plan #3 (OH)	MVVD	MWD - Standard		
(usft)	(usft) Survey (Wellbore)	Tool Name	Description		
From	То				
Survey Tool Program	Date 9/28/2015	the most int			
Warning Levels Evalua	ted at: 2.00 Sigma	Casing Method:	Not applied		
Results Limited by:	Maximum center-center distance of 50.0 usft	Error Surface:	Elliptical Conic		
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D		
Interpolation Method:	Stations	Error Model:	ISCWSA		
Filter type:	NO GLOBAL FILTER: Using user defined select	ion & filtering criteria			
Reference	Plan #3				
Reference Design:	Plan #3	Offset TVD Reference:	Reference Datum		
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db		
Well Error:	0.0 usft	Output errors are at	2.00 sigma		
Reference Well:	#7H	Survey Calculation Method:	Minimum Curvature		
Site Error:	0.0 usft	North Reference:	Grid		
Reference Site:	Streetcar 15 Fed	MD Reference:	KB = 30 @ 3385.0usft (Cactus 123)		
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	Well #7H KB = 30 @ 3385.0usft (Cactus 123)		

	Reference	Offset	Dista	ince		
Site Name Offset Well - Wellbore - Design	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Ochoa Fed						
#1H - OH - OH						Out of range
#1H - ST #1 - ST #1						Out of range
Streetcar 15 Fed						
#10H - OH - Plan #3						Out of range
#11H - OH - Plan #1						Out of range
#3H - OH - Plan #3						Out of range
#4H - OH - Plan #3						Out of range
#5H - OH - Plan #3						Out of range
#6H - OH - Plan #2						Out of range
#8H - OH - Plan #3	4,500.0	4,500.0	30.0	10.1	1.505	CC
#8H - OH - Plan #3	5,000.0	5,002.4	30.9	9.1	1.417	Level 3, ES
#8H - OH - Plan #3	5,100.0	5,102.9	31.4	9.2	1.415	Level 3, SF
#9H - OH - Plan #3						Out of range

offset De urvey Prog Refer	ram: 0-MI	and a standard stand		<ul> <li>#8H - OH</li> <li>Semi Major</li> </ul>	SART				Dista	ince			Offset Site Error: Offset Well Error:	0,0 us
Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (ustt)	Offset (usft)	Highside Toolface (*)	Offset Wellbore +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	30.0	30.0					
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	30.0	30.0	29.8	0.16	190.674		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	30.0	30.0	29.4	0.61	49.434		
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	30.0	30.0	28.9	1.06	28.398		
400.0	400.0	400.0	400.0	0.8	0.8	90.00	0.0	30.0	30.0	28.5	1.51	19.921		
500.0	500.0	500.0	500.0	1,0	1.0	90.00	0.0	30.0	30.0	28.0	1.96	15.342		
600.0	600.0	600.0	600.0	1.2	1.2	90.00	0.0	30.0	30.0	27.6	2.40	12.474		
700.0	700.0	700.0	700.0	1.4	1.4	90.00	0.0	30.0	30.0	27.1	2.85	10.510		
800.0	800.0	800.0	800.0	1.7	1.7	90.00	0.0	30.0	30.0	26.7	3.30	9.080		
900.0	900.0	900.0	900.0	1.9	1.9	90.00	0.0	30.0	30.0	26.2	3.75	7.992		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.00	0.0	30.0	30.0	25.8	4.20	7.138		
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	90.00	0.0	30.0	30.0	25.3	4.65	6.448		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	90.00	0.0	30.0	30.0	24.9	5.10	5.880		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	90.00	0.0	30.0	30.0	24.4	5.55	5.404		

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

9/28/2015 2:33:06PM



## EOG Resources, Inc.

Anticollision Report

- EOG Resources Midland Company: Project: Lea County, NM (NAD 27 NME) **Reference Site:** Streetcar 15 Fed Site Error: 0.0 usft Reference Well: #7H Well Error: 0.0 usft OH **Reference Wellbore** Reference Design: Plan #3
- Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method: Output errors are at Database: Offset TVD Reference:

#### Well #7H

KB = 30 @ 3385.0usft (Cactus 123) KB = 30 @ 3385.0usft (Cactus 123) Grid Minimum Curvature 2.00 sigma EDM 5000.1 Single User Db Reference Datum

fset Des	Sector (D)	A STREET, MERICAN	i is red	- #8H - OH	- r-tall #3					E TELEVER AL SARE				Offset Site Error:	0.0 ι
Refere		Offse		Semi Major	Axis					Dista	ince			Offset Well Error:	0.0 (
asured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	Velibore	Centre +E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(")	(usft)	28187	(usft)	(usft)	(usft)	(usft)			
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	90.00		0.0	30.0	30.0	24.0	6.00	4.999		
1,500.0	1,500.0	1,500.0	1,500.0	3.2	3.2	90.00		0.0	30.0	30.0	23.5	6.45	4.651		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	90.00		0.0	30.0	30.0	23.1	6.90	4.348		
1,700.0	1,700.0	1,700.0	1,700.0	3.7	3.7	90.00		0.0	30.0	30.0	22.7	7.35	4.082		
1,800.0	1,800.0	1,800.0	1,800.0	3.9	3.9	90.00		0.0	30.0	30.0	22.2	7.80	3.846		
1,900.0	1,900.0	1,900.0	1,900.0	4.1	4.1	90.00		0.0	30.0	30.0	21.8	8.25	3.637		
2,000.0	2,000.0	2,000.0	2,000.0	4.3	4.3	90.00		0.0	30.0	30.0	21.3	8.70	3.449		
2,100.0	2,100.0	2,100.0	2,100.0	4.6	4.6	90.00		0.0	30.0	30.0	20.9	9.15	3.279		
2,200.0	2,200.0	2,200.0	2,200.0	4.8	4.8	90.00		0.0	30.0	30.0	20.4	9.60	3.126		
2,300.0	2,300.0	2,300.0	2,300.0	5.0	5.0	90.00		0.0	30.0	30.0	20.0	10.05	2.986		
2,400.0	2,400.0	2,400.0	2,400.0	5.2	5.2	90.00		0.0	30.0	30.0	19.5	10.50	2.858		
2,500.0	2,500.0	2,500.0	2,500.0	5.5	5.5	90.00		0.0	30,0	30.0	19,1	10,95	2.741		
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	90.00		0.0	30.0	30.0	18.6	11.40	2.633		
2,700.0	2,700.0	2,700.0	2,700.0	5.9	5.9	90.00		0.0	30.0	30.0	18.2	11.85	2.533		
2,800.0	2,800.0	2,800.0	2,800.0	6.1	6.1	90.00		0.0	30.0	30.0	17.7	12.29	2.440		
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	90.00		0.0	30.0	30.0	17.3	12,74	2.354		
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	90.00		0.0	30.0	30.0	16.8	13.19	2.274		
3,000.0	3,000.0	3,100.0	3,000.0	6.8	6.8	90.00		0.0	30.0	30.0	16.4	13.19	2.274		
3,200.0	3,200.0	3,100.0	3,100.0	7.0	7.0	90.00		0.0	30.0	30.0	15.9	14.09	2.199		
3,300.0	3,300.0	3,300.0	3,200.0	7.3	7.3	90.00		0.0	30.0	30.0	15.5	14.54	2.063		
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	90.00		0.0	30.0	30.0	15.0	14.99	2.003		
3,500.0	3,500.0	3,500.0	3,500.0	7.7	7.7	90.00		0.0	30.0	30.0	14.6	15.44	1.943		
3,600.0	3,600.0	3,600.0	3,600.0	7.9	7.9	90.00		0.0	30.0	30.0	14.1	15.89	1.888		
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	90.00		0.0	30.0	30.0	13.7	16.34	1.836		
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	90.00		0.0	30.0	30.0	13.2	16.79	1.787		
3,900.0	3,900.0	3,900.0	3,900.0	8.6	8.6	90,00		0.0	30.0	30.0	12.8	17.24	1.740		
4,000.0	4,000.0	4,000.0	4,000.0	8.8	8.8	90.00		0.0	30.0	30.0	12.3	17.69	1.696		
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	90.00		0.0	30.0	30.0	11.9	18.14	1.654		
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	90.00		0.0	30.0	30.0	11.4	18.59	1.614		
4,300.0	4,300.0	4,300.0	4,300.0	9.5	9.5	90.00		0.0	30.0	30.0	11.0	19.04	1.576		
4,400.0	4,400.0	4,400.0	4,400.0	9.7	9.7	90.00		0.0	30.0	30.0	10.5	19.49	1.539		
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	90.00		0.0	30.0	30.0	10.1	19.94	1.505 C	c	
4,600.0	4,600.0	4,600.5	4,600.5	10.0	10.2	-166.24		-0.3	29.2	30.0	9,7	20.35	1.476 L	-	
4,700.0	4,700.0	4,701.0	4,700.9	10.4	10.4	-165.59		-1.3	26.7	30.1	9.4	20.71	1.454 L		
4,800.0	4,799.9	4,801.5	4,801.3	10.6	10.6	-164.53		-2.9	22.6	30.3	9.2	21.08	1.437 L		
4,900.0	4,899.7	4,902.0	4,901.6	10.8	10.8	-163.06		-5.1	16.9	30.5	9.1	21.44	1.425 L		
E 000 0	4.000.4	E 000 4	5.001.8	44.0	11.0	104.04			0.5	00.0	0.1	04.04		aug) 2 EC	
5,000.0	4,999.4	5,002.4		11.0	11.0	-161.21		-8.0	9.5	30.9	9.1	21.81		evel 3, ES	
5,100.0	5,098.9	5,102.9	5,101.8	11.2	11.2	-159.00		-11.5	0.4	31.4	9.2	22.17		evel 3, SF	
5,200.0	5,198.3	5,203.4	5;201.6	11.4	11.4	-156.49		-15.6	-10.2	32.0	9.4	22.55	1.419 L		
5,300.0 5,400.0	5,297.4 5,396.3	5,303.8 5,403.7	5,301.1 5,400.2	11.6 11.8	11.7 12.0	-153.73 -151.91		-20.3 -25.3	-22.5	32.8 34.7	9.9 11.4	22.93 23.33	1.430 L 1.487 L		
0,400.0	0,000.0	0,400.7	0,400.2	11.0	12.0	-101.01		20.0	-00.2	54.7	11.4	20.00	1.407 L	01010	
5,500.0	5,494.9	5,503.7	5,499.2	12.1	12.3	-151.56	1	-30.2	-48.0	38.2	14.4	23.72	1.608		
5,600.0	5,593.3	5,603.6	5,598.1	12.3	12.6	-152.38		-35.2	-60.8	43.2	19.0	24.11	1.790		
5,700.0	5,691,2	5,703.3	5,696.9	12.6	12.9	-153.93		-40.1	-73.5	49.7	25.2	24.48	2.031		



Company:

Site Error:

Well Error:

**Reference Site:** 

**Reference Well:** 

**Reference Wellbore** 

**Reference Design:** 

Project:

## EOG Resources, Inc.

Anticollision Report

EOG Resources - Midland Local Co-ordinate Reference: Lea County, NM (NAD 27 NME) **TVD Reference:** MD Reference: North Reference: Survey Calculation Method: Output errors are at Database: **Offset TVD Reference:** 

#### Well #7H

KB = 30 @ 3385.0usft (Cactus 123) KB = 30 @ 3385.0usft (Cactus 123) Grid Minimum Curvature 2.00 sigma EDM 5000.1 Single User Db Reference Datum

Reference Depths are relative to KB = 30 @ 3385.0usft (Cactus 123) Offset Depths are relative to Offset Datum Central Meridian is 104° 20' 0.000 W

Streetcar 15 Fed

0.0 usft

0.0 usft

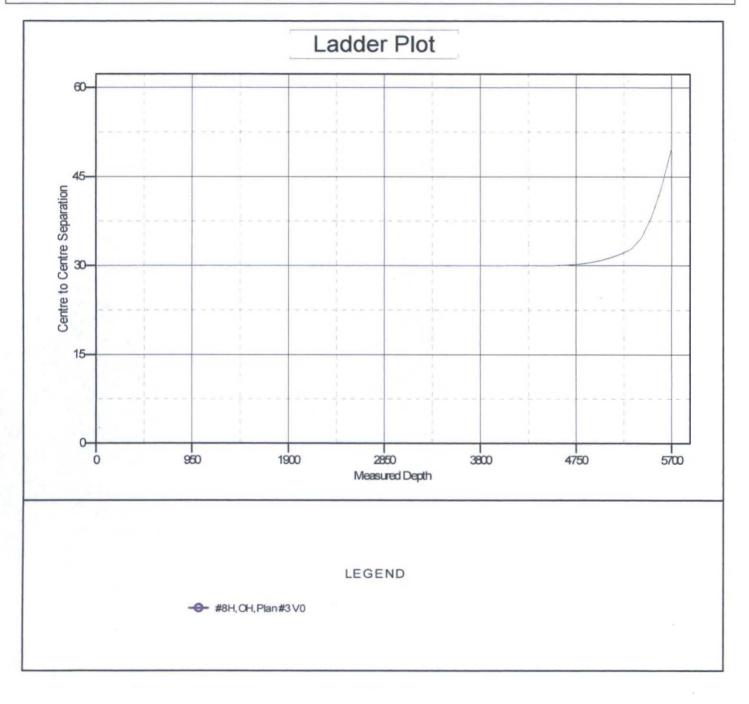
Plan #3

#7H

OH

Coordinates are relative to: #7H Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.41°



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



## EOG Resources, Inc.

Anticollision Report

Company: EOG Resources - Midland Local Co-ordinate Reference: Well #7H Project: Lea County, NM (NAD 27 NME) **TVD Reference:** KB = 30 @ 3385.0usft (Cactus 123) Streetcar 15 Fed KB = 30 @ 3385.0usft (Cactus 123) **Reference Site: MD** Reference: 0.0 usft Grid Site Error: North Reference: #7H Minimum Curvature **Reference Well:** Survey Calculation Method: Well Error: 0.0 usft Output errors are at 2.00 sigma OH **Reference Wellbore** Database: EDM 5000.1 Single User Db Offset TVD Reference: Plan #3 Reference Design: Reference Datum

Reference Depths are relative to KB = 30 @ 3385.0usft (Cactus 123) Offset Depths are relative to Offset Datum Central Meridian is 104° 20' 0.000 W Coordinates are relative to: #7H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30 Grid Convergence at Surface is:  $0.41^\circ$ 

