U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Report 02/23/2021
Well Name: THRASHER 33 FED COM	Well Location: T24S / R34E / SEC 33 / SESW /	County or Parish/State:
Well Number: 703H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Notice of Intent

Type of Submission: Notice of Intent

Date Sundry Submitted: 01/28/2021

Type of Action APD Change

Time Sundry Submitted: 07:22

Date proposed operation will begin: 02/25/2021

Procedure Description: EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes: Change BHL to T-24-S R-34-E Sec 28 100 feet FNL 1650 feet FWL Lea Co, NM

Application

I	eceived by OCD: 2/23/2021 11:49:44 AM Well Name: THRASHER 33 FED COM	Well Location: T24S / R34E / SEC 33 / SESW /	County or Parish/State: Page 2 of	38
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	Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:	
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Section 1 - General								
APD ID: 10400052135	Tie to previous NOS?	N Submission Date: 12/10/20	019					
BLM Office: CARLSBAD	User: Lisa Trascher Title: Regulatory Specialist							
Federal/Indian APD: FED	Is the first lease penetra	ated for production Federal or Indian? FED						
Lease number: NMNM120363	Lease Acres:							
Surface access agreement in place?	Allotted?	Reservation:						
Agreement in place? NO	Federal or Indian agreen	ment:						
Agreement number:								
Agreement name:								
Keep application confidential? Y								
Permitting Agent? NO	APD Operator: EOG RES	SOURCES INCORPORATED						
Operator letter of designation:								

Operator Info

Operator Organization Name: EOG RESOURCES INCORPORATED Operator Address: 1111 BAGBY SKY LOBBY2 Operator PO Box: Operator City: HOUSTON State: TX Operator Phone: (713)651-7000 Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO	Master Development Plan name:									
Well in Master SUPO? NO	Master SUPO name:									
Well in Master Drilling Plan? NO	Master Drilling Plan name:									
Well Name: THRASHER 33 FED COM	Well Number: 703H	Well API Number:								
Field/Pool or Exploratory? Field and Pool	Field Name: WC025 G09Pool Name: WC-025 G-09S253309P;UPPER WOLFCAMPS243336I; UPPER WOLFCAMP									
Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL										

Zip: 77002

Is the proposed well in a Helium production area? N	Use Existing Well Pad? N	New surface disturbance?
Type of Well Pad: MULTIPLE WELL	Multiple Well Pad Name:	Number: 703H, 704H
Well Class: HORIZONTAL	THRASHER 33 FED COM Number of Legs: 1	
Well Work Type: Drill		

Well Type: OIL WELL

Describe Well Type:

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Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Well sub-Type: INFILL Describe sub-type: Distance to town: Distance to nearest well: 33 FT Distance to lease line: 358 FT Reservoir well spacing assigned acres Measurement: 640 Acres Well plat: THRASHER_33_FED_COM_703H_REV2_C_102_signed_20191209101133.pdf Well work start Date: 06/01/2020 Duration: 25 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number:

Vertical Datum: NAVD88

Reference Datum: KELLY BUSHING

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL	358	FSL	167	FW	24S	34E	33	Aliquot	32.16776		LEA			F	NMNM	339	0	0	Y
Leg			9	L				SESW	16	103.4779		MEXI			120363	7			
#1										631		со	со						
KOP	50	FSL	125	FW	24S	34E	33	Aliquot	32.16691		LEA	NEW		F	NMNM	-	118	118	Y
Leg			4	L				SWS	73	103.4793		MEXI			120363	846	70	57	
#1								W		394		со	СО			0			
PPP	0	FSL	125	FW	24S	34E	28	Aliquot	32.18129	-	LEA	NEW	NEW	F	NMNM	-	173	123	Y
Leg			4	L				sws	01	103.4793		MEXI			015684	893	71	34	
#1-1								W		513		со	со			7			
PPP	100	FSL	125	FW	24S	34E	33	Aliquot	32.16705	-	LEA	NEW	NEW	F	NMNM	-	120	120	Y
Leg			4	L				sws	43	103.4793		MEXI			120363	867	90	69	
#1-2								W		369		со	СО			2			

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US Well Number:

Well Status: Approved Application for Permit to Drill

Operator: EOG RESOURCES INCORPORATED

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
EXIT	100	FNL	165	FW	24S	34E	28	Aliquot	32.19552	-	LEA	NEW	NEW	F	NMNM	-	225	123	Y
Leg			0	L				NENW	43	103.4780		MEXI			019452	893	41	34	
#1										856		со	CO			7			
BHL	100	FNL	165	FW	24S	34E	28	Aliquot	32.19552	-	LEA	NEW	NEW	F	NMNM	-	225	123	Y
Leg			0	L				NENW	43	103.4780		MEXI			019452	893	41	34	
#1										856		со	CO			7			

Drilling Plan

Section 1 - Geologic Formations

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1523274	PERMIAN	3397	0	0	ALLUVIUM	NONE	N
1523275	RUSTLER	2310	1087	1087	ANHYDRITE	NONE	N
1523276	TOP SALT	1874	1523	1523	SALT	NONE	N
1523278	BASE OF SALT	-1679	5076	5076	SALT	NONE	N
1523279	LAMAR	-1946	5343	5343	LIMESTONE	NONE	N
1523280	BELL CANYON	-1973	5370	5370	SANDSTONE	NATURAL GAS, OIL	N
1523281	CHERRY CANYON	-2912	6309	6309	SANDSTONE	NATURAL GAS, OIL	N
1523282	BRUSHY CANYON	-4454	7851	7851	SANDSTONE	NATURAL GAS, OIL	N
1523277	BONE SPRING LIME	-5767	9164	9164	LIMESTONE	NONE	N
1523283	FIRST BONE SPRING SAND	-6848	10245	10245	SANDSTONE	NATURAL GAS, OIL	N
1523287	BONE SPRING 2ND	-7284	10681	10681	SANDSTONE	NATURAL GAS	N
1523288	BONE SPRING 3RD	-8432	11829	11829	SANDSTONE	NATURAL GAS	N
1523289	WOLFCAMP	-8838	12235	12235	SANDSTONE	NATURAL GAS	N

Section 2 - Blowout Prevention

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Pressure Rating (PSI): 10M

Rating Depth: 12334

Equipment: The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. A multi-bowl wellhead system will be utilized. After running the 9-5/8 surface casing, a 9-5/8 BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10,000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2 The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 10,000 psi. The multi-bowl wellhead will be installed by vendors representative(s). A copy of the installation instructions for the Cactus Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM. The wellhead will be installed by a third party welder while being monitored by WH vendors representative. All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type. A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi. Casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater. **Requesting Variance?** YES

Variance request: Variance is requested to waive the centralizer requirements for the 7-5/8" FJ casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation. Variance is also requested to waive any centralizer requirements for the 5-1/2" FJ casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation. Variance is also requested to waive the annular clearance requirements for the 5-1/2" casing by 7-5/8" casing annulus to the proposed top of cement. EOG requests permission to allow deviation from the 0.422" annulus clearance requirement from Onshore Order #2 under the following conditions: - Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casing strings. - Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section. Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line). Variance is requested to use a 5,000 psi annular BOP with the 10,000 psi BOP stack.

Testing Procedure: Pipe rams and blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

Choke Diagram Attachment:

10_M_Choke_Manifold_20191007124219.pdf

- Co_Flex_Hose_Test_Chart_20191007124213.pdf
- Co_Flex_Hose_Certification_20191007124213.pdf

BOP Diagram Attachment:

10_M_BOP_Diagram_9.675_in_20191007124235.pdf

EOG_BLM_10M_Annular_Variance____9.675_in_20191007124235.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	
1	SURFACE	12.2 5	9.625	NEW	API	N	0	1180	0	1180	3397	2217	1180	J-55	40	LT&C	1.12 5	1.25	BUOY	1.6	BUOY	1

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Lease Number: NMNM120363

Unit or CA Name:

Unit or CA Number:

US Well Number:

Well Status: Approved Application for Permit to Drill

Operator: EOG RESOURCES INCORPORATED

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	-
2	PRODUCTI ON	6.75	5.5	NEW	API	N	0	10855	0	10855	3675	-7458	10855	OTH ER			1.12 5	1.25	BUOY	1.6	BUOY	1.
3	PRODUCTI ON	6.75	5.5	NEW	API	N	10855	11355	10855	11355	-7447	-7958		OTH ER		OTHER - VAM SFC	1.12 5	1.25	BUOY	1.6	BUOY	1.
4	INTERMED IATE	8.75	7.625	NEW	API	N	0	11355	0	11355		-7958		HCP -110		OTHER - FXL	1.12 5	1.25	BUOY	1.6	BUOY	1.
5	PRODUCTI ON	6.75	5.5	NEW	API	N	11355	22549	11355	12334	-7947	-8937	11194	OTH ER		OTHER - DWC/C-IS MS	1.12 5	1.25	BUOY	1.6	BUOY	1.

Casing Attachments

Casing ID: 1 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Thrasher_33_Fed_Com_703H_Permit_Info_REV1_20200228100553.pdf

Casing ID: 2 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

5.500in_20.00_VST_P110EC_DWC_C_IS_MS_Spec_Sheet_20191209100154.pdf

See_previously_attached_Drill_Plan_20191209100154.pdf

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Casing Attachments

Casing Attachments
Casing ID: 3 String Type: INTERMEDIATE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
7.625in_29.70_P110HC_FXL_20191209101511.pdf
See_previously_attached_Drill_Plan_20191209093349.pdf
Casing ID: 4 String Type: PRODUCTION
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
See_previously_attached_Drill_Plan_20191209101545.pdf
5.500in_20.00_VST_P110EC_VAM_SFC_20191209101545.pdf
Casing ID: 5 String Type: PRODUCTION
Inspection Document:
Shoo Dooumantu
Spec Document:
Taparad String Space
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
vasing besign Assumptions and worksneeds.

 $5.500 in_20.00_VST_P110EC_DWC_C_IS_MS_Spec_Sheet_20191209101534.pdf$

See_previously_attached_Drill_Plan_20191209101534.pdf

Section 4 - Cement

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				Ur	Unit or CA Name:						Unit or CA Number:		
US Well Numbe	r:				ell Stat ermit to		oproved	d Applic	cation		Operator: INCORPOR	EOG RESOURCES RATED	
String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%		Cement type	Additives	
PRODUCTION	Lead	_	0	0	0	0	0	0		na		na	
	1				1		1						
PRODUCTION	Lead		0	0	0	0	0	0		NA		NA	

SURFACE	Lead	0	980	1040	1.73	13.5	1799	25	Class C	Lead: Class C + 4.0% Bentonite + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)
SURFACE	Tail	980	1180	80	1.34	14.8	107.2	25	Class C	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 980')
INTERMEDIATE	Lead	0	7800	1000	2.29	12.7	2300	25	Class C	Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
INTERMEDIATE	Tail	780	0 1135 5	450	1.11	14.2	499.5	25	Class C	Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 7,800')
PRODUCTION	Lead	108 5	5 2254 9	940	1.31	14.2	1231. 4	25	Class H	Class H + 0.4% Halad- 344 + 0.35% HR-601 + 3% Microbond (TOC @ 10,855')

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: ((A) A kelly cock will be kept in the drill string at all times. (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times. (C) H2S monitoring and detection equipment will be utilized from surface casing point to TD. **Describe the mud monitoring system utilized:** The highest mud weight needed to balance formation is expected to be 11.5 ppg. In order to maintain hole stability, mud weights up to 14.0 ppg may be utilized. An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate. Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at

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the wellsite at all times.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (Ibs/cu ft)	Gel Strength (lbs/100 sqft)	Н	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1180	1135 5	SALT SATURATED	10	10.2							
0	1180	WATER-BASED MUD	8.6	8.8							
1135 5	1186 9	OIL-BASED MUD	8.7	9.4							
1186 9	1233 4	OIL-BASED MUD	10	14		\geq					

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Open-hole logs are not planned for this well.

List of open and cased hole logs run in the well: DIRECTIONAL SURVEY,

Coring operation description for the well:

None

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 8969

Anticipated Surface Pressure: 6255

Anticipated Bottom Hole Temperature(F): 194

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Thrasher_33_Fed_Com_703H_H2S_Plan_Summary_20191209101710.pdf

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Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Thrasher_33_Fed_Com_703H_Wall_Plot_20191209101728.pdf

Thrasher_33_Fed_Com_703H_Planning_Report_20191209101729.pdf

Other proposed operations facets description:

(A) EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the Surface Rig will move off so the wellhead can be installed. A welder will cut the casing to the proper height and weld on the wellhead (both A and B sections). The weld will be tested to 1000 psi. All valves will be closed and a wellhead cap will be installed (diagram attached). If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

Other proposed operations facets attachment:

Thrasher_33_Fed_Com_703H_Rig_Layout_20191209101738.pdf 5.500in_20.00_VST_P110EC_DWC_C_IS_MS_Spec_Sheet_20191007130059.pdf 5.500in_20.00_VST_P110EC_VAM_SFC_20191007130059.pdf 7.625in_29.70_P110HC_FXL_20191007130059.pdf Wellhead_9.675_in_20191007130059.pdf Thrasher_33_Fed_Com_703H_Permit_Info_REV1_20200228100624.pdf

Other Variance attachment:

10_M_BOP_Diagram_9.675_in_20191007130119.pdf Co_Flex_Hose_Certification_20191007130119.pdf Co_Flex_Hose_Test_Chart_20191007130119.pdf EOG_BLM_10M_Annular_Variance____9.675_in_20191007130120.pdf

SUPO

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

THRASHER_33_FED_COM_703H_REV2_Vicinity_20191209101818.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

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Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

SK_THRASHER_33_FED_COM_OVERALL_REV3_20191209094123.pdf THRASHER_33_FED_COM_703H_REV2_Wellsite_20191209101833.pdf THRASHER_33_FED_COM_703H_REV2_Padsite_20191209101834.pdf **New road type:** RESOURCE

Feet

Length: 479

Width (ft.): 30

Max slope (%): 2

Max grade (%): 20

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 25

New road access erosion control: Newly constructed or reconstructed roads 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. We plan to grade and water twice a year. **New road access plan or profile prepared?** N

New road access plan attachment:

Access road engineering design? N

Access road engineering design attachment:

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: 6" of Compacted Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: An adequate amount of topsoil/root zone will be stripped by dozer from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram / survey plat. **Access other construction information:**

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: No drainage crossings

Road Drainage Control Structures (DCS) description: N/A

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

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US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

THRASHER_33_FED_COM_703H_REV2_Radius_20191209101859.pdf

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Thrasher 33 Fed Com Central Tank Battery is located in the S/2 of Section 33.

Production Facilities map:

BO_THRASHER_33_FED_COM_CTB_20191209143647.PDF EP_BALD_EAGLE_LGL_TO_THRASHER_SEC_28_PRIVATE_1_20191209094352.pdf EP_BALD_EAGLE_LGL_TO_THRASHER_SEC_28_PRIVATE_2_20191209094352.pdf EP_BALD_EAGLE_LGL_TO_THRASHER_SEC_29_20191209094352.pdf EP_BALD_EAGLE_LGL_TO_THRASHER_SEC_33_20191209094352.pdf EP_THRASHER_33_FED_COM_CTB_ROAD_1_S_20191209094351.pdf EP_THRASHER_33_FED_COM_GAS_TAKEAWAY_SEC_33_1_S_20191209094351.pdf EP_THRASHER_33_FED_COM_OHE_SEC_33_1_S_20191209094352.pdf EP_THRASHER_33_FED_COM_OHE_SEC_33_1_S_20191209094353.pdf SK_THRASHER_33_FED_COM_OVERALL_REV3_20191209094352.pdf EP_THRASHER_33_FED_COM_OVERALL_REV3_20191209094352.pdf EP_THRASHER_33_FED_COM_OVERALL_REV3_20191209094352.pdf EP_THRASHER_33_FED_COM_703H_704H_FL_S_20191209101926.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: RECYCLED

Water source use type:

OTHER

Describe use type: Water will be supplied from the fra water source map. This location will be drilled using a c (outlined in the drilling program). The water will be obta in the area or recycled treated water and hauled to loca using existing and proposed roads depicted on the prop these cases where a poly pipeline is used to transport f proper authorizations will be secured by the contractor.

Source longitude:

Source latitude:	
Source datum:	
Water source permit type:	WATER RIGHT
Water source transport method:	TRUCKING
	PIPELINE

eceived by OCD: 2/23/2021 11:49:44 AM Well Name: THRASHER 33 FED CON	M Well Location: T24S / R34E / SEC 33 / SESW /	County or Parish/State: Page 13 o		
Well Number: 703H	Type of Well: OIL WELL	Allottee or Tribe Name:		
Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:		
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED		
Source land ownership: FEDERAL				
Source transportation land ownersh	ip: FEDERAL			
Water source volume (barrels): 0	Source vo	lume (acre-feet): 0		
Source volume (gal): 0				
Water source comments: New water well? N New Water Well Inf	io			
Well latitude:		ell datum:		
Well target aquifer:				
Est. depth to top of aquifer(ft):	Est thickness of aquifer:			
Aquifer comments:				
Aquifer documentation:				
Vell depth (ft):	Well casing type:			
Vell casing outside diameter (in.):	Well casing inside diameter (in	.):		
New water well casing?	Used casing source:			
Drilling method:	Drill material:			
Grout material:	Grout depth:			
Casing length (ft.):	Casing top depth (ft.):			
Well Production type:	Completion Method:			
Nater well additional information:				
State appropriation permit:				
Additional information attachment:				
Section 6 - Construction	n Materials			

Using any construction materials: YES

Construction Materials description: Caliche will be supplied from pits shown on the attached caliche source map. Caliche utilized for the drilling pad will be obtained either from an existing approved mineral pit, or by 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

Received by OCD: 2/23/2021 11:49:44 AM Well Name: THRASHER 33 FED COM	Well Location: T24S / R34E / SEC 33 / SESW /	County or Parish/State: Page 14 of 38
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US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

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. **Construction Materials source location attachment:**

Water_and_Caliche_Map_20191209094550.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill 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. Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly. Human waste and grey water will be properly contained of and disposed of properly. 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. **Amount of waste:** 0 barrels

Waste disposal frequency : Daily

Safe containment description: Steel Tanks

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL FACILITY

Disposal type description:

Disposal location description: Trucked to NMOCD approved disposal facility

Reserve Pit

Reserve pit width (ft.)

Reserve Pit being used? N

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings locationClosed Loop System. Drill cuttings will be disposed of into steel tanks and taken to anNMOCD approved disposal facility.Cuttings area length (ft.)Cuttings area length (ft.)Cuttings area width (ft.)

Cuttings area depth (ft.)

outtings area wiuth (it.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

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US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Thrasher_33_Fed_Com_703H_Rig_Layout_20191209101753.pdf THRASHER_33_FED_COM_703H_REV2_Padsite_20191209101806.pdf THRASHER_33_FED_COM_703H_REV2_Wellsite_20191209101806.pdf **Comments:** Exhibit 2A-Wellsite & Exhibit 2B-Padsite Rig Layout Exhibit 4

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: THRASHER 33 FED COM Multiple Well Pad Number: 703H, 704H

Recontouring attachment:

THRASHER_33_FED_COM_703H_REV2_Reclamation_20191209102004.pdf

Drainage/Erosion control construction: Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

Drainage/Erosion control reclamation: The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

Well pad proposed disturbance	Well pad interim reclamation (acres): 0	Well pad long term disturbance
(acres): 0 Road proposed disturbance (acres): 0	Road interim reclamation (acres): 0	(acres): 0 Road long term disturbance (acres): 0
Powerline proposed disturbance (acres): 0 Pipeline proposed disturbance (acres): Other proposed disturbance (acres): 0	Powerline interim reclamation (acres): 0 Pipeline interim reclamation (acres): 0 Other interim reclamation (acres): 0	(acres): 0
Total proposed disturbance: 0		Total long term disturbance: 0

Disturbance Comments: All Interim and Final reclamation must be within 6 months. Interim must be within 6 months of completion and final within 6 months of abandonment plugging. Dual pad operations may alter timing.

Reconstruction method: 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. Areas planned for interim reclamation will 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

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Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts and 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. **Soil treatment:** Re-seed according to BLM standards. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion is controlled.

Existing Vegetation at the well pad: 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 respreads 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.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the 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. **Existing Vegetation Community at the road attachment:**

Existing Vegetation Community at the pipeline: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the 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. **Existing Vegetation Community at the pipeline attachment:**

Existing Vegetation Community at other disturbances: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the 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. **Existing Vegetation Community at other disturbances attachment:**

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? ${\sf N}$

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

eceived by OCD: 2/23/2021 11:49:44 AM Well Name: THRASHER 33 FED COM	Well Location: T24S / R34E / SEC 33 / SESW /	County or Parish/State: Page 17 of
Well Number: 703H	Type of Well: OIL WELL	Allottee or Tribe Name:
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US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED
Seed Management Seed Table		
Seed Summary	Total pounds/Acre:	
Seed Type Pound	s/Acre	
Seed reclamation attachment:		
Operator Contact/Responsi	ble Official Contact Info	
First Name:	Last Name:	
Phone:	Email:	
Seedbed prep:		

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds. Weeds will be treated if found. Weed treatment plan attachment:

Monitoring plan description: Reclamation will be completed within 6 months of well plugging. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds.

Monitoring plan attachment:

Success standards: N/A

Pit closure description: NA

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD Describe: Surface Owner: Other surface owner description: BIA Local Office: BOR Local Office: COE Local Office: DOD Local Office:

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US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED
NPS Local Office:		
State Local Office:		
Military Local Office:		
USFWS Local Office:		
Other Local Office:		

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Use APD as ROW?

Section 12 - Other Information

Right of Way needed? N ROW Type(s):

ROW Applications

SUPO Additional Information: Onsite meeting 08/16/2018. See attached SUPO Plan.Use a previously conducted onsite? NPrevious Onsite information:

Other SUPO Attachment

Gas_Capture_Lucid_Enterprise_Regency_THRASHER_33_FC_700_SERIES_20191209094822.pdf THRASHER_33_FED_COM_703H_REV2_Location_20191209102027.pdf SUPO_THRASHER_33_FED_COM_703H_20191209102054.pdf

PWD

Received by OCD: 2/23/2021 11:49:44 AM Well Name: THRASHER 33 FED COM	Well Location: T24S / R34E / SEC 33 / SESW /	County or Parish/State: Page 19 of 38
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Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? N Produced Water Disposal (PWD) Location: **PWD** surface owner: Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit specifications: Pit liner description: Pit liner manufacturers information: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule attachment: Lined pit reclamation description: Lined pit reclamation attachment: Leak detection system description: Leak detection system attachment: Lined pit Monitor description: Lined pit Monitor attachment: Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment:

PWD disturbance (acres):

I	eceived by OCD: 2/23/2021 11:49:44 AM Well Name: THRASHER 33 FED COM	Well Location: T24S / R34E / SEC 33 / SESW /	County or Parish/State: Page 20 of 3	18
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	Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:	
	US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES	
			INCOM CITED	

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres):

PWD surface owner:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? $\ensuremath{\mathbb{N}}$

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Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:		
US Well Number:	Well Status: Approved Application Permit to Drill	on for Operator: EOG RESOURCES INCORPORATED		
Produced Water Disposal (PWD) Location	1:			
PWD surface owner:	PWD distu	rbance (acres):		
Injection PWD discharge volume (bbl/day):			
Injection well mineral owner:				
Injection well type:				
Injection well number:	Injection v	vell name:		
Assigned injection well API number?	Injection v	vell API number:		
Injection well new surface disturbance (a	cres):			
Minerals protection information:				
Mineral protection attachment:				
Underground Injection Control (UIC) Permit?				
UIC Permit attachment:				
Section 5 - Surface Discharge				
Would you like to utilize Surface Discharge PWD options? N				
Produced Water Disposal (PWD) Location:				
PWD surface owner:		rbance (acres):		
Surface discharge PWD discharge volume (bbl/day):				
Surface Discharge NPDES Permit?				
Surface Discharge NPDES Permit attachment:				
Surface Discharge site facilities information				
Surface discharge site facilities map:				
Section 6 - Other				
Would you like to utilize Other PWD optic	ons? N			
Produced Water Disposal (PWD) Location:				
		rbance (acres):		
PWD surface owner:	PWD distu			
	PWD distu			
Other PWD discharge volume (bbl/day):	PWD distu			
Other PWD discharge volume (bbl/day): Other PWD type description:	PWD distu			
PWD surface owner: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been				
Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment:	met?			

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Lease Number: NMNM120363	Unit or CA Name:	Unit or CA Number:
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Operator Certification

I hereby 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 which currently 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.

NAME: Lisa Trascher		Signed on: 01/28/2021
Title: Regulatory Specialist		
Street Address: 5509 Champions	s Drive	
City: Midland	State: TX	Zip: 79706
Phone: (432)247-6331		
Email address: lisa_trascher@ed	ogresources.com	
Field Representative	e	
Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

NOI Attachments Procedure Description Thrasher_33_Fed_Com_703H_Wall_Plot_20210128065427.pdf

Thrasher_33_Fed_Com_703H_Planning_Report_20210128065415.pdf

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Thrasher_33_Fed_Com_703H_Permit_Info___Revised_BHL_1.26.2021_20210128065415.pdf

THRASHER_33_FED_COM_703H_C_102_20210128065403.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature	: HARRELL	Signed on: JAN 28, 2021 07:21 AM
Name: EOG RESOURCES INC	ORPORATED	
Title: Regulatory Specialist		
Street Address: NOT ENTERE	D	
City: NOT ENTERED	State: NOT ENTERED	
Phone: (303) 572-9000		
Email address: NOT ENTERE)	
Field Representative		
Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved Signature: Chris Walls BLM POC Title: Petroleum Engineer BLM POC Email Address: cwalls@blm.gov Disposition Date: 02/23/2021 District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District III 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

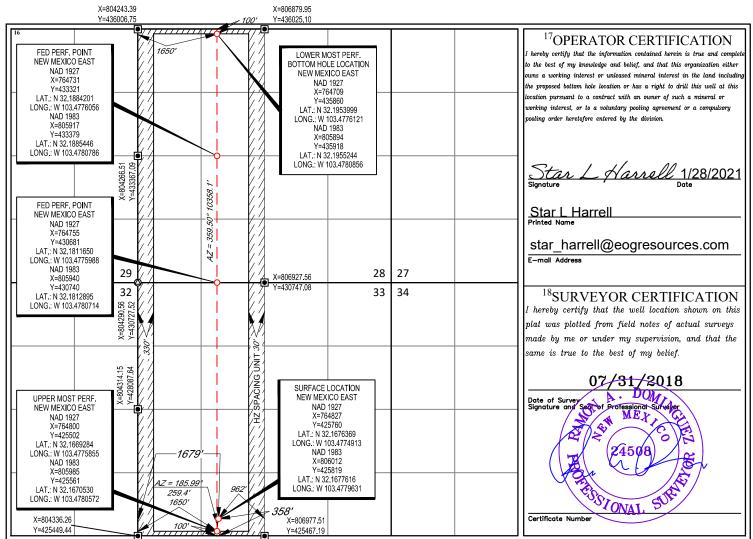
FORM C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	¹ API Number 025-483								fcamp	
⁴ Property C				тн	⁵ Property N RASHER 33			6	Well Number 703H	
329968 ⁷ 0GRID M 7377			⁸ Operator Name EOG RESOURCES, INC. 3397'							
	¹⁰ Surface Location									
UL or lot no. N	Section 33	Township 24–S				East/West line WEST	County LEA			
			¹¹ E	Bottom Ho	le Location If D	Different From Su	rface			
UL or lot no. D	Section 28	Township 24–S	Range 34–E	Lot Idn —	Feet from the 100'	North/South line NORTH	Feet from the 1650'	East/West line WEST	County	
¹² Dedicated Acres 640.00	¹³ Joint or 1	Infill ¹⁴ Cor	solidation Cod	le ¹⁵ Ord	er No.					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Released to Imaging: 3/5/2021 8:27:19 AM SISURVEYIEOG_MIDLAND/THRASHER_33_FED_COM/FINAL_PRODUCTSILO_THRASHER_33_FED_COM_703H_REV3.DWG 12/16/2020 7:57:26 PM csr

Revised Permit Information 1/26/2021:

Well Name: Thrasher 33 Fed Com #703H

Location:

SHL: 358' FSL & 1679' FWL, Section 33, T-24-S, R-34-E, Lea Co., N.M. BHL: 100' FNL & 1650' FWL, Section 28, T-24-S, R-34-E, Lea Co., N.M.

Design A

Casing	Program :
--------	------------------

Hole	0	Csg				DF _{min}	DF _{min}	DF _{min}
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
12.25"	0'-1,180'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
8.75"	0' – 11,355'	7.625"	29.7#	HCP-110	FXL	1.125	1.25	1.60
6.75"	0'-10,855'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			
6.75"	10,855'-11,355'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.60
6.75"	11,355' – 22,541'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
					MS			

Variance is requested to wave the centralizer requirements for the 7-5/8" casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to wave any centralizer requirements for the 5-1/2" casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

EOG requests variance to allow deviation from the 0.422'' annulus clearance requirement from Onshore Order #2 under the following conditions:

- Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casing strings.
- Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

	No.	Wt.	Yld	
Depth	Sacks	ppg	Ft ³ /sk	Slurry Description
1,180'	330	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl ₂ + 0.25
9-5/8"				lb/sk Cello-Flake (TOC @ Surface)
	100	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2%
				Sodium Metasilicate (TOC @ 980')
11,355'	440	14.2	1.11	1 st Stage (Tail): Class C + 0.6% Halad-9 + 0.45% HR-601 +
7-5/8"				3% Microbond (TOC @ 7,650')
	1,290	14.8	1.5	2 nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1%
				PreMag-M + 6% Bentonite Gel (TOC @ surface)
22,541'	990	14.2	1.31	Lead: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3%
5-1/2"				Microbond (TOC @ 10,855')

Cement Program:

Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	Expansive agent
Pre-Mag-M	Expansive agent
Sodium Chloride	Accelerator
FL-62	Fluid loss control
Halad-344	Fluid loss control
Halad-9	Fluid loss control
HR-601	Retarder
Microbond	Expansive Agent

EOG requests variance from minimum standards to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated TOC at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary a top out consisting of 1,000 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. Top of cement will be verified by Echo-meter.

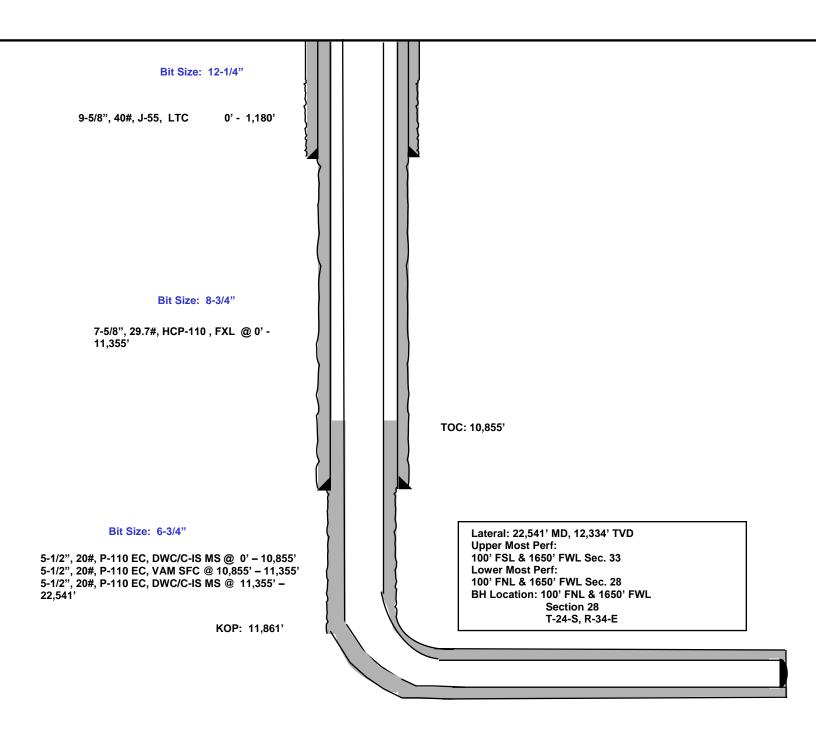
EOG will include the final fluid top verified by Echo-meter and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

EOG will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Depth	Туре	Weight (ppg)	Viscosity	Water Loss
0 - 1,180'	Fresh - Gel	8.6-8.8	28-34	N/c
1,180' – 11,355'	Brine	10.0-10.2	28-34	N/c
11,355' – 11,861'	Oil Base	8.7-9.4	58-68	N/c - 6
11,861' – 22,541'	Oil Base	10.0-14.0	58-68	3 - 6
Lateral				

Mud Program:

358' FSL		KB: 3,422'
1679' FWL	Revised Wellbore	GL: 3,397'
Section 33		
T-24-S, R-34-E	API: 30-025-48374	



eived by OCD: 2/23/2021 11:49:44 AM

400-

800-

1200-

1600-

2000-

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leogresources



To convert a Magnetic Direction to a Grid Direction, Add 6.09° To convert a Magnetic Direction to a True Direction, Add 6.54° East To convert a True Direction to a Grid Direction, Subtract 0.46°

169.5

4921.0

4921.6

7560.0

7561.0

10099.0

-29.6

-72.0

-72.0

-95.0

-95.0

-118.0

12.00

0.00

2.00

0.00

2.00

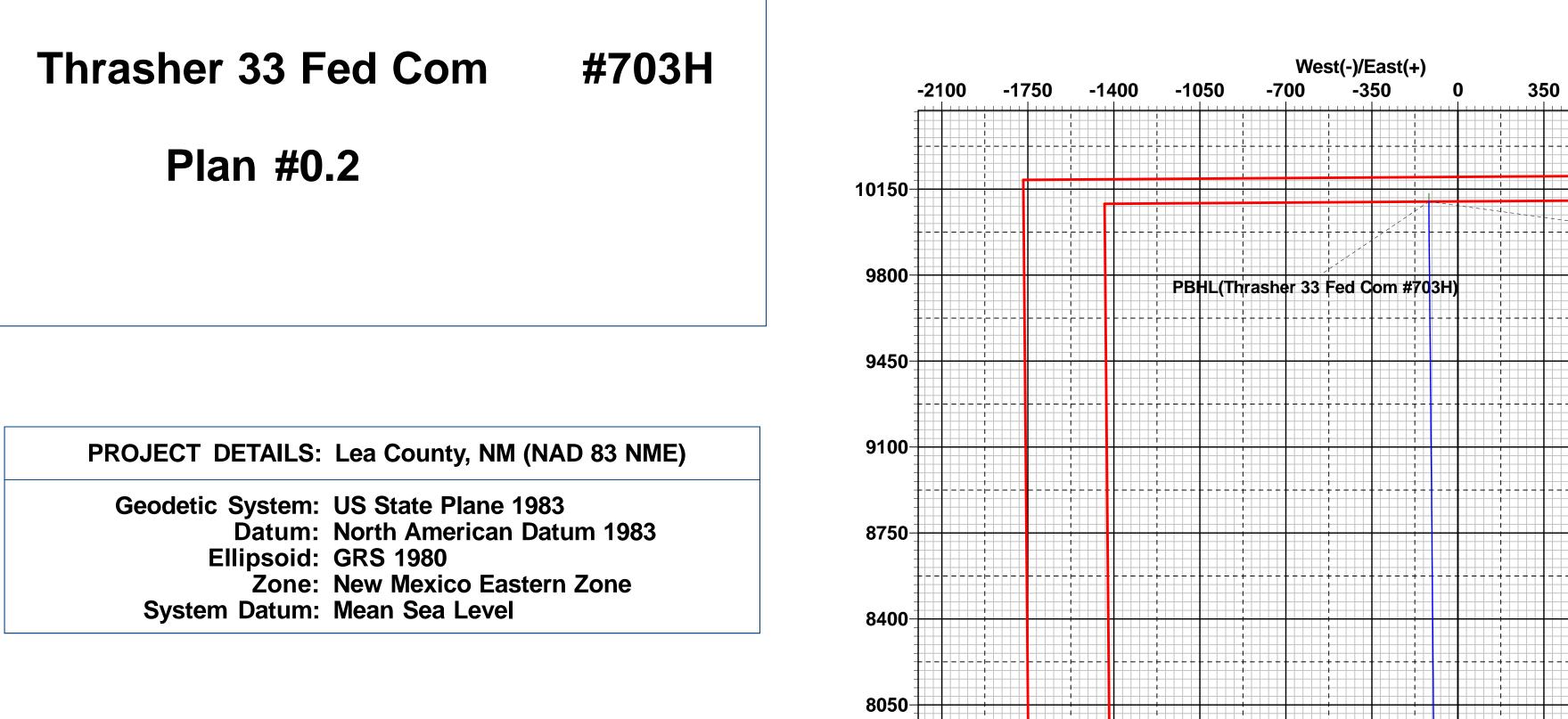
0.00

Lea County, NM (NAD 83 NME)

Fed Perf(Thrasher 33 Fed Com #703H)

Fed Perf2(Thrasher 33 Fed Com #703H)

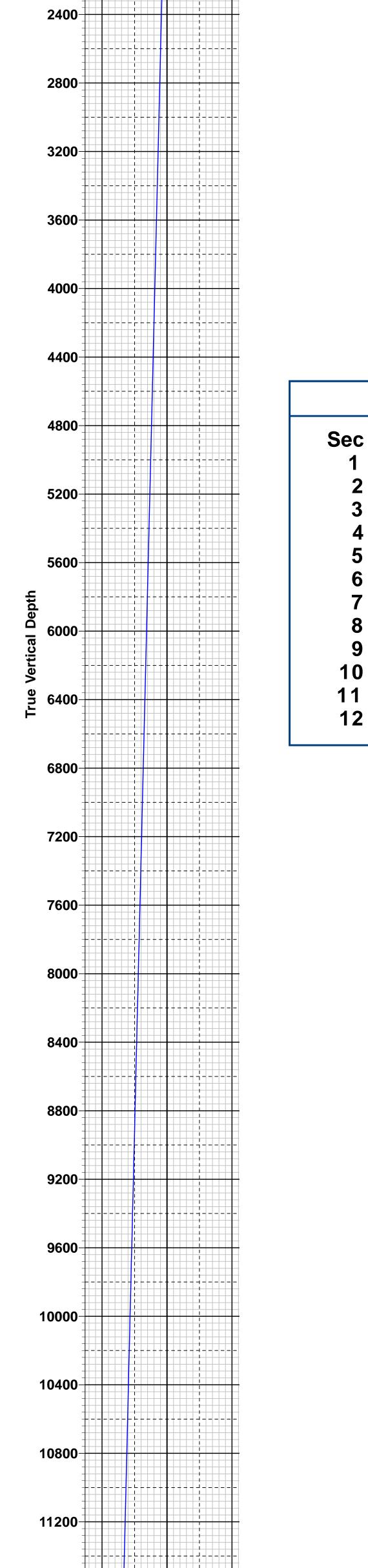
PBHL(Thrasher 33 Fed Com #703H)



1050

Thrasher 33 Fed Com/#703H/

700



						DETAILS: #			
						DETAILS. #	-703П		_
							3397.0		
			North	aina		KB = 25' @ 3			
			Nortl 4258	19.00		sting)12.00	Latittude 32.1677629°N	Longitude 103.4779645°W	
					SECTION	I DETAILS			
Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	-	
0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0		
1.64	185.01	1082.2	-1.2	-0.1	2.00	185.01	-1.2		
1.64	185.01	11774.3	-306.8	-26.9	0.00	0.00	-306.5		
0.00	0.00	11856.5	-308.0	-27.0	2.00	180.00	-307.7	KOP(Thrasher 33	Fed Com #703H)
26.46	0.00	12069.2	-258.0	-27.0	12.00	0.00	-257.7	FTP(Thrasher 33 I	Fed Com #703H)
						·		-	-

-0.57

0.00

86.85

0.00

-90.00

0.00

169.8

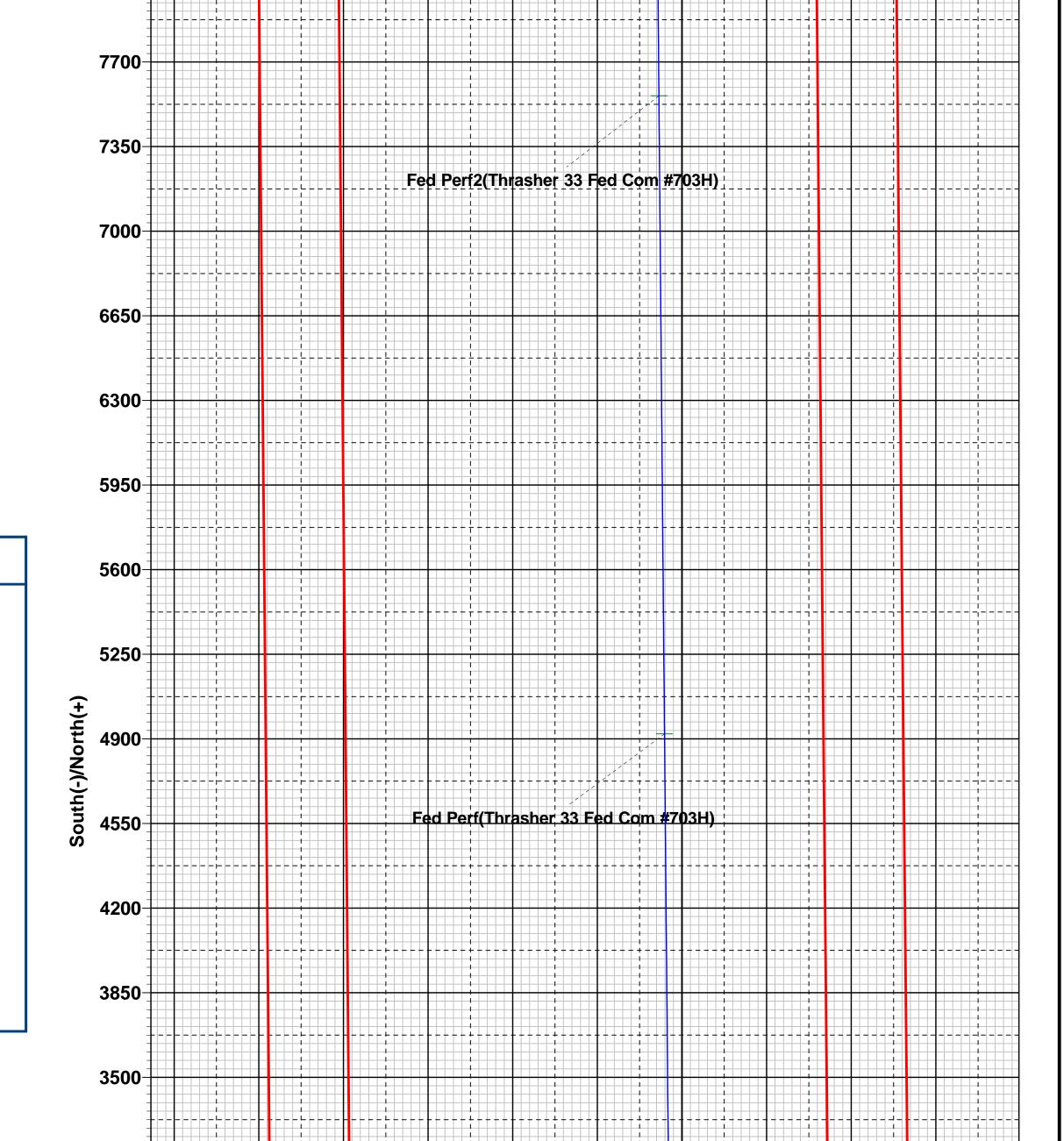
4921.5

4922.1

7560.6

7561.6

10099.7



No casing data is available

MD

0.0

1000.0

1082.2

11778.7

11860.9

12081.4

12610.9

17362.6

17363.2

20001.7

20002.7

22540.8

90.00

90.00

90.00

90.00

90.00

90.00

359.49

359.49

359.50

359.50

359.48

359.48

12333.9

12334.0

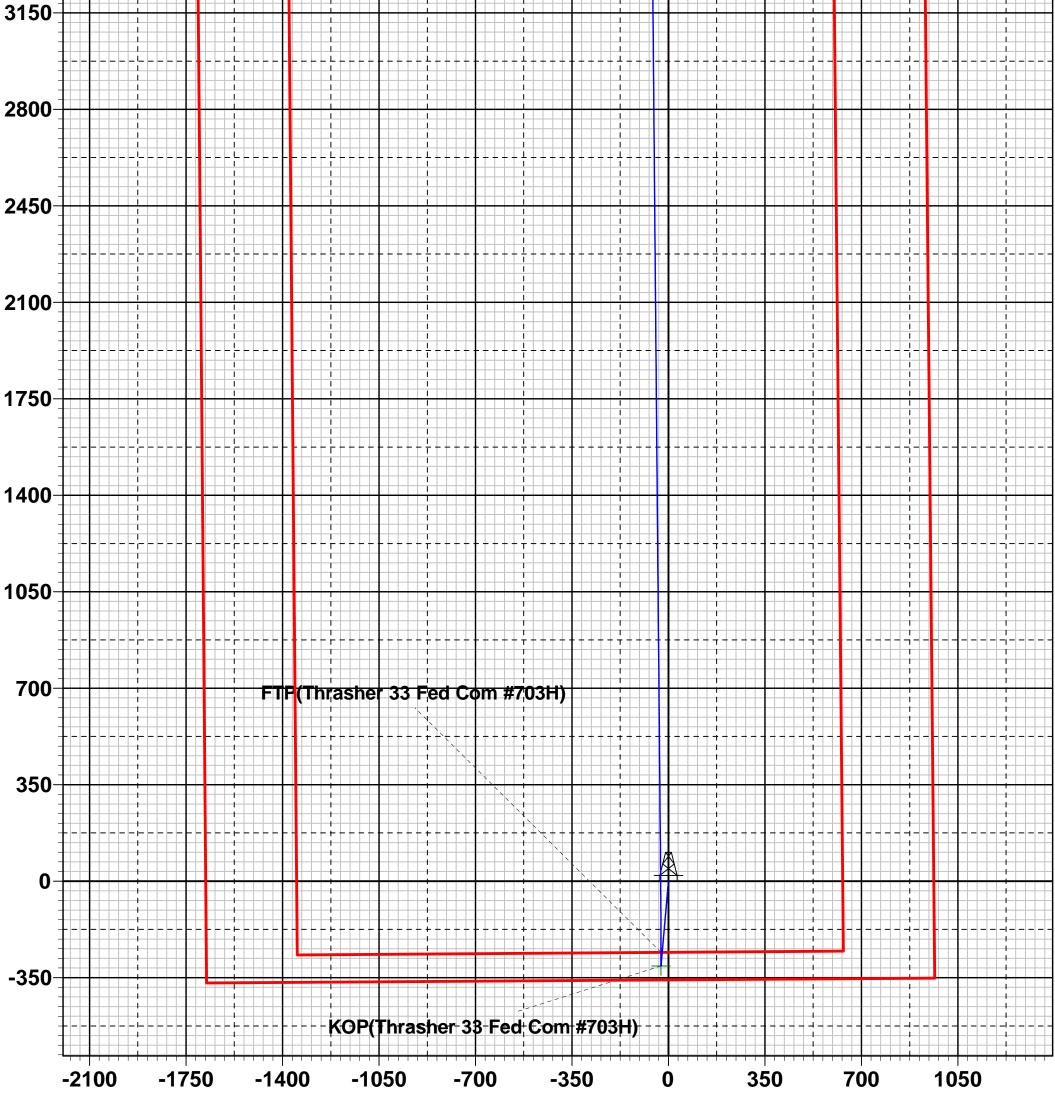
12334.0

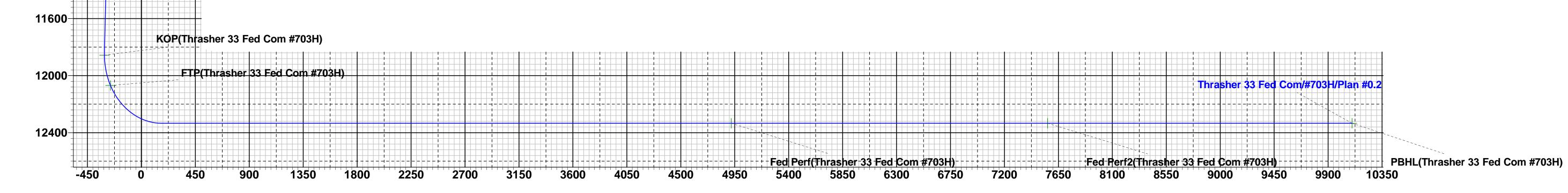
12334.0

12334.0

12334.0

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Thrasher 33 Fed Com #703H)	11856.5	-308.0	-27.0	425511.00	805985.00
FTP(Thrasher 33 Fed Com #703H)	12069.2	-258.0	-27.0	425561.00	805985.00
Fed Perf(Thrasher 33 Fed Com #703H)	12334.0	4921.0	-72.0	430740.00	805940.00
Fed Perf2(Thrasher 33 Fed Com #703H)	12334.0	7560.0	-95.0	433379.00	805917.00
PBHL(Thrasher 33 Fed Com #703H)	12334.0	10099.0	-118.0	435918.00	805894.00





Vertical Section at 359.33°





Lea County, NM (NAD 83 NME) Thrasher 33 Fed Com #703H OH Plan #0.2 14:59, January 18 2021



EOG Resources - Midland

Lea County, NM (NAD 83 NME) Thrasher 33 Fed Com #703H

OH

Plan: Plan #0.2

Standard Planning Report

18 January, 2021



Planning Report

Database: Company: Project: Site: Well: Wellbore: Design:		rces - Midland NM (NAD 83 NI Fed Com	ME)	TVD Refere MD Referer North Refer	ice:	Well #703H KB = 25' @ 3 KB = 25' @ 3 Grid Minimum Cu	3422.0usft	
Project	Lea County, N	NM (NAD 83 NM	E)					
Geo Datum:	US State Plane North American New Mexico Ea	Datum 1983		System Datu	m:	Mean Sea Lev	el	
Site	Thrasher 33 F	ed Com						
Site Position: From: Position Uncertainty:	Мар	0.0 usft	Northing: Easting: Slot Radius:	,	54.00 usft Latitu 62.00 usft Longi 13-3/16 " Grid C			32.1673322°I 103.4813617°V 0.45
Well	#703H							
Well Position	+N/-S +E/-W	165.0 usft 1,050.0 usft	Northing: Easting:		425,819.00 usft 806,012.00 usft	Latitude: Longitude:		32.1677629°l 103.4779645°V
Position Uncertainty		0.0 usft	Wellhead Ele	vation:		Ground Level:		3,397.0 us
Wellbore	OH							
Magnetics	Model Na	ime	Sample Date	Declinati (°)	on	Dip Angle (°)		Field Strength (nT)
	IGI	RF2020	1/18/2021		6.54	59.88	3	47,512.47693624
Design	Plan #0.2							
Audit Notes: Version:			Phase:	PLAN	Tie On De	pth:	0.0	
Vertical Section:			rom (TVD) sft)	+N/-S (usft)	+E/-W (usft)	-	Direction (°)	
		C	0.0	0.0	0.0		359.33	
Plan Survey Tool Prog	gram	Date 1/18/2	.021					
Depth From (usft)	Depth To (usft)	Survey (Wellbo		Tool Name	Ren	narks		
1 0.0	22,540.8	Plan #0.2 (OH)		MWD OWSG MWD - :	Standard			

Released to Imaging: 3/5/2021 8:27:19 AM



Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3422.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3422.0usft
Site:	Thrasher 33 Fed Com	North Reference:	Grid
Well:	#703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #0.2		

Plan Sections

Target	TFO (°)	Turn Rate (°/100usft)	Build Rate (°/100usft)	Dogleg Rate (°/100usft)	+E/-W (usft)	+N/-S (usft)	Vertical Depth (usft)	Azimuth (°)	Inclination (°)	Measured Depth (usft)
J	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
)	0.00	0.00	0.00	0.00	0.0	0.0	1,000.0	0.00	0.00	1,000.0
	185.01	0.00	2.00	2.00	-0.1	-1.2	1,082.2	185.01	1.64	1,082.2
)	0.00	0.00	0.00	0.00	-26.9	-306.8	11,774.3	185.01	1.64	11,778.7
KOP(Thrasher 33 Fe	180.00	0.00	-2.00	2.00	-27.0	-308.0	11,856.5	0.00	0.00	11,860.9
FTP(Thrasher 33 Fe	0.00	0.00	12.00	12.00	-27.0	-258.0	12,069.2	0.00	26.46	12,081.4
,	-0.57	-0.10	12.00	12.00	-29.6	169.5	12,333.9	359.49	90.00	12,610.9
Fed Perf(Thrasher 3	0.00	0.00	0.00	0.00	-72.0	4,921.0	12,334.0	359.49	90.00	17,362.6
;	86.85	2.00	0.11	2.00	-72.0	4,921.6	12,334.0	359.50	90.00	17,363.2
Fed Perf2(Thrasher	0.00	0.00	0.00	0.00	-95.0	7,560.0	12,334.0	359.50	90.00	20,001.7
)	-90.00	-2.00	0.00	2.00	-95.0	7,561.0	12,334.0	359.48	90.00	20,002.7
PBHL(Thrasher 33 F	0.00	0.00	0.00	0.00	-118.0	10,099.0	12,334.0	359.48	90.00	22,540.8

Released to Imaging: 3/5/2021 8:27:19 AM



Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3422.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3422.0usft
Site:	Thrasher 33 Fed Com	North Reference:	Grid
Well:	#703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0 600.0	0.00 0.00	0.00 0.00	500.0 600.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,082.2	1.64	185.01	1,082.2	-1.2	-0.1	-1.2	2.00	2.00	0.00
1,100.0	1.64	185.01	1,100.0	-1.7	-0.1	-1.7	0.00	0.00	0.00
1,200.0	1.64	185.01	1,199.9	-4.5	-0.4	-4.5	0.00	0.00	0.00
1,300.0	1.64	185.01	1,299.9	-7.4	-0.6	-7.4	0.00	0.00	0.00
1,400.0	1.64	185.01	1,399.9	-10.3	-0.9	-10.2	0.00	0.00	0.00
1,500.0	1.64	185.01	1,499.8	-13.1	-1.1	-13.1	0.00	0.00	0.00
1,600.0	1.64	185.01	1,599.8	-16.0	-1.4	-16.0	0.00	0.00	0.00
1,700.0	1.64	185.01	1,699.7	-18.8	-1.7	-18.8	0.00	0.00	0.00
1,800.0	1.64	185.01	1,799.7	-21.7	-1.9	-21.7	0.00	0.00	0.00
1,900.0	1.64	185.01	1,899.7	-24.5	-2.2	-24.5	0.00	0.00	0.00
2,000.0	1.64	185.01	1,999.6	-27.4	-2.4	-27.4	0.00	0.00	0.00
2,100.0	1.64	185.01	2,099.6	-30.3	-2.7	-30.2	0.00	0.00	0.00
2,200.0	1.64	185.01	2,199.5	-33.1	-2.9	-33.1	0.00	0.00	0.00
2,300.0	1.64	185.01	2,299.5	-36.0	-3.2	-35.9	0.00	0.00	0.00
2,400.0	1.64	185.01	2,399.4	-38.8	-3.4	-38.8	0.00	0.00	0.00
2,500.0	1.64	185.01	2,499.4	-41.7	-3.7	-41.6	0.00	0.00	0.00
2,600.0	1.64	185.01	2,599.4	-44.5	-3.9	-44.5	0.00	0.00	0.00
2,700.0	1.64	185.01	2,699.3	-47.4	-4.2	-47.4	0.00	0.00	0.00
2,800.0	1.64	185.01	2,799.3	-50.3	-4.4	-50.2	0.00	0.00	0.00
2,900.0	1.64	185.01	2,899.2	-53.1	-4.7	-53.1	0.00	0.00	0.00
3,000.0	1.64	185.01	2,999.2	-56.0	-4.9	-55.9	0.00	0.00	0.00
3,100.0	1.64	185.01	3,099.2	-58.8	-4.9	-58.8	0.00	0.00	0.00
3,200.0	1.64	185.01	3,199.1	-61.7	-5.2	-56.6	0.00	0.00	0.00
3,300.0	1.64	185.01	3,299.1	-64.5	-5.4	-64.5	0.00	0.00	0.00
3,400.0	1.64	185.01	3,399.0	-67.4	-5.9	-67.3	0.00	0.00	0.00
3,500.0	1.64	185.01	3,499.0	-70.3	-6.2	-70.2	0.00	0.00	0.00
3,600.0	1.64	185.01	3,599.0	-73.1	-6.4	-73.0	0.00	0.00	0.00
3,700.0	1.64	185.01	3,698.9	-76.0	-6.7	-75.9	0.00	0.00	0.00
3,800.0	1.64	185.01	3,798.9	-78.8	-6.9	-78.7	0.00	0.00	0.00
3,900.0	1.64	185.01	3,898.8	-81.7	-7.2	-81.6	0.00	0.00	0.00
4,000.0	1.64	185.01	3,998.8	-84.6	-7.4	-84.5	0.00	0.00	0.00
4,100.0	1.64	185.01	4,098.7	-87.4	-7.7	-87.3	0.00	0.00	0.00
4,200.0	1.64	185.01	4,198.7	-90.3	-7.9	-90.2	0.00	0.00	0.00
4,300.0	1.64	185.01	4,298.7	-93.1	-8.2	-93.0	0.00	0.00	0.00
4,400.0	1.64	185.01	4,398.6	-96.0	-8.4	-95.9	0.00	0.00	0.00
4,500.0	1.64	185.01	4,498.6	-98.8	-8.7	-98.7	0.00	0.00	0.00
4,600.0	1.64	185.01	4,598.5	-101.7	-8.9	-101.6	0.00	0.00	0.00
4,700.0	1.64	185.01	4,698.5	-104.6	-9.2	-104.4	0.00	0.00	0.00
4,800.0	1.64	185.01	4,798.5	-107.4	-9.4	-107.3	0.00	0.00	0.00
4,900.0	1.64	185.01	4,898.4	-110.3	-9.7	-110.1	0.00	0.00	0.00
5,000.0	1.64	185.01	4,998.4	-113.1	-9.9	-113.0	0.00	0.00	0.00
5,100.0	1.64	185.01	5,098.3	-116.0	-10.2	-115.9	0.00	0.00	0.00
5,200.0	1.64	185.01	5,198.3	-118.8	-10.4	-118.7	0.00	0.00	0.00
			.,						

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Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3422.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3422.0usft
Site:	Thrasher 33 Fed Com	North Reference:	Grid
Well:	#703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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)
5,300.0		185.01	5,298.3	-121.7	-10.7	-121.6	0.00	0.00	0.00
5,400.0	1.64	185.01	5,398.2	-124.6	-10.9	-124.4	0.00	0.00	0.00
5,500.0		185.01	5,498.2	-127.4	-11.2	-127.3	0.00	0.00	0.00
5,600.0		185.01	5,598.1	-130.3	-11.4	-130.1	0.00	0.00	0.00
5,700.0		185.01	5,698.1	-133.1	-11.4	-133.0	0.00	0.00	0.00
						-135.8			0.00
5,800.0	1.64	185.01	5,798.0	-136.0	-11.9	-135.0	0.00	0.00	0.00
5,900.0	1.64	185.01	5,898.0	-138.8	-12.2	-138.7	0.00	0.00	0.00
6,000.0	1.64	185.01	5,998.0	-141.7	-12.4	-141.5	0.00	0.00	0.00
6,100.0	1.64	185.01	6,097.9	-144.6	-12.7	-144.4	0.00	0.00	0.00
6,200.0		185.01	6,197.9	-147.4	-12.9	-147.3	0.00	0.00	0.00
6,300.0		185.01	6,297.8	-150.3	-13.2	-150.1	0.00	0.00	0.00
6,400.0		185.01	6,397.8	-153.1	-13.4	-153.0	0.00	0.00	0.00
6,500.0	1.64	185.01	6,497.8	-156.0	-13.7	-155.8	0.00	0.00	0.00
6,600.0		185.01	6,597.7	-158.8	-13.9	-158.7	0.00	0.00	0.00
6,700.0	1.64	185.01	6,697.7	-161.7	-14.2	-161.5	0.00	0.00	0.00
6,800.0	1.64	185.01	6,797.6	-164.6	-14.4	-164.4	0.00	0.00	0.00
6 000 0	1.64	185.01	6,897.6	-167.4	-14.7	-167.2	0.00	0.00	0.00
6,900.0									
7,000.0		185.01	6,997.6	-170.3	-14.9	-170.1	0.00	0.00	0.00
7,100.0		185.01	7,097.5	-173.1	-15.2	-172.9	0.00	0.00	0.00
7,200.0		185.01	7,197.5	-176.0	-15.4	-175.8	0.00	0.00	0.00
7,300.0	1.64	185.01	7,297.4	-178.8	-15.7	-178.7	0.00	0.00	0.00
7,400.0	1.64	185.01	7,397.4	-181.7	-15.9	-181.5	0.00	0.00	0.00
7,500.0		185.01	7,497.3	-184.6	-16.2	-184.4	0.00	0.00	0.00
7,600.0		185.01	7,597.3	-187.4	-16.4	-187.2	0.00	0.00	0.00
7,700.0		185.01	7,697.3	-190.3	-16.7	-190.1	0.00	0.00	0.00
7,800.0		185.01	7,797.2	-193.1	-16.9	-192.9	0.00	0.00	0.00
7,000.0	1.04	165.01	1,191.2	-195.1	-10.9	-192.9	0.00	0.00	0.00
7,900.0	1.64	185.01	7,897.2	-196.0	-17.2	-195.8	0.00	0.00	0.00
8,000.0	1.64	185.01	7,997.1	-198.8	-17.4	-198.6	0.00	0.00	0.00
8,100.0	1.64	185.01	8,097.1	-201.7	-17.7	-201.5	0.00	0.00	0.00
8,200.0	1.64	185.01	8,197.1	-204.6	-17.9	-204.3	0.00	0.00	0.00
8,300.0		185.01	8,297.0	-207.4	-18.2	-207.2	0.00	0.00	0.00
8,400.0		185.01	8,397.0	-210.3	-18.4	-210.0	0.00	0.00	0.00
8,500.0	1.64	185.01	8,496.9	-213.1	-18.7	-212.9	0.00	0.00	0.00
8,600.0		185.01	8,596.9	-216.0	-18.9	-215.8	0.00	0.00	0.00
8,700.0		185.01	8,696.9	-218.9	-19.2	-218.6	0.00	0.00	0.00
8,800.0	1.64	185.01	8,796.8	-221.7	-19.4	-221.5	0.00	0.00	0.00
8,900.0	1.64	185.01	8,896.8	-224.6	-19.7	-224.3	0.00	0.00	0.00
9,000.0		185.01	8,996.7	-227.4	-19.9	-227.2	0.00	0.00	0.00
9,100.0		185.01	9,096.7	-230.3	-20.2	-230.0	0.00	0.00	0.00
9,200.0	1.64	185.01	9,196.6	-230.5	-20.2	-232.9	0.00	0.00	0.00
9,200.0		185.01	9,296.6	-236.0	-20.4	-232.9	0.00	0.00	0.00
						-200.7			
9,400.0		185.01	9,396.6	-238.9	-20.9	-238.6	0.00	0.00	0.00
9,500.0	1.64	185.01	9,496.5	-241.7	-21.2	-241.4	0.00	0.00	0.00
9,600.0	1.64	185.01	9,596.5	-244.6	-21.4	-244.3	0.00	0.00	0.00
9,700.0		185.01	9,696.4	-247.4	-21.7	-247.2	0.00	0.00	0.00
9,800.0		185.01	9,796.4	-250.3	-21.9	-250.0	0.00	0.00	0.00
9,900.0		185.01	9,896.4	-253.1	-22.2	-252.9	0.00	0.00	0.00
10,000.0		185.01	9,996.3	-256.0	-22.4	-255.7	0.00	0.00	0.00
10,100.0		185.01	10,096.3	-258.9	-22.7	-258.6	0.00	0.00	0.00
10,200.0		185.01	10,196.2	-261.7	-22.9	-261.4	0.00	0.00	0.00
10,300.0	1.64	185.01	10,296.2	-264.6	-23.2	-264.3	0.00	0.00	0.00
10,400.0	1.64	185.01	10,396.2	-267.4	-23.4	-267.1	0.00	0.00	0.00
10,400.0		185.01	10,496.1	-270.3	-23.4	-270.0	0.00	0.00	0.00
10,600.0	1.64	185.01	10,596.1	-270.3	-23.7	-270.0	0.00	0.00	0.00
	1.04	100.01	10,090.1	-213.1	-23.9	-212.0	0.00	0.00	0.00

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Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3422.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3422.0usft
Site:	Thrasher 33 Fed Com	North Reference:	Grid
Well:	#703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #0.2		

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)
10,700.0	1.64	185.01	10,696.0	-276.0	-24.2	-275.7	0.00	0.00	0.00
10,800.0	1.64	185.01	10,796.0	-278.9	-24.4	-278.6	0.00	0.00	0.00
40,000,0	4.04	405.04	10.895.9		04.7			0.00	0.00
10,900.0	1.64	185.01	- ,	-281.7	-24.7	-281.4	0.00	0.00	0.00
11,000.0	1.64	185.01	10,995.9	-284.6	-24.9	-284.3	0.00	0.00	0.00
11,100.0	1.64	185.01	11,095.9	-287.4	-25.2	-287.1	0.00	0.00	0.00
11,200.0	1.64	185.01	11,195.8	-290.3	-25.4	-290.0	0.00	0.00	0.00
11,300.0	1.64	185.01	11,295.8	-293.1	-25.7	-292.8	0.00	0.00	0.00
11,400.0	1.64	185.01	11,395.7	-296.0	-25.9	-295.7	0.00	0.00	0.00
11,500.0	1.64	185.01	11,495.7	-298.9	-26.2	-298.5	0.00	0.00	0.00
11,600.0	1.64	185.01	11,595.7	-301.7	-26.4	-301.4	0.00	0.00	0.00
11,700.0	1.64	185.01	11,695.6	-304.6	-26.7	-304.2	0.00	0.00	0.00
11,778.7	1.64	185.01	11,774.3	-306.8	-26.9	-306.5	0.00	0.00	0.00
11,800.0	1.22	185.01	11,795.6	-307.4	-26.9	-307.0	2.00	-2.00	0.00
11,860.9	0.00	0.00	11,856.5	-308.0	-27.0	-307.7	2.00	-2.00	0.00
11,875.0	1.69	0.00	11,870.6	-307.8	-27.0	-307.5	12.00	12.00	0.00
11,900.0	4.69	0.00	11,895.5	-306.4	-27.0	-306.1	12.00	12.00	0.00
11,925.0	7.69	0.00	11,920.4	-303.7	-27.0	-303.4	12.00	12.00	0.00
11,950.0	10.69	0.00	11,945.1	-299.7	-27.0	-299.4	12.00	12.00	0.00
11,975.0	13.69	0.00	11,969.5	-294.4	-27.0	-294.1	12.00	12.00	0.00
12,000.0	16.69	0.00	11,993.6	-287.9	-27.0	-287.6	12.00	12.00	0.00
12,000.0	19.69	0.00	12,017.4	-280.1	-27.0	-279.7	12.00	12.00	0.00
12,025.0	22.69	0.00	12,017.4	-280.1	-27.0	-279.7	12.00	12.00	0.00
12,050.0	22.09	0.00	12,040.7			-270.7	12.00	12.00	
12,075.0	25.69	0.00	12,063.5	-260.8	-27.0	-260.5	12.00	12.00	0.00
12,081.4	26.46	0.00	12,069.2	-258.0	-27.0	-257.7	12.00	12.00	0.00
12,100.0	28.69	359.95	12,085.7	-249.4	-27.0	-249.0	12.00	12.00	-0.25
12,125.0	31.69	359.90	12,107.3	-236.8	-27.0	-236.5	12.00	12.00	-0.21
12,150.0	34.69	359.86	12,128.2	-223.1	-27.0	-222.8	12.00	12.00	-0.18
12,175.0	37.69	359.82	12,148.4	-208.4	-27.1	-208.0	12.00	12.00	-0.15
12,200.0	40.69	359.78	12,167.8	-192.6	-27.1	-192.2	12.00	12.00	-0.13
12,225.0	43.69	359.76	12,186.3	-175.8	-27.2	-175.4	12.00	12.00	-0.12
12,250.0	46.69	359.73	12,203.9	-158.0	-27.3	-157.7	12.00	12.00	-0.11
12,275.0	49.69	359.70	12,220.6	-139.4	-27.4	-139.1	12.00	12.00	-0.10
12,300.0	52.69	359.68	12,236.2	-119.9	-27.5	-119.6	12.00	12.00	-0.09
12,325.0	55.69	359.66	12,250.2	-99.7	-27.6	-99.3	12.00	12.00	-0.08
12,350.0	58.69	359.64	12,264.4	-78.7	-27.7	-78.3	12.00	12.00	-0.08
12,330.0	61.69	359.63	12,276.8	-57.0	-27.9	-56.6	12.00	12.00	-0.07
12,375.0	64.69	359.63	12,270.0	-34.7	-27.9	-34.3	12.00	12.00	-0.07
,									
12,425.0	67.69	359.59	12,298.2	-11.8	-28.2	-11.5	12.00	12.00	-0.06
12,450.0	70.69	359.58	12,307.1	11.6	-28.3	11.9	12.00	12.00	-0.06
12,475.0	73.69	359.56	12,314.7	35.4	-28.5	35.7	12.00	12.00	-0.06
12,500.0	76.69	359.55	12,321.1	59.5	-28.7	59.9	12.00	12.00	-0.06
12,525.0	79.69	359.54	12,326.2	84.0	-28.9	84.3	12.00	12.00	-0.06
12,550.0	82.69	359.52	12,330.1	108.7	-29.1	109.0	12.00	12.00	-0.05
12,575.0	85.69	359.52	12,332.6	133.6	-29.1	133.9	12.00	12.00	-0.05
12,600.0	88.69	359.49	12,332.0	158.5	-29.5	158.9	12.00	12.00	-0.05
12,600.0									
12,610.9	90.00	359.49	12,333.9	169.5 258.5	-29.6	169.8 258.0	12.00	12.00	-0.05
12,700.0	90.00	359.49	12,333.9	258.5	-30.4	258.9	0.00	0.00	0.00
12,800.0	90.00	359.49	12,333.9	358.5	-31.3	358.9	0.00	0.00	0.00
12,900.0	90.00	359.49	12,334.0	458.5	-32.2	458.9	0.00	0.00	0.00
13,000.0	90.00	359.49	12,334.0	558.5	-33.1	558.9	0.00	0.00	0.00
13,100.0	90.00	359.49	12,334.0	658.5	-34.0	658.9	0.00	0.00	0.00
13,200.0	90.00	359.49	12,334.0	758.5	-34.9	758.9	0.00	0.00	0.00
13,300.0	90.00	359.49	12,334.0	858.5	-35.8	858.9	0.00	0.00	0.00
13,400.0	90.00	359.49	12,334.0	958.5	-36.7	958.9	0.00	0.00	0.00

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Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #703H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3422.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3422.0usft
Site:	Thrasher 33 Fed Com	North Reference:	Grid
Well:	#703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #0.2		

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)
13,500.0	90.00	359.49	12,334.0	1,058.5	-37.6	1,058.9	0.00	0.00	0.00
13,600.0	90.00	359.49	12,334.0	1,158.5	-38.5	1,158.9	0.00	0.00	0.00
13,700.0	90.00	359.49	12,334.0	1,258.5	-39.3	1,258.9	0.00	0.00	0.00
13,800.0	90.00	359.49	12,334.0	1,358.5	-40.2	1,358.9	0.00	0.00	0.00
13,900.0	90.00	359.49	12,334.0	1,458.5	-41.1	1,458.9	0.00	0.00	0.00
14,000.0	90.00	359.49	12,334.0	1,558.5	-42.0	1,558.9	0.00	0.00	0.00
14,100.0	90.00	359.49	12,334.0	1,658.5	-42.9	1,658.9	0.00	0.00	0.00
14,200.0	90.00	359.49	12,334.0	1,758.5	-43.8	1,758.9	0.00	0.00	0.00
14,300.0	90.00	359.49	12,334.0	1,858.5	-44.7	1,858.9	0.00	0.00	0.00
14,400.0	90.00	359.49	12,334.0	1,958.5	-45.6	1,958.9	0.00	0.00	0.00
14,500.0	90.00	359.49	12,334.0	2,058.5	-46.5	2,058.9	0.00	0.00	0.00
14,600.0	90.00	359.49	12,334.0	2,158.5	-47.4	2,158.9	0.00	0.00	0.00
14,700.0	90.00	359.49	12,334.0	2,258.5	-48.3	2,258.9	0.00	0.00	0.00
14,800.0	90.00	359.49	12,334.0	2,358.5	-49.2	2,358.9	0.00	0.00	0.00
14,900.0	90.00	359.49	12,334.0	2,458.5	-50.0	2,458.9	0.00	0.00	0.00
15,000.0	90.00	359.49	12,334.0	2,558.5	-50.9	2,558.9	0.00	0.00	0.00
15,100.0	90.00	359.49	12,334.0	2,658.4	-51.8	2,658.9	0.00	0.00	0.00
15,200.0	90.00	359.49	12,334.0	2,758.4	-52.7	2,758.9	0.00	0.00	0.00
15,300.0	90.00	359.49	12,334.0	2,858.4	-53.6	2,858.9	0.00	0.00	0.00
15,400.0	90.00	359.49	12,334.0	2,958.4	-54.5	2,958.9	0.00	0.00	0.00
15,500.0	90.00	359.49	12,334.0	3,058.4	-55.4	3,058.9	0.00	0.00	0.00
15,600.0	90.00	359.49	12,334.0	3,158.4	-56.3	3,158.9	0.00	0.00	0.00
15,700.0	90.00	359.49	12,334.0	3,258.4	-57.2	3,258.9	0.00	0.00	0.00
15,800.0	90.00	359.49	12,334.0	3,358.4	-58.1	3,358.9	0.00	0.00	0.00
15,900.0	90.00	359.49	12,334.0	3,458.4	-59.0	3,458.9	0.00	0.00	0.00
16,000.0	90.00	359.49	12,334.0	3,558.4	-59.9	3,558.9	0.00	0.00	0.00
16,100.0	90.00	359.49	12,334.0	3,658.4	-60.7	3,658.9	0.00	0.00	0.00
16,200.0	90.00	359.49	12,334.0	3,758.4	-61.6	3,758.9	0.00	0.00	0.00
16,300.0	90.00	359.49	12,334.0	3,858.4	-62.5	3,858.9	0.00	0.00	0.00
16,400.0	90.00	359.49	12,334.0	3,958.4	-63.4	3,958.9	0.00	0.00	0.00
16,500.0	90.00	359.49	12,334.0	4,058.4	-64.3	4,058.9	0.00	0.00	0.00
16,600.0	90.00	359.49	12,334.0	4,158.4	-65.2	4,158.9	0.00	0.00	0.00
16,700.0	90.00	359.49	12,334.0	4,258.4	-66.1	4,258.9	0.00	0.00	0.00
16,800.0	90.00	359.49	12,334.0	4,358.4	-67.0	4,358.9	0.00	0.00	0.00
16,900.0	90.00	359.49	12,334.0	4,458.4	-67.9	4,458.9	0.00	0.00	0.00
17,000.0	90.00	359.49	12,334.0	4,558.4	-68.8	4,558.9	0.00	0.00	0.00
17,100.0	90.00	359.49	12,334.0	4,658.4	-69.7	4,658.9	0.00	0.00	0.00
17,200.0	90.00	359.49	12,334.0	4,758.4	-70.5	4,758.9	0.00	0.00	0.00
17,300.0	90.00	359.49	12,334.0	4,858.4	-71.4	4,858.9	0.00	0.00	0.00
17,362.6	90.00	359.49	12,334.0	4,921.0	-72.0	4,921.5	0.00	0.00	0.00
17,363.2	90.00	359.50	12,334.0	4,921.6	-72.0	4,922.1	2.00	0.11	2.00
17,400.0	90.00	359.50	12,334.0	4,958.4	-72.3	4,958.9	0.00	0.00	0.00
17,500.0	90.00	359.50	12,334.0	5,058.4	-73.2	5,058.9	0.00	0.00	0.00
17,600.0	90.00	359.50	12,334.0	5,158.3	-74.1	5,158.9	0.00	0.00	0.00
17,700.0	90.00	359.50	12,334.0	5,258.3	-74.9	5,258.9	0.00	0.00	0.00
17,800.0	90.00	359.50	12,334.0	5,358.3	-75.8	5,358.9	0.00	0.00	0.00
17,900.0	90.00	359.50	12,334.0	5,458.3	-76.7	5,458.9	0.00	0.00	0.00
18,000.0	90.00	359.50	12,334.0	5,558.3	-77.6	5,558.9	0.00	0.00	0.00
18,100.0	90.00	359.50	12,334.0	5,658.3	-78.4	5,658.9	0.00	0.00	0.00
18,200.0	90.00	359.50	12,334.0	5,758.3	-79.3	5,758.9	0.00	0.00	0.00
18,300.0	90.00	359.50	12,334.0	5,858.3	-80.2	5,858.9	0.00	0.00	0.00
18,400.0	90.00	359.50	12,334.0	5,958.3	-81.0	5,958.9	0.00	0.00	0.00
18,500.0	90.00	359.50	12,334.0	6,058.3	-81.9	6,058.9	0.00	0.00	0.00

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Planning Report

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Site:	Thrasher 33 Fed Com	North Reference:	Grid
Well:	#703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

Planned Survey

18,700.0 18,800.0 18,900.0 19,000.0 19,000.0 19,200.0 19,300.0 19,400.0 19,500.0 19,600.0 19,600.0 19,600.0 19,800.0 19,800.0 20,001.7 20,002.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,500.0 20,600.0 20,700.0 20,800.0 20,900.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	6,258.3 6,358.3 6,458.3 6,558.3 6,658.3 6,758.3 6,858.3 6,958.3 7,058.3 7,158.3 7,158.3 7,258.3 7,358.3 7,458.3	-83.7 -84.5 -85.4 -86.3 -87.1 -88.0 -88.9 -89.8 -90.6 -91.5 -92.4 -93.2	6,258.9 6,358.9 6,458.9 6,558.9 6,658.9 6,758.9 6,858.9 6,958.9 7,058.9 7,158.9 7,258.9	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
18,900.0 19,000.0 19,200.0 19,200.0 19,300.0 19,400.0 19,500.0 19,600.0 19,700.0 19,800.0 19,900.0 20,001.7 20,002.7 20,100.0 20,200.0 20,200.0 20,300.0 20,500.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	6,458.3 6,558.3 6,658.3 6,758.3 6,858.3 6,958.3 7,058.3 7,158.3 7,158.3 7,258.3 7,358.3	-85.4 -86.3 -87.1 -88.0 -88.9 -89.8 -90.6 -91.5 -92.4	6,458.9 6,558.9 6,658.9 6,758.9 6,858.9 6,958.9 7,058.9 7,158.9 7,258.9	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
19,000.0 19,100.0 19,200.0 19,300.0 19,400.0 19,500.0 19,600.0 19,700.0 19,800.0 19,900.0 20,001.7 20,002.7 20,100.0 20,200.0 20,300.0 20,300.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	6,558.3 6,658.3 6,758.3 6,858.3 6,958.3 7,058.3 7,158.3 7,258.3 7,358.3	-86.3 -87.1 -88.0 -88.9 -89.8 -90.6 -91.5 -92.4	6,558.9 6,658.9 6,758.9 6,858.9 6,958.9 7,058.9 7,158.9 7,258.9	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
$19,100.0 \\ 19,200.0 \\ 19,300.0 \\ 19,400.0 \\ 19,500.0 \\ 19,500.0 \\ 19,600.0 \\ 19,700.0 \\ 19,700.0 \\ 19,800.0 \\ 20,001.7 \\ 20,002.7 \\ 20,002.7 \\ 20,100.0 \\ 20,200.0 \\ 20,200.0 \\ 20,300.0 \\ 20,400.0 \\ 20,500.0 \\ 20,600.0 \\ 20,700.0 \\ 20,800.0 $	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	6,658.3 6,758.3 6,858.3 6,958.3 7,058.3 7,158.3 7,258.3 7,358.3	-87.1 -88.0 -88.9 -89.8 -90.6 -91.5 -92.4	6,658.9 6,758.9 6,858.9 6,958.9 7,058.9 7,158.9 7,258.9	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
19,200.0 $19,300.0$ $19,400.0$ $19,500.0$ $19,600.0$ $19,700.0$ $19,800.0$ $19,900.0$ $20,001.7$ $20,002.7$ $20,100.0$ $20,200.0$ $20,200.0$ $20,300.0$ $20,400.0$ $20,500.0$ $20,500.0$ $20,600.0$ $20,700.0$ $20,800.0$	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	6,758.3 6,858.3 6,958.3 7,058.3 7,158.3 7,258.3 7,358.3	-88.0 -88.9 -89.8 -90.6 -91.5 -92.4	6,758.9 6,858.9 6,958.9 7,058.9 7,158.9 7,258.9	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
19,300.0 19,400.0 19,500.0 19,700.0 19,800.0 19,900.0 20,001.7 20,002.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	6,858.3 6,958.3 7,058.3 7,158.3 7,258.3 7,358.3	-88.9 -89.8 -90.6 -91.5 -92.4	6,858.9 6,958.9 7,058.9 7,158.9 7,258.9	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
19,400.0 19,500.0 19,600.0 19,700.0 19,800.0 20,001.7 20,002.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	6,958.3 7,058.3 7,158.3 7,258.3 7,358.3	-89.8 -90.6 -91.5 -92.4	6,958.9 7,058.9 7,158.9 7,258.9	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
19,500.0 19,600.0 19,700.0 19,800.0 20,001.7 20,002.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0 12,334.0 12,334.0 12,334.0	7,058.3 7,158.3 7,258.3 7,358.3	-90.6 -91.5 -92.4	7,058.9 7,158.9 7,258.9	0.00 0.00	0.00 0.00	0.00 0.00
19,600.0 19,700.0 19,800.0 20,001.7 20,002.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0 12,334.0	7,158.3 7,258.3 7,358.3	-91.5 -92.4	7,158.9 7,258.9	0.00	0.00	0.00
19,700.0 19,800.0 19,900.0 20,001.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0	7,258.3 7,358.3	-92.4	7,258.9			
19,800.0 19,900.0 20,001.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00 90.00	359.50 359.50 359.50 359.48	12,334.0 12,334.0 12,334.0	7,358.3				0.00	0.00
19,900.0 20,001.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00	359.50 359.50 359.48	12,334.0 12,334.0		-03 3			0.00	0.00
19,900.0 20,001.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00 90.00	359.50 359.50 359.48	12,334.0		-30.2	7,358.9	0.00	0.00	0.00
20,001.7 20,002.7 20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00 90.00 90.00	359.50 359.48			-94.1	7,458.9	0.00	0.00	0.00
20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00			7,560.0	-95.0	7,560.6	0.00	0.00	0.00
20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00		12,334.0	7,561.0	-95.0	7,561.6	2.00	0.00	-2.00
20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0		359.48	12,334.0	7,658.3	-95.9	7,658.9	0.00	0.00	0.00
20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,800.0		359.48	12,334.0	7,758.3	-96.8	7,758.9	0.00	0.00	0.00
20,400.0 20,500.0 20,600.0 20,700.0 20,800.0	90.00	359.48	12,334.0	7,858.2	-97.7	7,858.9	0.00	0.00	0.00
20,600.0 20,700.0 20,800.0	90.00	359.48	12,334.0	7,958.2	-98.6	7,958.9	0.00	0.00	0.00
20,600.0 20,700.0 20,800.0	90.00	359.48	12,334.0	8,058.2	-99.5	8,058.9	0.00	0.00	0.00
20,700.0 20,800.0	90.00	359.48	12,334.0	8,158.2	-100.4	8,158.9	0.00	0.00	0.00
20,800.0	90.00	359.48	12,334.0	8,258.2	-101.3	8,258.8	0.00	0.00	0.00
,	90.00	359.48	12,334.0	8,358.2	-102.2	8,358.8	0.00	0.00	0.00
20,000.0	90.00	359.48	12,334.0	8,458.2	-103.1	8,458.8	0.00	0.00	0.00
21,000.0	90.00	359.48	12,334.0	8,558.2	-104.0	8,558.8	0.00	0.00	0.00
21,100.0	90.00	359.48	12,334.0	8,658.2	-104.9	8,658.8	0.00	0.00	0.00
21,200.0	90.00	359.48	12,334.0	8,758.2	-105.9	8,758.8	0.00	0.00	0.00
21,300.0	90.00	359.48	12,334.0	8,858.2	-106.8	8,858.8	0.00	0.00	0.00
21,400.0	90.00	359.48	12,334.0	8,958.2	-107.7	8,958.8	0.00	0.00	0.00
21,500.0	90.00	359.48	12,334.0	9,058.2	-108.6	9,058.8	0.00	0.00	0.00
21,600.0	90.00	359.48	12,334.0	9,158.2	-109.5	9,158.8	0.00	0.00	0.00
21,700.0	90.00	359.48	12,334.0	9,258.2	-110.4	9,258.8	0.00	0.00	0.00
21,800.0	90.00	359.48	12,334.0	9,358.2	-111.3	9,358.8	0.00	0.00	0.00
21,900.0	90.00	359.48	12,334.0	9,458.2	-112.2	9,458.8	0.00	0.00	0.00
22,000.0	90.00	359.48	12.334.0	9,558.2	-113.1	9.558.8	0.00	0.00	0.00
22,000.0	90.00	359.48	12,334.0	9,658.2	-114.0	9,658.8	0.00	0.00	0.00
22,200.0	90.00	359.48	12,334.0	9,758.2	-114.0	9,050.0	0.00	0.00	0.00
22,300.0	90.00	359.48	12,334.0	9,858.2	-114.9	9,858.8	0.00	0.00	0.00
22,300.0	90.00	359.48	12,334.0	9,958.2	-116.7	9,858.8 9,958.8	0.00	0.00	0.00
22,500.0	90.00	359.48	12,334.0	10,058.2	-117.6	10,058.8	0.00	0.00	0.00
22,500.0	90.00 90.00	359.48 359.48	12,334.0	10,058.2	-117.6 -118.0	10,058.8	0.00	0.00	0.00



Planning Report

Database: Company: Project: Site: Well: Wellbore: Design:	EDM EOG Resour Lea County, I Thrasher 33 #703H OH Plan #0.2	NM (NAD 83	-		Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:		KB = 25' (KB = 25' (Grid	Well #703H KB = 25' @ 3422.0usft KB = 25' @ 3422.0usft Grid Minimum Curvature		
Design Targets Target Name										
- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
KOP(Thrasher 33 Fed - plan hits target ca - Point		0.00	11,856.5	-308.0	-27.0	425,511.00	805,985.00	32.1669169°N	103.4780596°W	
FTP(Thrasher 33 Fed 0 - plan hits target co - Point		0.00	12,069.2	-258.0	-27.0	425,561.00	805,985.00	32.1670543°N	103.4780583°W	
Fed Perf(Thrasher 33 F - plan hits target ce - Point		0.00	12,334.0	4,921.0	-72.0	430,740.00	805,940.00	32.1812904°N	103.4780707°W	
PBHL(Thrasher 33 Fec - plan hits target ce - Point		0.00	12,334.0	10,099.0	-118.0	435,918.00	805,894.00	32.1955237°N	103.4780863°W	
Fed Perf2(Thrasher 33 - plan hits target ce - Point		0.00	12,334.0	7,560.0	-95.0	433,379.00	805,917.00	32.1885445°N	103.4780772°W	

District I 1625 N. French Dr., Hobbs, NM 88240

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District II

District IV

CONDITIONS

Action 18595

State of New Mexico Phone:(575) 393-6161 Fax:(575) 393-0720 **Energy, Minerals and Natural Resources** 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720 **Oil Conservation Division** 1220 S. St Francis Dr. Phone:(505) 334-6178 Fax:(505) 334-6170 Santa Fe, NM 87505 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

CONDITIONS OF APPROVAL

Operator:				OGRID:	Action Number:	Action Type:
EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702		7377	18595	C-103A
OCD Reviewer			Condit	ion		
pkautz			None			