

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	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	Type of Action APD Change
Date Sundry Submitted: 01/15/2021	Time Sundry Submitted: 07:55
Date proposed operation will begin: 03/28/2021	
Procedure Description: EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes: Change well number to 309H from 709 Change target formation to First Bone Spring Sand Adjust casing and cement program to accommodate shallower target	

Application

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
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Section 1 - General

APD ID: 10400047721	Tie to previous NOS?	Submission Date: 09/19/2019
BLM Office: CARLSBAD	User: Lisa Trascher	Title: Regulatory Specialist
Federal/Indian APD: FED	Is the first lease penetrated for production Federal or Indian? FED	
Lease number: NMNM17241	Lease Acres:	
Surface access agreement in place?	Allotted?	Reservation:
Agreement in place? NO	Federal or Indian agreement:	
Agreement number:		
Agreement name:		
Keep application confidential? N		
Permitting Agent? NO	APD Operator: EOG RESOURCES INCORPORATED	
Operator letter of designation:		

Operator Info

Operator Organization Name: EOG RESOURCES INCORPORATED		
Operator Address: 1111 BAGBY SKY LOBBY2		
Operator PO Box:		Zip: 77002
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: YUKON 20 FED COM	Well Number: 709H	Well API Number:
Field/Pool or Exploratory? Field and Pool	Field Name: BOBCAT DRAW; UPR WOLFCAMP	Pool Name: WC-025 G-09 S253309P; UPPER WOLFCAMP
Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL		
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: YUKON 20 FED COM	Number: 709H/710H/711H
Well Class: HORIZONTAL	Number of Legs: 1	
Well Work Type: Drill		
Well Type: OIL WELL		

Well Name: YUKON 20 FED COM

Well Location: T24S / R34E / SEC 20 / NENW /

County or Parish/State:

Well Number: 709H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM17241

Unit or CA Name:

Unit or CA Number:

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

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town:Distance to nearest well: 33 FTDistance to lease line: 492 FT

Reservoir well spacing assigned acres Measurement: 640 Acres

Well plat: YUKON_20_FED_COM_709H_C_102_20190919140344.pdf

Well work start Date: 01/01/2021Duration: 25 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83Vertical Datum: NAVD88

Survey number: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 Leg #1	492	FNL	1603	FWL	24S	34E	20	Aliquot NENW	32.2089657	-103.4952813	LEA	NEW MEXICO	NEW MEXICO	F	NMNM017241	3543	0	0	Y
KOP Leg #1	50	FNL	1254	FWL	24S	34E	20	Aliquot NWNW	32.210182	-103.4964235	LEA	NEW MEXICO	NEW MEXICO	F	NMNM017241	-8082	11650	11625	Y
PPP Leg #1-1	100	FNL	1254	FWL	24S	34E	20	Aliquot NWNW	32.2100448	-103.4964249	LEA	NEW MEXICO	NEW MEXICO	F	NMNM017241	-8294	11871	11837	Y
EXIT Leg #1	100	FSL	1254	FWL	24S	34E	29	Aliquot SWSW	32.1815639	-103.4964417	LEA	NEW MEXICO	NEW MEXICO	F	NMNM028881	-8559	22334	12102	Y

Well Name: YUKON 20 FED COM

Well Location: T24S / R34E / SEC 20 / NENW /

County or Parish/State:

Well Number: 709H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM17241

Unit or CA Name:

Unit or CA Number:

US Well Number:

Well Status: Approved Application for Permit to Drill

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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?
BHL Leg #1	100	FSL	1254	FWL	24S	34E	29	Aliquot SWSW	32.1815639	-103.4964417	LEA	NEW MEXICO	NEW MEXICO	F	NMNM028881	-8559	22334	12102	Y

Drilling Plan

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1384194	PERMIAN	3491	0	0	ALLUVIUM	NONE	N
1384195	RUSTLER	2601	890	890	ANHYDRITE	NONE	N
1384196	TOP SALT	2061	1430	1430	SALT	NONE	N
1384198	BASE OF SALT	-1409	4900	4900	SALT	NONE	N
1384199	LAMAR	-1670	5161	5161	LIMESTONE	NONE	N
1384200	BELL CANYON	-1696	5187	5187	SANDSTONE	NATURAL GAS, OIL	N
1384201	CHERRY CANYON	-2074	5565	5565	SANDSTONE	NATURAL GAS, OIL	N
1384202	BRUSHY CANYON	-4110	7601	7601	SANDSTONE	NATURAL GAS, OIL	N
1384197	BONE SPRING LIME	-5587	9078	9078	LIMESTONE	NONE	N
1384203	FIRST BONE SPRING SAND	-6540	10031	10031	SANDSTONE	NATURAL GAS, OIL	N
1384204	BONE SPRING 2ND	-6944	10435	10435	SANDSTONE	NATURAL GAS, OIL	N
1384205	BONE SPRING 3RD	-8132	11623	11623	SANDSTONE	NATURAL GAS, OIL	N
1384206	WOLFCAMP	-8599	12090	12090	SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Well Name: YUKON 20 FED COM		Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
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Pressure Rating (PSI): 10M

Rating Depth: 12102

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 (10,000-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 vendor's 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 vendor's 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 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. 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. EOG Resources also requests approval to implement Casing Design B (pg. 8-9). BLM will be notified of elected design at spud.

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_20190508145233.pdf
- Co_Flex_Hose_Certification_20190508145234.pdf
- Co_Flex_Hose_Test_Chart_20190508145234.pdf

BOP Diagram Attachment:

- EOG_BLM_10M_Annular_Variance___13.375_in_20190508145333.pdf
- 10_M_BOP_Diagram_9.675_in_20190508145331.pdf
- EOG_BLM_10M_Annular_Variance___9.675_in_20190508145332.pdf
- 10_M_BOP_Diagram_13.375_in_20190508145331.pdf

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Type of Well: OIL WELL

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Lease Number: NMNM17241

Unit or CA Name:

Unit or CA Number:

US Well Number:

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Operator: EOG RESOURCES INCORPORATED

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	12.25	9.625	NEW	API	N	0	1090	0	1090	3543	2453	1090	J-55	40	LT&C	1.125	1.25	BUOY	1.6	BUOY	1.6
2	PRODUCTI ON	6.75	5.5	NEW	API	N	0	10540	0	10540	3491	-6997	10540	OT H E R	20	OTHER - DWC/C-IS MS	1.125	1.25	BUOY	1.6	BUOY	1.6
3	PRODUCTI ON	6.75	5.5	NEW	API	N	10540	11040	10540	11040	-7002	-7497	500	OT H E R	20	OTHER - VAM SFC	1.125	1.25	BUOY	1.6	BUOY	1.6
4	INTERMED IATE	8.75	7.625	NEW	API	N	0	11040	0	11040	3491	-7497	11040	HCP -110	29.7	OTHER - FXL	1.125	1.25	BUOY	1.6	BUOY	1.6
5	PRODUCTI ON	6.75	5.5	NEW	API	N	11040	22334	11040	12102	-7502	-8559	11294	OT H E R	20	OTHER - DWC/C-IS MS	1.125	1.25	BUOY	1.6	BUOY	1.6

Casing Attachments

Casing ID: 1String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Yukon_20_Fed_Com_709H_Permit_Info_20190919141641.pdf

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Casing Attachments

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_20190919141656.pdf

See_previously_attached_Drill_Plan_20190919141656.pdf

Casing ID: 3 String Type:PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Please_see_previously_attached_drill_plan_20180910200917.pdf

5.500in_20.00_VST_P110EC_VAM_SFC_20190916090418.pdf

Casing ID: 4 String Type:INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Please_see_previously_attached_drill_plan_20180913084044.pdf

7.625in_29.70_P110HC_FXL_20190916090606.pdf

Well Name: YUKON 20 FED COM

Well Number: 709H

Lease Number: NMNM17241

US Well Number:

Well Location: T24S / R34E / SEC 20 / NENW /

Type of Well: OIL WELL

Unit or CA Name:

Well Status: Approved Application for Permit to Drill

County or Parish/State:

Allottee or Tribe Name:

Unit or CA Number:

Operator: EOG RESOURCES INCORPORATED

Casing Attachments

Casing ID: 5 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Please_see_previously_attached_drill_plan_20180913083920.pdf
5.500in_20.00_VST_P110EC_DWC_C_IS_MS_Spec_Sheet_20190916090459.pdf

Section 4 - Cement

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	0		

PRODUCTION	Lead		0	0	0	0	0	0	0		
------------	------	--	---	---	---	---	---	---	---	--	--

SURFACE	Lead		0	890	950	1.73	13.5	1643.5	25	Class C	Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)
SURFACE	Tail		890	1090	80	1.34	14.8	107.2	25	Class C	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 890')
INTERMEDIATE	Lead		0	7600	1000	2.3	12.7	2300	25	Class C	2nd Stage Bradenhead Squeeze Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ Surface)
INTERMEDIATE	Tail		7600	11040	440	1.11	14.2	488.4	25	Class C	Class C + 0.6% Halad-9 + 0.45% HR-601 + 3% Microbond (TOC @ 7,600')

Well Number: 709H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM17241

Unit or CA Name:

Unit or CA Number:

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Operator: EOG RESOURCES INCORPORATED

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		10540	22334	950	1.31	14.2	1244.5	25	Class H	Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 10,540')

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: Mud weights up to 14 ppg, may be utilized in well kill scenario. 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 the wellsite at all times.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1090	11040	SALT SATURATED	10	10.2							
11040	11650	OIL-BASED MUD	8.7	9.4							
0	1090	WATER-BASED MUD	8.6	8.8							
11650	12102	OIL-BASED MUD	10	14							Mud weights up to 14 ppg, may be utilized in well kill scenario.

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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: 8801

Anticipated Surface Pressure: 6138

Anticipated Bottom Hole Temperature(F): 181

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:

Yukon_20_Fed_Com_709H_H2S_Plan_Summary_20190919141916.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Yukon_20_Fed_Com_709H_Wall_Plot_20190919141953.pdf

Yukon_20_Fed_Com_709H_Planning_Report_20190919141953.pdf

Other proposed operations facets description:

EOG requests 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 top of cement at the Brushy Canyon (7,494’) 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. The final cement top will be verified by Echo-meter.

EOG will include the Echo-meter verified fluid top 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.

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

(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

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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:

- Wellhead_9.675_in_20190509124528.pdf
- Wellhead_13.375_in_20190509124529.pdf
- 7.625in_29.70_P110HC_FXL_20190509124527.pdf
- 5.500in_20.00_VST_P110EC_VAM_SFC_20190509124527.pdf
- 5.500in_20.00_VST_P110EC_DWC_C_IS_MS_Spec_Sheet_20190509124526.pdf
- Yukon_20_Fed_Com_709H_Permit_Info_20190919141944.pdf
- Yukon_20_Fed_Com_709H_Rig_Layout_20190919141945.pdf

Other Variance attachment:

- EOG_BLM_10M_Annular_Variance___9.675_in_20190509124742.pdf
- 10_M_BOP_Diagram_13.375_in_20190509124741.pdf
- Co_Flex_Hose_Certification_20190509124741.pdf
- Co_Flex_Hose_Test_Chart_20190509124741.pdf
- EOG_BLM_10M_Annular_Variance___13.375_in_20190509124743.pdf
- 10_M_BOP_Diagram_9.675_in_20190509124740.pdf

SUPO

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

YUKON_20_FED_COM_709H_Vicinity_20190919142024.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:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

- YUKON_20_FED_COM_INFRA_REV1_20190916093144.pdf
- YUKON_20_FED_COM_709H_Padsite_20190919142041.pdf
- YUKON_20_FED_COM_709H_Wellsite_20190919142041.pdf

New road type: RESOURCE

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Length: 3894 Feet 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: 30

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: CULVERT

Drainage Control comments: An appropriately sized culvert will be installed where drainages cross the access road.

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

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

YUKON_20_FED_COM_709H_Radius_20190919142112.pdf

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Yukon 20 Fed Com CTB is located in the NE/4 of Section 20.

Production Facilities map:

YUKON_20_FED_COM_CTB_SEC_20_S_20190916094205.pdf
YUKON_20_FED_COM_ELEC_SEC_20_S_20190916094204.pdf
YUKON_20_FED_COM_ELEC_SEC_21_PRIVATE_S_20190916094204.pdf
YUKON_20_FED_COM_ELEC_SEC_21_USA_S_20190916094205.pdf
YUKON_20_FED_COM_ELEC_SEC_28_S_20190916094204.pdf
YUKON_20_FED_COM_GAS_SEC_20_S_20190916094204.pdf
YUKON_20_FED_COM_GAS_SEC_21_S_20190916094204.pdf
YUKON_20_FED_COM_INFRA_REV1_20190916094204.pdf
YUKON_20_FED_COM_SEC_20_RD_REV2_S_20190916094029.pdf
YUKON_20_FED_COM_WATER_SEC_20_S_20190916100840.pdf
YUKON_20_FED_COM_WATER_SEC_21_S_20190916100840.pdf
YUKON_20_FED_COM_709H_711H_FL_REV1_S_20190919142128.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 latitude:

Source longitude:

Source datum:

Water source permit type: WATER RIGHT

Water source transport method: TRUCKING
PIPELINE

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 1
Source volume (acre-feet): 0.00012889
Source volume (gal): 42

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Water source and transportation map:

Yukon_Water_and_Caliche_Map_20190916094812.pdf

Water source comments:

New water well? N

New Water Well Info

Well latitude:	Well Longitude:	Well datum:
Well target aquifer:		
Est. depth to top of aquifer(ft):	Est thickness of aquifer:	
Aquifer comments:		
Aquifer documentation:		
Well depth (ft):	Well casing type:	
Well 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:	
Water well additional information:		
State appropriation permit:		
Additional information attachment:		

Section 6 - Construction 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 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:

Yukon_Water_and_Caliche_Map_20190916095144.pdf

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

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 FACILITY Disposal location ownership: COMMERCIAL

Disposal type description:

Disposal location description: Trucked to NMOCD approved disposal facility

Reserve Pit

Reserve Pit being used? N

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) Reserve pit width (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 location Closed Loop System. Drill cuttings will be disposed of into steel tanks and taken to an NMOCD approved disposal facility.

Cuttings area length (ft.) Cuttings area width (ft.)

Cuttings area depth (ft.) Cuttings area volume (cu. yd.)

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

WCuttings area liner

Cuttings area liner specifications and installation description

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

YUKON_20_FED_COM_709H_Padsite_20190919142224.pdf
YUKON_20_FED_COM_709H_Wellsite_20190919142225.pdf
Yukon_20_Fed_Com_709H_Rig_Layout_20190919142236.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: YUKON 20 FED COM

Multiple Well Pad Number: 709H/710H/711H

Recontouring attachment:

YUKON_20_FED_COM_709H_Reclamation_20190919142257.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 (acres): 0	Well pad interim reclamation (acres): 0	Well pad long term disturbance (acres): 0
Road proposed disturbance (acres): 0	Road interim reclamation (acres): 0	Road long term disturbance (acres): 0
Powerline proposed disturbance (acres): 0	Powerline interim reclamation (acres): 0	Powerline long term disturbance (acres): 0
Pipeline proposed disturbance (acres): 0	Pipeline interim reclamation (acres): 0	Pipeline long term disturbance (acres): 0
Other proposed disturbance (acres): 0	Other interim reclamation (acres): 0	Other long term disturbance (acres): 0
Total proposed disturbance: 0	Total interim reclamation: 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 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

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

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? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Seed Summary		Total pounds/Acre:
Seed Type	Pounds/Acre	

Seed reclamation attachment:

Operator Contact/Responsible 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: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Fee Owner: COG Operating LLC - ATTN Surface Management Dept
Phone: (432)683-7443

Fee Owner Address: 600 West Illinois Ave.
Email:

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: surface use agreement

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? N

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information: An onsite meeting was conducted 5/2018. Poly lines are planned to transport water for operations. Will truck if necessary. See attached SUPO Plan.

Use a previously conducted onsite? N

Previous Onsite information:

Other SUPO Attachment

Gas_Capture_Enterprise_Regency_Yukon20FedCom701H_711H_20190916100638.pdf
YUKON_20_FED_COM_709H_Location_20190919142320.pdf
SUPO_YUKON_20_FED_COM_709H_20190919142326.pdf

PWD

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

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: PWD disturbance (acres):

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:

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

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? N

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Injection PWD discharge volume (bbl/day):	
Injection well mineral owner:	
Injection well type:	
Injection well number:	Injection well name:
Assigned injection well API number?	Injection well API number:
Injection well new surface disturbance (acres):	
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:	PWD disturbance (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 options? N	
Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Other PWD discharge volume (bbl/day):	
Other PWD type description:	
Other PWD type attachment:	
Have other regulatory requirements been met?	
Other regulatory requirements attachment:	

Operator Certification

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

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: 01/15/2021
Title: Regulatory Specialist	
Street Address: 5509 Champions Drive	
City: Midland	State: TX
	Zip: 79706
Phone: (432)247-6331	
Email address: lisa_trascher@eogresources.com	

Field Representative

Representative Name:	
Street Address:	
City:	State:
	Zip:
Phone:	
Email address:	

NOI Attachments

Procedure Description

- Yukon_20_Fed_Com_309H_Permit_Info___Rev_Name__TD__csg_12.21.2020_20210115075424.pdf
- Yukon_20_Fed_Com_309H_Planning_Report_20210115075424.pdf

Well Name: YUKON 20 FED COM	Well Location: T24S / R34E / SEC 20 / NENW /	County or Parish/State:
Well Number: 709H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM17241	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: EOG RESOURCES INCORPORATED

YUKON_20_FED_COM_309H_C_102_20210115075402.pdf

Yukon_20_Fed_Com_309H_Wall_Plot_20210115075401.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: FOLLIS	Signed on: JAN 15, 2021 07:54 AM
Name: EOG RESOURCES INCORPORATED	
Title: Sr. Regulatory Administrator	
Street Address: NOT ENTERED	
City: NOT ENTERED	State: NOT ENTERED
Phone: (432) 686-3600	
Email address: NOT ENTERED	

Field Representative

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 02/11/2021
Signature: Chris Walls	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
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 3002546975	² Pool Code 98092	³ Pool Name WC025 G09 S2533361
⁴ Property Code 327233	⁵ Property Name YUKON 20 FED COM	⁶ Well Number #309H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3543'

¹⁰Surface Location

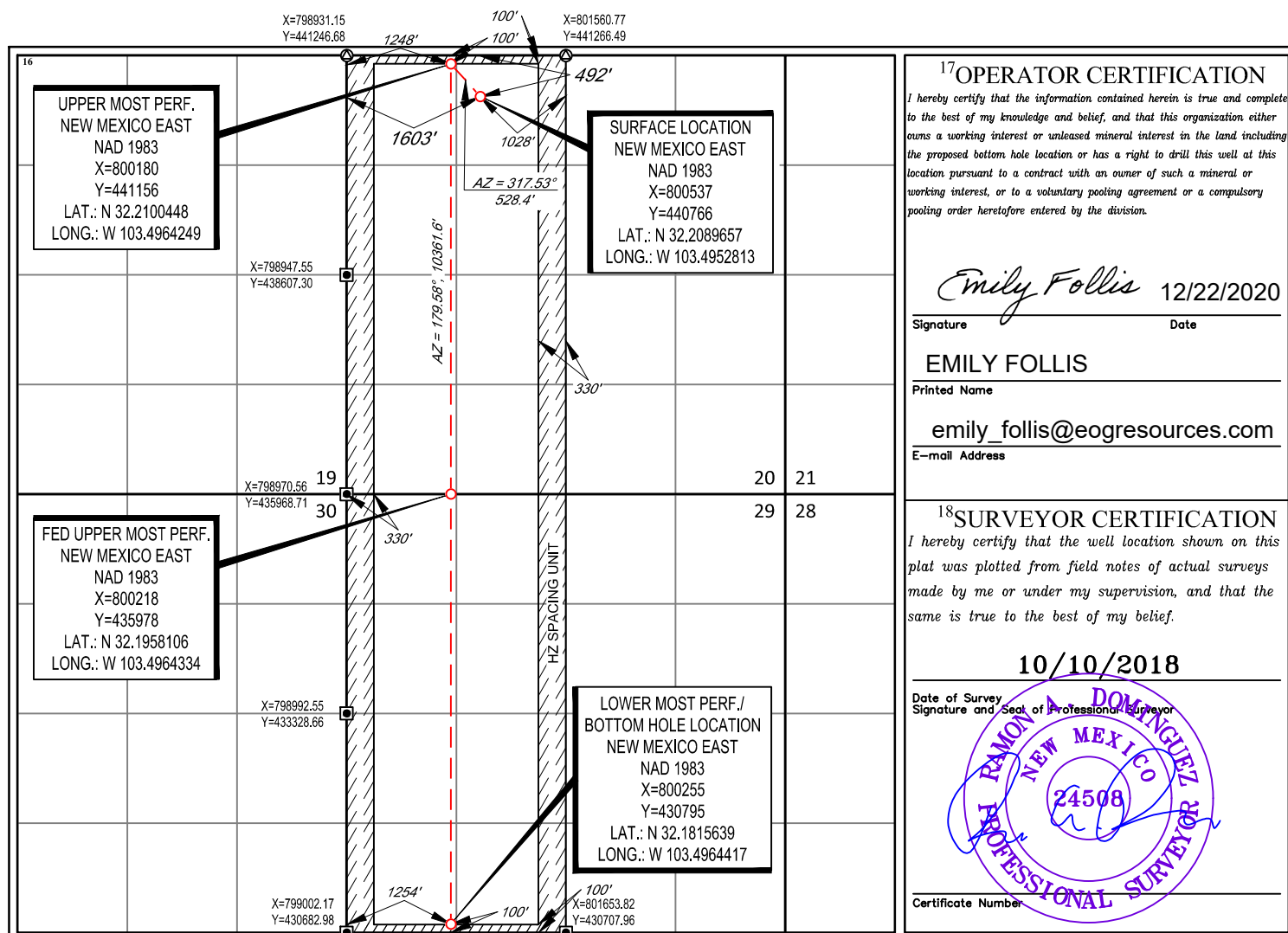
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	20	24-S	34-E	-	492'	NORTH	1603'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	29	24-S	34-E	-	100'	SOUTH	1254'	WEST	LEA

¹² Dedicated Acres 640.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁷OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Emily Follis 12/22/2020
Signature Date

EMILY FOLLIS

Printed Name

emily_follis@eogresources.com

E-mail Address

¹⁸SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

10/10/2018

Date of Survey
Signature and Seal of Professional Surveyor

RAMONA DOMINGUEZ
NEW MEXICO
24508
PROFESSIONAL SURVEYOR

Certificate Number

Revised Permit Information 12/21/2020:

Well Name: Yukon 20 Fed Com #309H

Location:

SHL: 492' FNL & 1603' FWL, Section 20, T-24-S, R-34-E, Lea Co., N.M.

BHL: 100' FSL & 1254' FWL, Section 29, T-24-S, R-34-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0' – 1,140'	13.375"	54.5#	J-55	STC	1.125	1.25	1.60
12.25"	0' – 4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
12.25"	4,000' – 5,050'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0' – 10,448'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60
8.5"	10,448' – 20,382'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Variance is requested to waive the centralizer requirements for the 9-5/8" casing in the 12-1/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 12-1/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to waive any centralizer requirements for the 5-1/2" casing in the 8-3/4" and 8-1/2" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" and 8-1/2" hole interval to maximize cement bond and zonal isolation.

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /sk	Slurry Description
1,140'	510	13.5	1.73	Lead: Class C + 4.0% Bentonite + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	160	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate (TOC @ 940')
5,050'	740	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
	320	14.8	1.21	Tail: Class C + 10% NaCl + 3% MagOx (TOC @ 4,040')
20,382'	530	11.0	3.21	Lead: Class C + 3% CaCl ₂ + 3% Microbond (TOC @ 4,550')
	2,590	14.4	1.2	Tail: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 9,698')

Additive	Purpose
Bentonite Gel	Lightweight/Lost circulation prevention
Calcium Chloride	Accelerator
Cello-flake	Lost circulation prevention
Sodium Metasilicate	Accelerator
MagOx	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

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

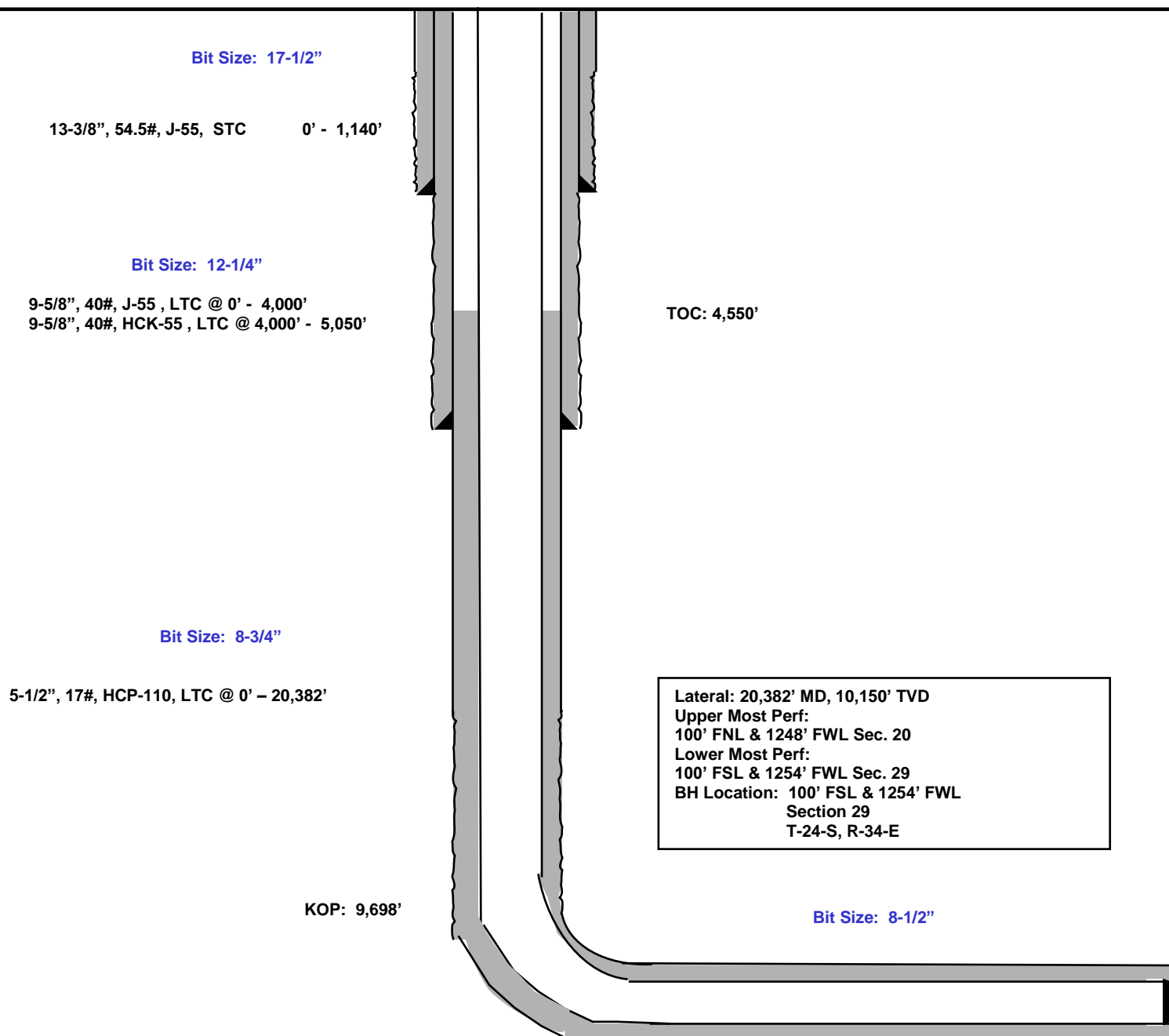
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,140'	Fresh - Gel	8.6-8.8	28-34	N/c
1,140' – 5,050'	Brine	8.6-8.8	28-34	N/c
5,050' – 20,382'	Oil Base	8.8-9.5	58-68	N/c - 6

492' FNL
1603' FWL
Section 20
T-24-S, R-34-E

Proposed Wellbore
Revised 12/21/2020

KB: 3,568'
GL: 3,543'

API: 30-025-46975





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Yukon 20 Fed Com

#309H

OH

Plan: Plan #0.1 RT

Standard Planning Report

08 December, 2020

EOG Resources

Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well #309H
Company:	EOG Resources - Midland	TVD Reference:	kb = 25' @ 3571.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3571.0usft
Site:	Yukon 20 Fed Com	North Reference:	Grid
Well:	#309H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

Project	Lea County, NM (NAD 83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Yukon 20 Fed Com					
Site Position:		Northing:	440,613.00 usft	Latitude:	32° 12' 30.615 N	
From:	Map	Easting:	802,407.00 usft	Longitude:	103° 29' 21.259 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.45 °

Well	#309H					
Well Position	+N/-S	153.0 usft	Northing:	440,766.00 usft	Latitude:	32° 12' 32.274 N
	+E/-W	-1,870.0 usft	Easting:	800,537.00 usft	Longitude:	103° 29' 43.010 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,546.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	12/8/2020	6.57	59.92	47,545.79656805

Design	Plan #0.1 RT				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	181.61	

Plan Survey Tool Program	Date	12/8/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	20,381.9	Plan #0.1 RT (OH)	EOG MWD+IFR1	
				MWD + IFR1	

EOG Resources

Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well #309H
Company:	EOG Resources - Midland	TVD Reference:	kb = 25' @ 3571.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3571.0usft
Site:	Yukon 20 Fed Com	North Reference:	Grid
Well:	#309H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,564.5	5.29	321.42	1,564.2	9.5	-7.6	2.00	2.00	0.00	321.42	
7,404.1	5.29	321.42	7,378.8	430.5	-343.4	0.00	0.00	0.00	0.00	
7,668.6	0.00	0.00	7,643.0	440.0	-351.0	2.00	-2.00	0.00	180.00	
9,698.1	0.00	0.00	9,672.5	440.0	-351.0	0.00	0.00	0.00	0.00	KOP(Yukon 20 Fed C
9,918.6	26.46	180.00	9,885.2	390.0	-351.0	12.00	12.00	81.65	180.00	FTP(Yukon 20 Fed C
10,448.1	90.00	179.60	10,149.9	-37.5	-348.9	12.00	12.00	-0.08	-0.44	
15,198.8	90.00	179.60	10,150.0	-4,788.0	-316.0	0.00	0.00	0.00	0.00	Fed Perf 1(Yukon 20 I
20,381.9	90.00	179.62	10,150.0	-9,971.0	-281.0	0.00	0.00	0.00	86.40	PBHL(Yukon 20 Fed C

EOG Resources

Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well #309H
Company:	EOG Resources - Midland	TVD Reference:	kb = 25' @ 3571.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3571.0usft
Site:	Yukon 20 Fed Com	North Reference:	Grid
Well:	#309H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	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
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	2.00	321.42	1,400.0	1.4	-1.1	-1.3	2.00	2.00	0.00
1,500.0	4.00	321.42	1,499.8	5.5	-4.4	-5.3	2.00	2.00	0.00
1,564.5	5.29	321.42	1,564.2	9.5	-7.6	-9.3	2.00	2.00	0.00
1,600.0	5.29	321.42	1,599.5	12.1	-9.7	-11.8	0.00	0.00	0.00
1,700.0	5.29	321.42	1,699.0	19.3	-15.4	-18.9	0.00	0.00	0.00
1,800.0	5.29	321.42	1,798.6	26.5	-21.2	-25.9	0.00	0.00	0.00
1,900.0	5.29	321.42	1,898.2	33.7	-26.9	-33.0	0.00	0.00	0.00
2,000.0	5.29	321.42	1,997.8	40.9	-32.7	-40.0	0.00	0.00	0.00
2,100.0	5.29	321.42	2,097.3	48.1	-38.4	-47.0	0.00	0.00	0.00
2,200.0	5.29	321.42	2,196.9	55.3	-44.2	-54.1	0.00	0.00	0.00
2,300.0	5.29	321.42	2,296.5	62.6	-49.9	-61.1	0.00	0.00	0.00
2,400.0	5.29	321.42	2,396.1	69.8	-55.7	-68.2	0.00	0.00	0.00
2,500.0	5.29	321.42	2,495.6	77.0	-61.4	-75.2	0.00	0.00	0.00
2,600.0	5.29	321.42	2,595.2	84.2	-67.2	-82.3	0.00	0.00	0.00
2,700.0	5.29	321.42	2,694.8	91.4	-72.9	-89.3	0.00	0.00	0.00
2,800.0	5.29	321.42	2,794.4	98.6	-78.7	-96.3	0.00	0.00	0.00
2,900.0	5.29	321.42	2,893.9	105.8	-84.4	-103.4	0.00	0.00	0.00
3,000.0	5.29	321.42	2,993.5	113.0	-90.2	-110.4	0.00	0.00	0.00
3,100.0	5.29	321.42	3,093.1	120.2	-95.9	-117.5	0.00	0.00	0.00
3,200.0	5.29	321.42	3,192.7	127.4	-101.7	-124.5	0.00	0.00	0.00
3,300.0	5.29	321.42	3,292.2	134.6	-107.4	-131.6	0.00	0.00	0.00
3,400.0	5.29	321.42	3,391.8	141.8	-113.2	-138.6	0.00	0.00	0.00
3,500.0	5.29	321.42	3,491.4	149.1	-118.9	-145.6	0.00	0.00	0.00
3,600.0	5.29	321.42	3,591.0	156.3	-124.7	-152.7	0.00	0.00	0.00
3,700.0	5.29	321.42	3,690.5	163.5	-130.4	-159.7	0.00	0.00	0.00
3,800.0	5.29	321.42	3,790.1	170.7	-136.2	-166.8	0.00	0.00	0.00
3,900.0	5.29	321.42	3,889.7	177.9	-141.9	-173.8	0.00	0.00	0.00
4,000.0	5.29	321.42	3,989.2	185.1	-147.7	-180.9	0.00	0.00	0.00
4,100.0	5.29	321.42	4,088.8	192.3	-153.4	-187.9	0.00	0.00	0.00
4,200.0	5.29	321.42	4,188.4	199.5	-159.2	-194.9	0.00	0.00	0.00
4,300.0	5.29	321.42	4,288.0	206.7	-164.9	-202.0	0.00	0.00	0.00
4,400.0	5.29	321.42	4,387.5	213.9	-170.7	-209.0	0.00	0.00	0.00
4,500.0	5.29	321.42	4,487.1	221.1	-176.4	-216.1	0.00	0.00	0.00
4,600.0	5.29	321.42	4,586.7	228.3	-182.2	-223.1	0.00	0.00	0.00
4,700.0	5.29	321.42	4,686.3	235.5	-187.9	-230.2	0.00	0.00	0.00
4,800.0	5.29	321.42	4,785.8	242.8	-193.7	-237.2	0.00	0.00	0.00
4,900.0	5.29	321.42	4,885.4	250.0	-199.4	-244.2	0.00	0.00	0.00
5,000.0	5.29	321.42	4,985.0	257.2	-205.2	-251.3	0.00	0.00	0.00
5,100.0	5.29	321.42	5,084.6	264.4	-210.9	-258.3	0.00	0.00	0.00
5,200.0	5.29	321.42	5,184.1	271.6	-216.7	-265.4	0.00	0.00	0.00

EOG Resources

Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well #309H
Company:	EOG Resources - Midland	TVD Reference:	kb = 25' @ 3571.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3571.0usft
Site:	Yukon 20 Fed Com	North Reference:	Grid
Well:	#309H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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	5.29	321.42	5,283.7	278.8	-222.4	-272.4	0.00	0.00	0.00
5,400.0	5.29	321.42	5,383.3	286.0	-228.2	-279.5	0.00	0.00	0.00
5,500.0	5.29	321.42	5,482.9	293.2	-233.9	-286.5	0.00	0.00	0.00
5,600.0	5.29	321.42	5,582.4	300.4	-239.7	-293.5	0.00	0.00	0.00
5,700.0	5.29	321.42	5,682.0	307.6	-245.4	-300.6	0.00	0.00	0.00
5,800.0	5.29	321.42	5,781.6	314.8	-251.2	-307.6	0.00	0.00	0.00
5,900.0	5.29	321.42	5,881.2	322.0	-256.9	-314.7	0.00	0.00	0.00
6,000.0	5.29	321.42	5,980.7	329.3	-262.7	-321.7	0.00	0.00	0.00
6,100.0	5.29	321.42	6,080.3	336.5	-268.4	-328.8	0.00	0.00	0.00
6,200.0	5.29	321.42	6,179.9	343.7	-274.2	-335.8	0.00	0.00	0.00
6,300.0	5.29	321.42	6,279.5	350.9	-279.9	-342.9	0.00	0.00	0.00
6,400.0	5.29	321.42	6,379.0	358.1	-285.7	-349.9	0.00	0.00	0.00
6,500.0	5.29	321.42	6,478.6	365.3	-291.4	-356.9	0.00	0.00	0.00
6,600.0	5.29	321.42	6,578.2	372.5	-297.2	-364.0	0.00	0.00	0.00
6,700.0	5.29	321.42	6,677.7	379.7	-302.9	-371.0	0.00	0.00	0.00
6,800.0	5.29	321.42	6,777.3	386.9	-308.7	-378.1	0.00	0.00	0.00
6,900.0	5.29	321.42	6,876.9	394.1	-314.4	-385.1	0.00	0.00	0.00
7,000.0	5.29	321.42	6,976.5	401.3	-320.2	-392.2	0.00	0.00	0.00
7,100.0	5.29	321.42	7,076.0	408.5	-325.9	-399.2	0.00	0.00	0.00
7,200.0	5.29	321.42	7,175.6	415.7	-331.7	-406.2	0.00	0.00	0.00
7,300.0	5.29	321.42	7,275.2	423.0	-337.4	-413.3	0.00	0.00	0.00
7,404.1	5.29	321.42	7,378.8	430.5	-343.4	-420.6	0.00	0.00	0.00
7,500.0	3.37	321.42	7,474.5	436.1	-347.9	-426.1	2.00	-2.00	0.00
7,600.0	1.37	321.42	7,574.4	439.4	-350.5	-429.3	2.00	-2.00	0.00
7,668.6	0.00	0.00	7,643.0	440.0	-351.0	-429.9	2.00	-2.00	0.00
7,700.0	0.00	0.00	7,674.4	440.0	-351.0	-429.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,774.4	440.0	-351.0	-429.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,874.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,974.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,100.0	0.00	0.00	8,074.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,200.0	0.00	0.00	8,174.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,300.0	0.00	0.00	8,274.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,400.0	0.00	0.00	8,374.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,500.0	0.00	0.00	8,474.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,600.0	0.00	0.00	8,574.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,700.0	0.00	0.00	8,674.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,800.0	0.00	0.00	8,774.4	440.0	-351.0	-429.9	0.00	0.00	0.00
8,900.0	0.00	0.00	8,874.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,000.0	0.00	0.00	8,974.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,100.0	0.00	0.00	9,074.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,200.0	0.00	0.00	9,174.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,300.0	0.00	0.00	9,274.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,400.0	0.00	0.00	9,374.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,500.0	0.00	0.00	9,474.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,600.0	0.00	0.00	9,574.4	440.0	-351.0	-429.9	0.00	0.00	0.00
9,698.1	0.00	0.00	9,672.5	440.0	-351.0	-429.9	0.00	0.00	0.00
KOP(Yukon 20 Fed Com #309H)									
9,700.0	0.22	180.00	9,674.4	440.0	-351.0	-429.9	12.00	12.00	0.00
9,725.0	3.22	180.00	9,699.4	439.2	-351.0	-429.2	12.00	12.00	0.00
9,750.0	6.23	180.00	9,724.3	437.2	-351.0	-427.1	12.00	12.00	0.00
9,775.0	9.23	180.00	9,749.0	433.8	-351.0	-423.8	12.00	12.00	0.00
9,800.0	12.23	180.00	9,773.6	429.2	-351.0	-419.1	12.00	12.00	0.00
9,825.0	15.23	180.00	9,797.9	423.2	-351.0	-413.2	12.00	12.00	0.00

EOG Resources

Planning Report



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Company:	EOG Resources - Midland	TVD Reference:	kb = 25' @ 3571.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3571.0usft
Site:	Yukon 20 Fed Com	North Reference:	Grid
Well:	#309H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,850.0	18.23	180.00	9,821.8	416.0	-351.0	-406.0	12.00	12.00	0.00
9,875.0	21.23	180.00	9,845.4	407.6	-351.0	-397.6	12.00	12.00	0.00
9,900.0	24.23	180.00	9,868.4	398.0	-351.0	-387.9	12.00	12.00	0.00
9,918.6	26.46	180.00	9,885.2	390.0	-351.0	-380.0	12.00	12.00	0.00
FTP(Yukon 20 Fed Com #309H)									
9,925.0	27.23	179.99	9,890.9	387.1	-351.0	-377.1	12.00	12.00	-0.20
9,950.0	30.23	179.94	9,912.8	375.1	-351.0	-365.0	12.00	12.00	-0.18
9,975.0	33.23	179.90	9,934.1	361.9	-351.0	-351.9	12.00	12.00	-0.15
10,000.0	36.23	179.87	9,954.7	347.7	-350.9	-337.7	12.00	12.00	-0.13
10,025.0	39.23	179.84	9,974.4	332.4	-350.9	-322.4	12.00	12.00	-0.11
10,050.0	42.23	179.82	9,993.4	316.1	-350.9	-306.1	12.00	12.00	-0.10
10,075.0	45.23	179.80	10,011.4	298.8	-350.8	-288.8	12.00	12.00	-0.09
10,100.0	48.23	179.78	10,028.6	280.6	-350.7	-270.6	12.00	12.00	-0.08
10,125.0	51.23	179.76	10,044.7	261.5	-350.7	-251.6	12.00	12.00	-0.07
10,150.0	54.23	179.75	10,059.9	241.7	-350.6	-231.7	12.00	12.00	-0.07
10,175.0	57.23	179.73	10,073.9	221.0	-350.5	-211.0	12.00	12.00	-0.06
10,200.0	60.23	179.72	10,086.9	199.6	-350.4	-189.7	12.00	12.00	-0.06
10,225.0	63.23	179.70	10,098.8	177.6	-350.3	-167.7	12.00	12.00	-0.05
10,250.0	66.23	179.69	10,109.4	155.0	-350.1	-145.1	12.00	12.00	-0.05
10,275.0	69.23	179.68	10,118.9	131.9	-350.0	-122.0	12.00	12.00	-0.05
10,300.0	72.23	179.67	10,127.2	108.3	-349.9	-98.4	12.00	12.00	-0.05
10,325.0	75.23	179.65	10,134.2	84.3	-349.7	-74.4	12.00	12.00	-0.04
10,350.0	78.23	179.64	10,139.9	60.0	-349.6	-50.1	12.00	12.00	-0.04
10,375.0	81.23	179.63	10,144.4	35.4	-349.4	-25.5	12.00	12.00	-0.04
10,400.0	84.23	179.62	10,147.5	10.6	-349.3	-0.7	12.00	12.00	-0.04
10,425.0	87.23	179.61	10,149.4	-14.4	-349.1	24.2	12.00	12.00	-0.04
10,448.1	90.00	179.60	10,149.9	-37.5	-348.9	47.3	12.00	12.00	-0.04
10,500.0	90.00	179.60	10,149.9	-89.3	-348.6	99.1	0.00	0.00	0.00
10,600.0	90.00	179.60	10,149.9	-189.3	-347.9	199.1	0.00	0.00	0.00
10,700.0	90.00	179.60	10,149.9	-289.3	-347.2	299.0	0.00	0.00	0.00
10,800.0	90.00	179.60	10,149.9	-389.3	-346.5	398.9	0.00	0.00	0.00
10,900.0	90.00	179.60	10,150.0	-489.3	-345.8	498.9	0.00	0.00	0.00
11,000.0	90.00	179.60	10,150.0	-589.3	-345.1	598.8	0.00	0.00	0.00
11,100.0	90.00	179.60	10,150.0	-689.3	-344.4	698.8	0.00	0.00	0.00
11,200.0	90.00	179.60	10,150.0	-789.3	-343.7	798.7	0.00	0.00	0.00
11,300.0	90.00	179.60	10,150.0	-889.3	-343.0	898.6	0.00	0.00	0.00
11,400.0	90.00	179.60	10,150.0	-989.3	-342.3	998.6	0.00	0.00	0.00
11,500.0	90.00	179.60	10,150.0	-1,089.3	-341.7	1,098.5	0.00	0.00	0.00
11,600.0	90.00	179.60	10,150.0	-1,189.3	-341.0	1,198.5	0.00	0.00	0.00
11,700.0	90.00	179.60	10,150.0	-1,289.3	-340.3	1,298.4	0.00	0.00	0.00
11,800.0	90.00	179.60	10,150.0	-1,389.3	-339.6	1,398.3	0.00	0.00	0.00
11,900.0	90.00	179.60	10,150.0	-1,489.3	-338.9	1,498.3	0.00	0.00	0.00
12,000.0	90.00	179.60	10,150.0	-1,589.3	-338.2	1,598.2	0.00	0.00	0.00
12,100.0	90.00	179.60	10,150.0	-1,689.3	-337.5	1,698.1	0.00	0.00	0.00
12,200.0	90.00	179.60	10,150.0	-1,789.3	-336.8	1,798.1	0.00	0.00	0.00
12,300.0	90.00	179.60	10,150.0	-1,889.3	-336.1	1,898.0	0.00	0.00	0.00
12,400.0	90.00	179.60	10,150.0	-1,989.3	-335.4	1,998.0	0.00	0.00	0.00
12,500.0	90.00	179.60	10,150.0	-2,089.3	-334.7	2,097.9	0.00	0.00	0.00
12,600.0	90.00	179.60	10,150.0	-2,189.3	-334.0	2,197.8	0.00	0.00	0.00
12,700.0	90.00	179.60	10,150.0	-2,289.3	-333.3	2,297.8	0.00	0.00	0.00
12,800.0	90.00	179.60	10,150.0	-2,389.3	-332.6	2,397.7	0.00	0.00	0.00
12,900.0	90.00	179.60	10,150.0	-2,489.3	-331.9	2,497.7	0.00	0.00	0.00
13,000.0	90.00	179.60	10,150.0	-2,589.3	-331.2	2,597.6	0.00	0.00	0.00
13,100.0	90.00	179.60	10,150.0	-2,689.3	-330.6	2,697.5	0.00	0.00	0.00

EOG Resources

Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well #309H
Company:	EOG Resources - Midland	TVD Reference:	kb = 25' @ 3571.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3571.0usft
Site:	Yukon 20 Fed Com	North Reference:	Grid
Well:	#309H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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)	
13,200.0	90.00	179.60	10,150.0	-2,789.3	-329.9	2,797.5	0.00	0.00	0.00	
13,300.0	90.00	179.60	10,150.0	-2,889.3	-329.2	2,897.4	0.00	0.00	0.00	
13,400.0	90.00	179.60	10,150.0	-2,989.3	-328.5	2,997.3	0.00	0.00	0.00	
13,500.0	90.00	179.60	10,150.0	-3,089.3	-327.8	3,097.3	0.00	0.00	0.00	
13,600.0	90.00	179.60	10,150.0	-3,189.3	-327.1	3,197.2	0.00	0.00	0.00	
13,700.0	90.00	179.60	10,150.0	-3,289.3	-326.4	3,297.2	0.00	0.00	0.00	
13,800.0	90.00	179.60	10,150.0	-3,389.3	-325.7	3,397.1	0.00	0.00	0.00	
13,900.0	90.00	179.60	10,150.0	-3,489.3	-325.0	3,497.0	0.00	0.00	0.00	
14,000.0	90.00	179.60	10,150.0	-3,589.3	-324.3	3,597.0	0.00	0.00	0.00	
14,100.0	90.00	179.60	10,150.0	-3,689.3	-323.6	3,696.9	0.00	0.00	0.00	
14,200.0	90.00	179.60	10,150.0	-3,789.3	-322.9	3,796.9	0.00	0.00	0.00	
14,300.0	90.00	179.60	10,150.0	-3,889.3	-322.2	3,896.8	0.00	0.00	0.00	
14,400.0	90.00	179.60	10,150.0	-3,989.3	-321.5	3,996.7	0.00	0.00	0.00	
14,500.0	90.00	179.60	10,150.0	-4,089.3	-320.8	4,096.7	0.00	0.00	0.00	
14,600.0	90.00	179.60	10,150.0	-4,189.2	-320.2	4,196.6	0.00	0.00	0.00	
14,700.0	90.00	179.60	10,150.0	-4,289.2	-319.5	4,296.5	0.00	0.00	0.00	
14,800.0	90.00	179.60	10,150.0	-4,389.2	-318.8	4,396.5	0.00	0.00	0.00	
14,900.0	90.00	179.60	10,150.0	-4,489.2	-318.1	4,496.4	0.00	0.00	0.00	
15,000.0	90.00	179.60	10,150.0	-4,589.2	-317.4	4,596.4	0.00	0.00	0.00	
15,100.0	90.00	179.60	10,150.0	-4,689.2	-316.7	4,696.3	0.00	0.00	0.00	
15,198.8	90.00	179.60	10,150.0	-4,788.0	-316.0	4,795.0	0.00	0.00	0.00	
Fed Perf 1(Yukon 20 Fed Com #309H)										
15,200.0	90.00	179.60	10,150.0	-4,789.2	-316.0	4,796.2	0.00	0.00	0.00	
15,300.0	90.00	179.60	10,150.0	-4,889.2	-315.3	4,896.2	0.00	0.00	0.00	
15,400.0	90.00	179.60	10,150.0	-4,989.2	-314.6	4,996.1	0.00	0.00	0.00	
15,500.0	90.00	179.60	10,150.0	-5,089.2	-313.9	5,096.0	0.00	0.00	0.00	
15,600.0	90.00	179.60	10,150.0	-5,189.2	-313.2	5,196.0	0.00	0.00	0.00	
15,700.0	90.00	179.60	10,150.0	-5,289.2	-312.5	5,295.9	0.00	0.00	0.00	
15,800.0	90.00	179.61	10,150.0	-5,389.2	-311.8	5,395.9	0.00	0.00	0.00	
15,900.0	90.00	179.61	10,150.0	-5,489.2	-311.2	5,495.8	0.00	0.00	0.00	
16,000.0	90.00	179.61	10,150.0	-5,589.2	-310.5	5,595.7	0.00	0.00	0.00	
16,100.0	90.00	179.61	10,150.0	-5,689.2	-309.8	5,695.7	0.00	0.00	0.00	
16,200.0	90.00	179.61	10,150.0	-5,789.2	-309.1	5,795.6	0.00	0.00	0.00	
16,300.0	90.00	179.61	10,150.0	-5,889.2	-308.4	5,895.6	0.00	0.00	0.00	
16,400.0	90.00	179.61	10,150.0	-5,989.2	-307.7	5,995.5	0.00	0.00	0.00	
16,500.0	90.00	179.61	10,150.0	-6,089.2	-307.0	6,095.4	0.00	0.00	0.00	
16,600.0	90.00	179.61	10,150.0	-6,189.2	-306.4	6,195.4	0.00	0.00	0.00	
16,700.0	90.00	179.61	10,150.0	-6,289.2	-305.7	6,295.3	0.00	0.00	0.00	
16,800.0	90.00	179.61	10,150.0	-6,389.2	-305.0	6,395.3	0.00	0.00	0.00	
16,900.0	90.00	179.61	10,150.0	-6,489.2	-304.3	6,495.2	0.00	0.00	0.00	
17,000.0	90.00	179.61	10,150.0	-6,589.2	-303.6	6,595.1	0.00	0.00	0.00	
17,100.0	90.00	179.61	10,150.0	-6,689.2	-302.9	6,695.1	0.00	0.00	0.00	
17,200.0	90.00	179.61	10,150.0	-6,789.2	-302.3	6,795.0	0.00	0.00	0.00	
17,300.0	90.00	179.61	10,150.0	-6,889.2	-301.6	6,894.9	0.00	0.00	0.00	
17,400.0	90.00	179.61	10,150.0	-6,989.2	-300.9	6,994.9	0.00	0.00	0.00	
17,500.0	90.00	179.61	10,150.0	-7,089.2	-300.2	7,094.8	0.00	0.00	0.00	
17,600.0	90.00	179.61	10,150.0	-7,189.2	-299.5	7,194.8	0.00	0.00	0.00	
17,700.0	90.00	179.61	10,150.0	-7,289.2	-298.9	7,294.7	0.00	0.00	0.00	
17,800.0	90.00	179.61	10,150.0	-7,389.2	-298.2	7,394.6	0.00	0.00	0.00	
17,900.0	90.00	179.61	10,150.0	-7,489.2	-297.5	7,494.6	0.00	0.00	0.00	
18,000.0	90.00	179.61	10,150.0	-7,589.2	-296.8	7,594.5	0.00	0.00	0.00	
18,100.0	90.00	179.61	10,150.0	-7,689.2	-296.2	7,694.5	0.00	0.00	0.00	
18,200.0	90.00	179.61	10,150.0	-7,789.2	-295.5	7,794.4	0.00	0.00	0.00	

EOG Resources

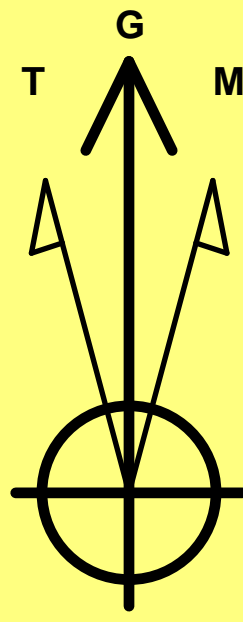
Planning Report



Database:	EDM	Local Co-ordinate Reference:	Well #309H
Company:	EOG Resources - Midland	TVD Reference:	kb = 25' @ 3571.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	kb = 25' @ 3571.0usft
Site:	Yukon 20 Fed Com	North Reference:	Grid
Well:	#309H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1 RT		

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)
18,300.0	90.00	179.62	10,150.0	-7,889.2	-294.8	7,894.3	0.00	0.00	0.00
18,400.0	90.00	179.62	10,150.0	-7,989.2	-294.2	7,994.3	0.00	0.00	0.00
18,500.0	90.00	179.62	10,150.0	-8,089.2	-293.5	8,094.2	0.00	0.00	0.00
18,600.0	90.00	179.62	10,150.0	-8,189.2	-292.8	8,194.2	0.00	0.00	0.00
18,700.0	90.00	179.62	10,150.0	-8,289.2	-292.1	8,294.1	0.00	0.00	0.00
18,800.0	90.00	179.62	10,150.0	-8,389.2	-291.5	8,394.0	0.00	0.00	0.00
18,900.0	90.00	179.62	10,150.0	-8,489.1	-290.8	8,494.0	0.00	0.00	0.00
19,000.0	90.00	179.62	10,150.0	-8,589.1	-290.1	8,593.9	0.00	0.00	0.00
19,100.0	90.00	179.62	10,150.0	-8,689.1	-289.5	8,693.8	0.00	0.00	0.00
19,200.0	90.00	179.62	10,150.0	-8,789.1	-288.8	8,793.8	0.00	0.00	0.00
19,300.0	90.00	179.62	10,150.0	-8,889.1	-288.1	8,893.7	0.00	0.00	0.00
19,400.0	90.00	179.62	10,150.0	-8,989.1	-287.5	8,993.7	0.00	0.00	0.00
19,500.0	90.00	179.62	10,150.0	-9,089.1	-286.8	9,093.6	0.00	0.00	0.00
19,600.0	90.00	179.62	10,150.0	-9,189.1	-286.2	9,193.5	0.00	0.00	0.00
19,700.0	90.00	179.62	10,150.0	-9,289.1	-285.5	9,293.5	0.00	0.00	0.00
19,800.0	90.00	179.62	10,150.0	-9,389.1	-284.8	9,393.4	0.00	0.00	0.00
19,900.0	90.00	179.62	10,150.0	-9,489.1	-284.2	9,493.4	0.00	0.00	0.00
20,000.0	90.00	179.62	10,150.0	-9,589.1	-283.5	9,593.3	0.00	0.00	0.00
20,100.0	90.00	179.62	10,150.0	-9,689.1	-282.9	9,693.2	0.00	0.00	0.00
20,200.0	90.00	179.62	10,150.0	-9,789.1	-282.2	9,793.2	0.00	0.00	0.00
20,300.0	90.00	179.62	10,150.0	-9,889.1	-281.5	9,893.1	0.00	0.00	0.00
20,381.9	90.00	179.62	10,150.0	-9,971.0	-281.0	9,975.0	0.00	0.00	0.00
PBHL(Yukon 20 Fed Com #309H)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(Yukon 20 Fed Cor - plan hits target center - Point	0.00	0.00	9,672.5	440.0	-351.0	441,206.00	800,186.00	32° 12' 36.655 N	103° 29' 47.055 W
FTP(Yukon 20 Fed Com - plan hits target center - Point	0.00	0.00	9,885.2	390.0	-351.0	441,156.00	800,186.00	32° 12' 36.160 N	103° 29' 47.059 W
Fed Perf 1(Yukon 20 Fe - plan hits target center - Point	0.00	0.00	10,150.0	-4,788.0	-316.0	435,978.00	800,221.00	32° 11' 44.921 N	103° 29' 47.121 W
PBHL(Yukon 20 Fed Co - plan hits target center - Point	0.00	0.00	10,150.0	-9,971.0	-281.0	430,795.00	800,256.00	32° 10' 53.632 N	103° 29' 47.183 W



Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.12°

Magnetic Field
Strength: 47545.8nT
Dip Angle: 59.92°
Date: 12/8/2020
Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 6.12°
To convert a Magnetic Direction to a True Direction, Add 6.57° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

Lea County, NM (NAD 83 NME)

Yukon 20 Fed Com #309H

Plan #0.1 RT

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #309H

3546.0

kb = 25' @ 3571.0usft

Northing
440766.00

Easting
800537.00

Latitude
32° 12' 32.274 N

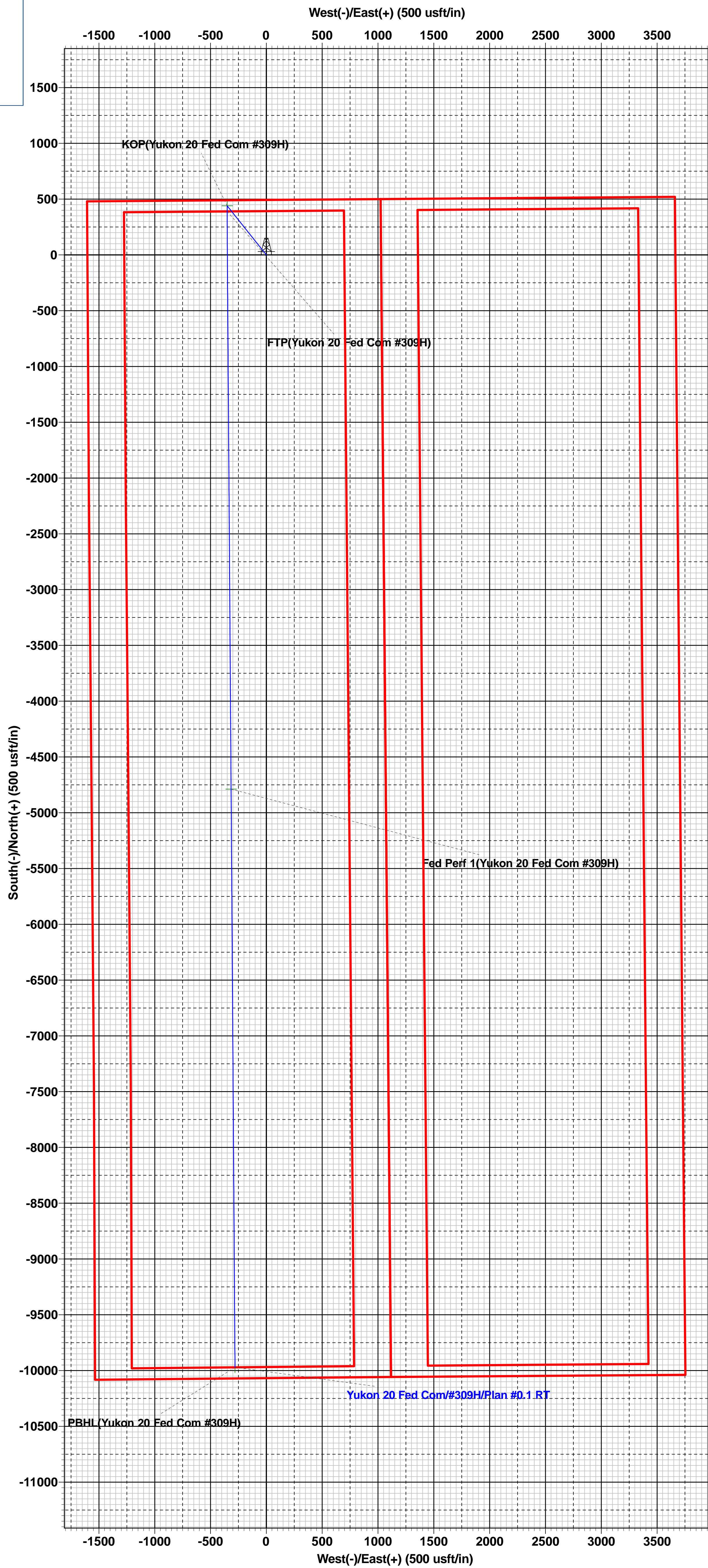
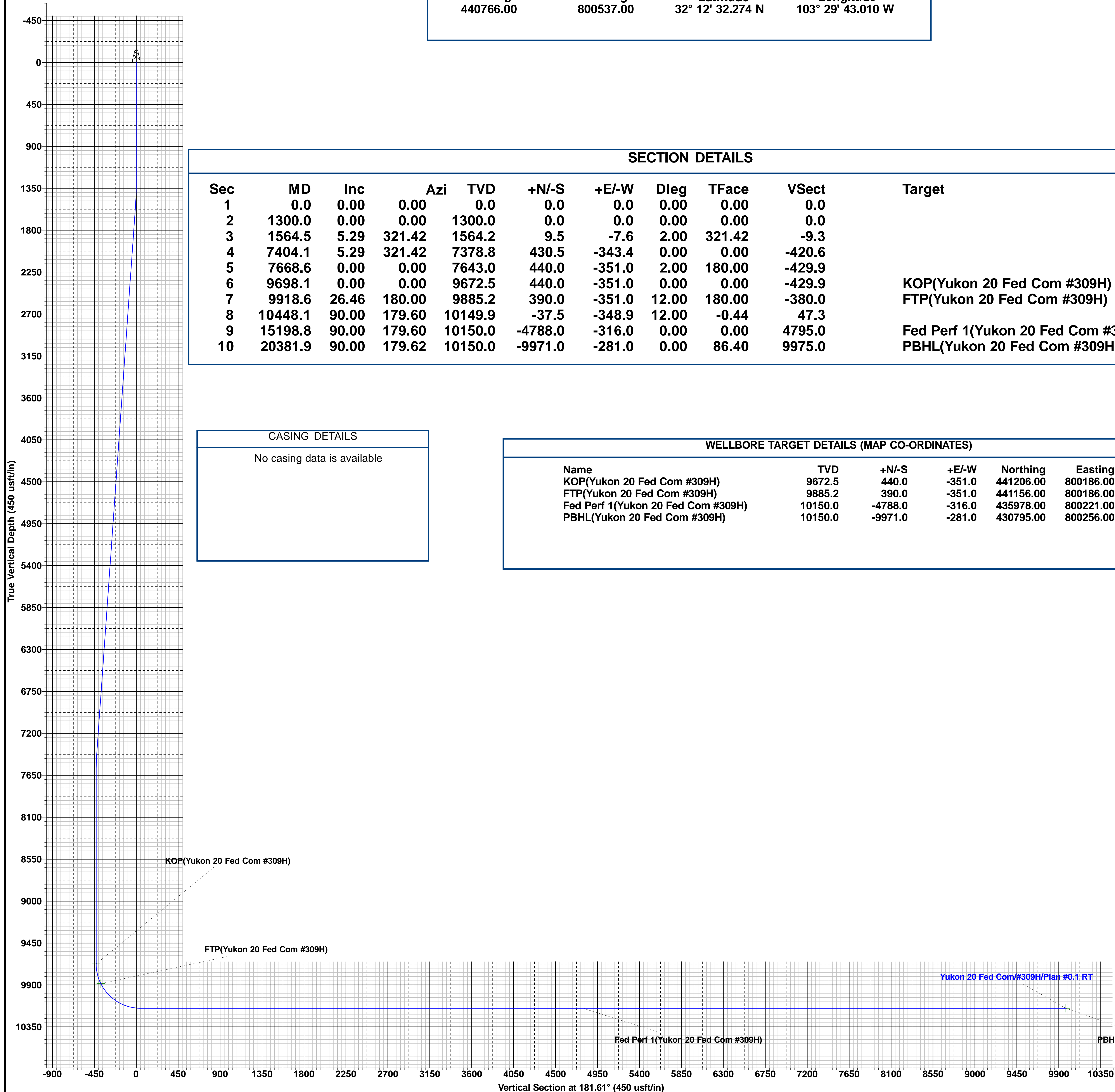
Longitude
103° 29' 43.010 W

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1300.0	0.00	0.00	1300.0	0.0	0.0	0.00	0.00	0.0	
3	1564.5	5.29	321.42	1564.2	9.5	-7.6	2.00	321.42	-9.3	
4	7404.1	5.29	321.42	7378.8	430.5	-343.4	0.00	0.00	-420.6	
5	7668.6	0.00	0.00	7643.0	440.0	-351.0	2.00	180.00	-429.9	
6	9698.1	0.00	0.00	9672.5	440.0	-351.0	0.00	0.00	-429.9	
7	9918.6	26.46	180.00	9885.2	390.0	-351.0	12.00	180.00	-380.0	KOP(Yukon 20 Fed Com #309H)
8	10448.1	90.00	179.60	10149.9	-37.5	-348.9	12.00	-0.44	47.3	FTP(Yukon 20 Fed Com #309H)
9	15198.8	90.00	179.60	10150.0	-4788.0	-316.0	0.00	0.00	4795.0	Fed Perf 1(Yukon 20 Fed Com #309H)
10	20381.9	90.00	179.62	10150.0	-9971.0	-281.0	0.00	86.40	9975.0	PBHL(Yukon 20 Fed Com #309H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)					
Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Yukon 20 Fed Com #309H)	9672.5	440.0	-351.0	441206.00	800186.00
FTP(Yukon 20 Fed Com #309H)	9885.2	390.0	-351.0	441156.00	800186.00
Fed Perf 1(Yukon 20 Fed Com #309H)	10150.0	-4788.0	-316.0	435978.00	800221.00
PBHL(Yukon 20 Fed Com #309H)	10150.0	-9971.0	-281.0	430795.00	800256.00



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 17874

CONDITIONS OF APPROVAL

Operator:	EOG RESOURCES INC	P.O. Box 2267	Midland, TX79702	OGRID:	7377	Action Number:	17874	Action Type:	C-103A
OCD Reviewer									Condition
pkautz									None