Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

Carlsbad Field Office
OCD Hobbs

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No. NMNM108977

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
DELLA 29 FED COM 701H

2. Name of Operator
EOG RESOURCES INCORPORATED

Contact: STAN WAGNER
E-Mail: stan_wagner@eogresources.com

9. API Well No.
30-025-43053-00-X1

3a. Address
MIDLAND, TX 79702

3b. Phone No. (include area code)
Ph: 432-686-3689

10. Field and Pool, or Exploratory
LEA

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 29 T20S R34E SESE 250FSL 1270FEL

HOBBS OCD
JUN 28 2016
RECEIVED

11. County or Parish, and State
LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

EOG Resources requests a change to our approved APD for this well to reflect a change in casing design. We request a change from a 3-string to a 4-string design,

Design details attached.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #342285 verified by the BLM Well Information System
For EOG RESOURCES INCORPORATED, sent to the Hobbs
Committed to AFMSS for processing by MUSTAFA HAQUE on 06/17/2016 (16MH0004SE)

Name *(Printed/Typed)* STAN WAGNER — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 06/16/2016

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ~~(BLM Approver Not Specified)~~ mustafa haque — Title PETROLEUM ENGINEER — Date 06/20/2016

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Della 29 Fed 701H
30-025-43053
EOG Resources, Inc
Surface Location: Sec. 29, T. 20S, R. 34E
Conditions of Approval

See below for the updated Conditions of Approval for the Drilling Section.

All previous COAs still apply, except for the following:

A. CASING

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

The initial wellhead installed on the well will remain on the well with spools used as needed.

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

Wait on cement (WOC) for Potash Areas:
After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE.

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

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Risks:
Possibility of Water Flows in the Capitan Reef, in the Salado and in the Artesia Group. Possibility of Lost Circulation in the Rustler, in the Capitan Reef, in the Red Beds, in the Delaware and in the Artesia Group.

1. The **13 3/8** inch surface casing shall be set at approximately **1625** feet **(a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Formation below the 13 3/8 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Special Capitan Reef requirements:

If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:

a. Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.

b. Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the

operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

The intermediate casing shall be kept fluid filled to avoid approaching the minimum collapse pressure rating of the casing.

2. The minimum required fill of cement behind the **10 3/4** inch first intermediate casing, which shall be set at approximately **5400** feet is:

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

Formation below the 10 3/4 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

3. The minimum required fill of cement behind the **7 5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see A.1.a, c-d above. **Excess calculates to negative 42%. Additional cement will be required.**

Formation below the 7 5/8 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Variance is granted for centralizers in the production interval per the drilling program.

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

   ☒ **Cement should tie-back to cover casing 50 feet above Capitan Reef, which shall be approximately at a depth of 4000 feet. Operator shall provide method of verification.**

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

MHH 06202016

EOG RESOURCES, INC.
DELLA 29 FED COM NO. 701H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,600'
Top of Salt	1,984'
Base of Salt / Top Anhydrite	3,500'
Base Anhydrite	3,736'
Yates	3,736'
Capitan	4,060'
Cherry Canyon	5,550'
Brushy Canyon	7,100'
Bone Spring Lime	8,610'
1st Bone Spring Sand	9,809'
2nd Bone Spring Lime	10,033'
2nd Bone Spring Sand	10,239'
3rd Bone Spring Carb	10,699'
3rd Bone Spring Sand	10,982'
Wolfcamp	11,300'
TD	11,360'

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	5,550'	Oil
Brushy Canyon	7,030'	Oil
Bone Spring Lime	8,610'	Oil
1st Bone Spring Sand	9,809'	Oil
2nd Bone Spring Lime	10,033'	Oil
2nd Bone Spring Sand	10,239'	Oil
3rd Bone Spring Carb	10,699'	Oil
3rd Bone Spring Sand	10,982'	Oil
Wolfcamp	11,300'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 13.375" casing at 1,725' and circulating cement back to surface.

4. CASING PROGRAM - NEW

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF_{min} Collapse	DF_{min} Burst	DF_{min} Tension
17.5"	0 – ~~1,725~~ 1625'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0 – ~~5,800'~~ 5400'	10-3/4"	45.5#	L80 / N80	FlushMax III	1.125	1.25	1.60
9.875"	0-8,000'	7.625"	29.7#	HCP-110	LTC	1.125	1.25	1.60
8.75"	8,000' – 10,900'	7.625"	29.7#	HCP-110	FlushMax III	1.125	1.25	1.60
6.75"	0'-16,198'	5.5"	23#	HCP-110	ULT SFII	1.125	1.25	1.60

SEE COA

Variance is requested to wave 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. Centralizers will be placed in the 9-7/8" hole interval at least one every third joint.

Variance is also requested to wave 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.

Cementing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft^3/ft	Mix Water Gal/sk	Slurry Description
13-3/8" ~~1,725~~ 1625'	1075	13.5	1.74	9.17	Class C + 4% Gel + 2% CaCl2 + 0.25 pps Celloflake (TOC @ Surface)
	385	14.8	1.34	6.35	Class C + 2.0% CaCl2
10-3/4" ~~5,800'~~ 5400'	330	9.5	3.62	16.73	Class C + 8.0% Salt + 16.0% Gel + 0.3% GXT-C + 0.3% CPT-19 + 0.3% CPT-35 (TOC @ Surface)
	585	14.8	1.33	6.32	Class C + 0.2% CPT-19
7-5/8" ~~10,900'~~	425	11.5	2.64	14.69	50:50 Poz:H + 5.0% Salt + 7.0% Gel + 0.4% CPT-503P + 0.5% CPT-19 (TOC @ Surface)
	140	14.4	1.24	5.08	50:50 Poz:H + 5.0% Salt
5-1/2" 16,198'	220	11.0	3.21	19.24	50:50 Poz:H + 5.0% Salt + 3.0% CPT-45 + 0.4% CPT-503P + 1.0% CPT-19 + 5.0% Gypsum + 0.15% CPT-20 + 0.15% Citric Acid (TOC @ 10,400')
	550	14.4	1.20	4.81	50:50 Poz:H + 0.25% CPT-503P + 0.8% CPT-16A + 0.2% CPT-35 + 0.4% CPT-39 + 0.25% CPT-20

SEE COA

Excess calculated 12% additional cement required.

Intermediate casing needs to be fluid filled.

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.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

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 (3500-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. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 5000/ 250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the 1st and 2nd intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 3500/ 250 psig. The intermediate casing will be tested to 2000 psi for 30 minutes.

Pipe rams will be operationally checked each 24-hour period. 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.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – ~~1,725'~~ 1625'	Fresh - Gel	8.6-8.8	28-34	N/c
1625' ~~1,725'~~ – ~~5,800'~~ 5400'	Cut Brine / Brine	8.8-10.0	28-34	N/c
5400' ~~5,800'~~ – 10,900'	Cut Brine / Brine	8.8-10.0	28-34	N/c
10,900' – 16,198' Lateral	Oil Base	10.0-11.5	58-68	3 - 6

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.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

(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) H_2S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

GR–CCL Will be run in cased hole during completions phase of operations.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom-hole temperature (BHT) at TD is 170 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 6793 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 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 5000 psi.

EOG RESOURCES, INC.
DELLA 29 FED COM NO. 701H

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Stream Flo FBD100 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.

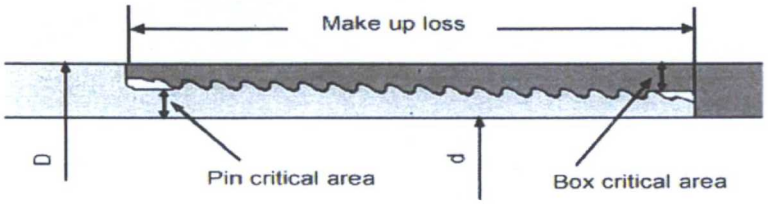
All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

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. Prior to running the intermediate casing, the rams will be changed out to accommodate the 7-5/8" casing. The bonnet seals will be tested to 1500 psi. After installing the intermediate casing the casing rams will be removed and replaced with variable bore rams. The remaining BOPE will not be retested after installing the intermediate casing.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

Wellhead drawing Attached.

Metal One Corp	FLUSHMAX-III Connection Data Sheet	Page	44-0
		Date	1-Oct-15
		Rev.	N-0



Pipe Body	Imperial		S.I.	
Grade	P110		P110	
Pipe OD (D)	7 5/8	in	193.68	mm
Weight	29.7	lb/ft	44.25	kg/m
Actual weight	29.0	lb/ft	43.26	kg/m
Wall thickness (t)	0.375	in	9.53	mm
Pipe ID (d)	6.875	in	174.63	mm
Pipe body cross section	8.537	in^2	5,508	mm^2
Drift Dia.	6.750	in	171.45	mm

Connection				
Box OD (W)	7.625	in	193.68	mm
PIN ID	6.875	in	174.63	mm
Pin critical area	4.420	in^2	2,852	mm^2
Box critical area	4.424	in^2	2,854	mm^2
Joint load efficiency	60	%	60	%
Make up loss	3.040	in	77.22	mm
Thread taper	1/16 (3/4 in per ft)			
Number of threads	5 thread per in.			

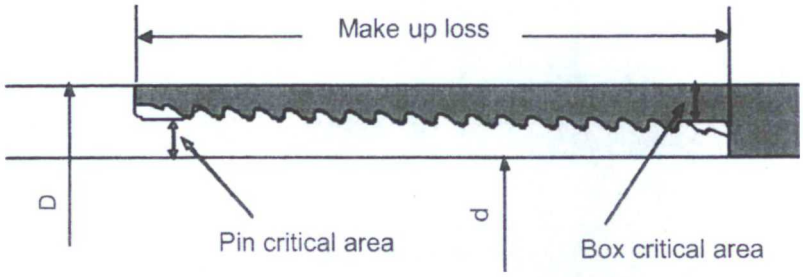
Connection Performance Properties				
Tensile Yield load	563.4	kips	2,506	kN
M.I.Y.P.	7,574	psi	52.2	MPa
Collapse strength	5,350	psi	36.9	MPa

Note
M.I.Y.P. = Minimum Internal Yield Pressure of the connection

Torque Recommended				
Min.	8,700	ft-lb	11,700	N-m
Opti.	9,700	ft-lb	13,100	N-m
Max.	10,700	ft-lb	14,500	N-m
Operational Max.	23,600	ft-lb	32,000	N-m

Note : Operational Max. torque can be applied for high torque application

Metal One Metal One Corp	FLUSHMAX-III Connection Data Sheet	Page	57-N
		Date	1-Oct-15
		Rev.	N-0



Pipe Body	Imperial		S.I.	
Grade	L80 / N80		L80 / N80	
Pipe OD (D)	10 3/4	in	273.05	mm
Weight	45.5	lb/ft	67.80	kg/m
Actual weight	44.2	lb/ft	65.88	kg/m
Wall thickness (t)	0.400	in	10.16	mm
Pipe ID (d)	9.950	in	252.73	mm
Pipe body cross section	13.000	in^2	8,387	mm^2
Drift Dia.	9.794	in	248.77	mm

Connection				
Box OD (W)	10.750	in	273.05	mm
PIN ID	9.950	in	252.73	mm
Pin critical area	6.760	in^2	4,361	mm^2
Box critical area	6.760	in^2	4,361	mm^2
Joint load efficiency	60	%	60	%
Make up loss	3.090	in	78.49	mm
Thread taper	1/16 (3/4 in per ft)			
Number of threads	5 thread per in.			

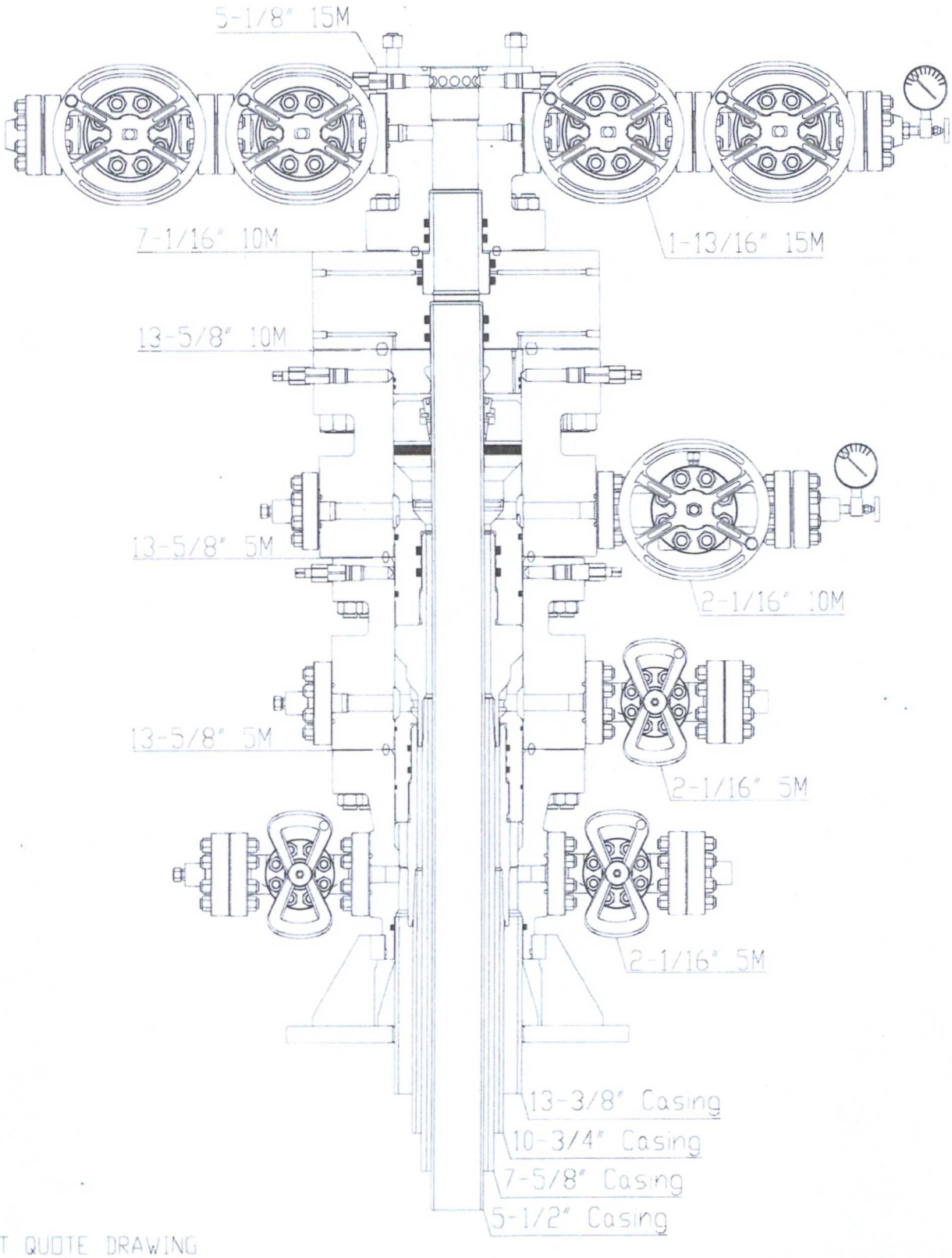
Connection Performance Properties				
Tensile Yield load	624.0	kips	2,775	kN
M.I.Y.P.	4,167	psi	28.7	MPa
Collapse strength	2,470	psi	17.0	MPa

Note

M.I.Y.P. = Minimum Internal Yield Pressure of the connection

Torque Recommended				
Min.	14,400	ft-lb	19,500	N-m
Opti.	16,000	ft-lb	21,600	N-m
Max.	17,600	ft-lb	23,800	N-m
Operational Max.	35,700	ft-lb	48,400	N-m

Note : Operational Max. torque can be applied for high torque application



*CONCEPT QUOTE DRAWING

EOG RESOURCES

13-3/8" X 10-3/4" X 7-5/8" X 5-1/2"
FBD-100 WELLHEAD SYSTEM
QUOTE: HOU - 93556

DWN	BAY	2/2/16
CHK		
APP		
	BY	DATE

Stream Flo
Worldwide Expertise · Global Strength

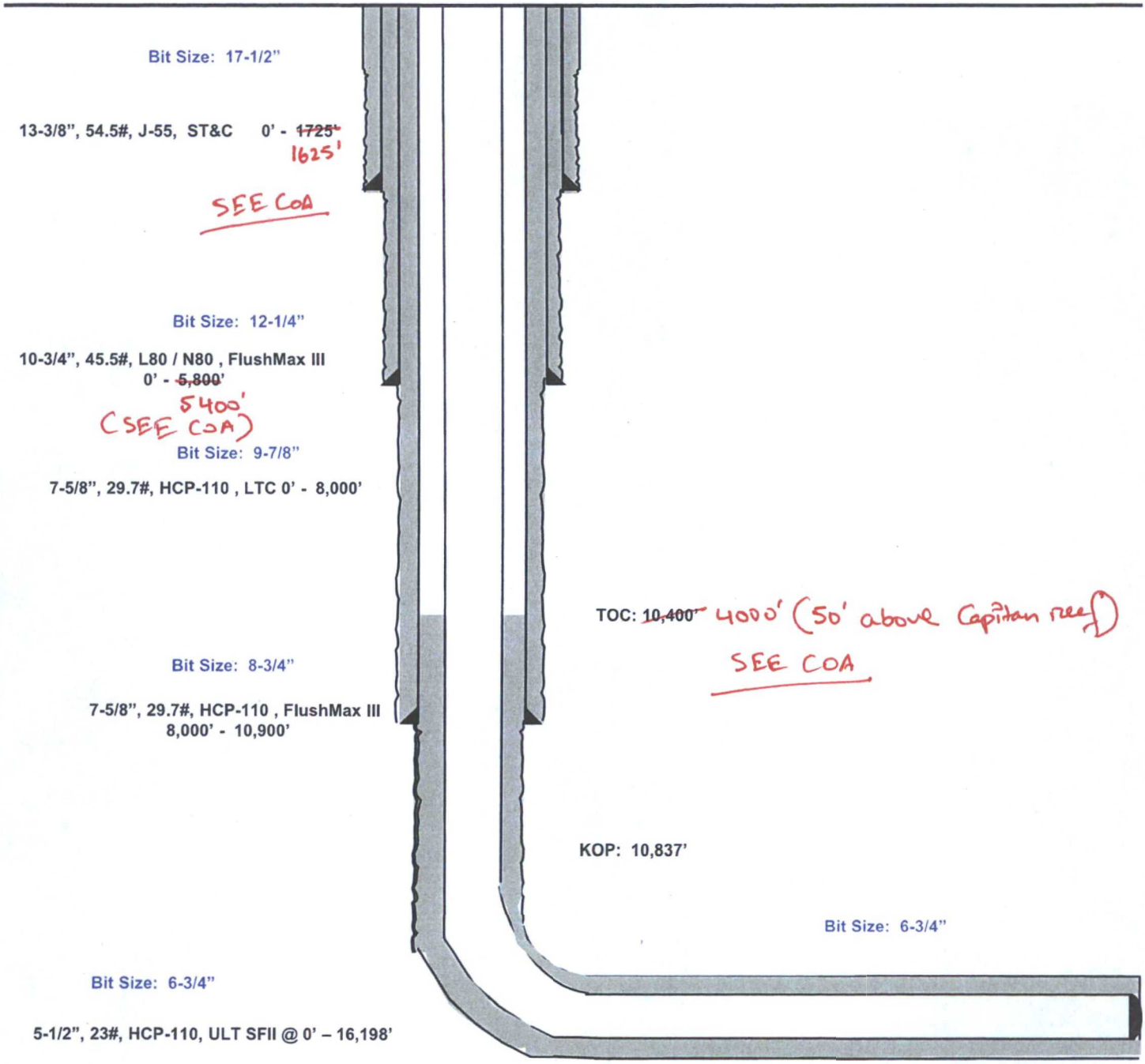
DRAWING NO
WH-15858

Della 29 Fed #701H

250' FSL
1270' FEL
Section 29
T-20-S, R-34-E

Lea County, New Mexico
Proposed Wellbore
Revised 6/16/16
API: 30-025-43053

KB: 3,744'
GL: 3,714'



Lateral: 16,198' MD, 11,360' TVD
Upper Most Perf:
330' FSL & 1650' FEL Sec. 29
Lower Most Perf:
330' FNL & 1650' FEL Sec. 29
BH Location: 230' FNL & 1650' FEL
Section 29
T-20-S, R-34-E