ATS-16-100

Form 3160-3
(August 2007)

OCD Hobbs

HOBBS OCD

APR 10 2017

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SHL: NMNM057285/BHL: NM0005519

6. If Indian, Allotee or Tribe Name

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

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Espejo Federal Com #2H (317589)

2. Name of Operator XTO Energy, Inc (5380)

9. API Well No.
30-025-43742

3a. Address 500 W. Illinois St Ste 100
Midland, Texas 79701

3b. Phone No. *(include area code)*
432-620-6714

10. Field and Pool, or Exploratory
Lea; Bone Spring (37570)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 275'FSL & 1630'FEL, O-23-T19S-R34E
At proposed prod. zone 330'FNL & 1910'FEL, B-26-T19S-R34E

11. Sec., T. R. M. or Blk. and Survey or Area
O-23-T19S-R34E

14. Distance in miles and direction from nearest town or post office*
18 Miles West/Southwest of Hobbs, NM

12. County or Parish
Lea

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
275'

16. No. of acres in lease
SHL: 1280
BHL: 280

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
50' to the Espejo Federal #1H

19. Proposed Depth
TVD: 10,927'
MD: 16,036'

20. BLM/BIA Bond No. on file
UTB000138

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3775' GL

22. Approximate date work will start*
ASAP

23. Estimated duration
90 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature Stephanie Rabadue
Name *(Printed/Typed)* Stephanie Rabadue
Date 01/11/2016

Title
Regulatory Analyst

Approved by *(Signature)* /s/George MacDonell
Name *(Printed/Typed)*
Date AUG 1 – 2016

Title FIELD MANAGER
Office CARLSBAD FIELD OFFICE

Application approval 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.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

KZ 04/10/17

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
Espejo Federal Com 2H
Projected TD: 16036' MD / 10927' TVD
SHL: 275' FSL & 1630' FEL,SECTION 23, T19S, R34E
1st Take Point: 330 FNL & 1910 FEL, SECTION 26-T19S-R34E
2nd Take Point: 330 FSL & 2153' FEL, SECTION 26-T19S-R34E
BHL: 200' FSL & 2160' FEL, SECTION 26, T19S, R34E
Lea County, NM

1. GEOLOGIC NAME OF SURFACE FORMATION:

A. Quaternary

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Formation	Well Depth (TVD)	Water / Oil / Gas
Rustler	1805'	Water
Top of Salt	1935'	Water
Base of Salt	3270'	Water
Yates	3490'	Water/Oil/Gas
Brushy Canyon	6690'	Water/Oil/Gas
Bone Spring	8210'	Water/Oil/Gas
1st Bone Spring	9540'	Water/Oil/Gas
2nd Bone Spring	10050'	Water/Oil/Gas
3rd Bone Spring	10659'	Water/Oil/Gas
Target/Land Curve	10874'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon
*** Groundwater depth 180'.

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8" casing at 1850' above the salt and circulating cement back to surface. The salt will be isolated by setting 9-5/8" casing at 3525' and circulating cement to surface. An 8-3/4" curve and lateral hole will be drilled to MD/TD and 5-1/2" casing will be set at TD and cemented back up to the 9-5/8" casing shoe.

3. CASING PROGRAM:

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' – ~~1850'~~ 1970	13-3/8"	54.5#	BTC	J-55	New	4.04	1.33	8.46
12-1/4"	0' – ~~3525'~~ 4030	9-5/8"	36#	LTC	J-55	New	2.27	1.48	3.57
8-3/4"	0' – 16036'	5-1/2"	17#	BTC	P-110	New	1.12	1.43	2.00

WELLHEAD:

A. Starting Head: 13-5/8" 3000psi top flange x 13-3/8" SOW bottom
B. 'B' Section/ Drilling Spool: 13-5/8" 3000psi bottom flange x 11" 5M top flange
C. Tubing Head: 11" 5000psi bottom flange x 7-1/16" 10,000psi top flange

4. CEMENT PROGRAM:

See COA

A. **Surface Casing:** 13-3/8", 54.5#, NEW J-55, BTC casing to be set at ± ~~1850'~~ 1870.

Lead: 20 bbls FW, then 1115 sx ExtendaCem-CZ (mixed at 13.7 ppg, 1.68 ft^3/sk, 8.72 gal/sx wtr)

Tail: 515 sx HalCem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft^3/sk, 6.39 gal/sx wtr)
***All volumes 100% excess in open hole. Cement to surface.

See COA

B. **Intermediate Casing:** 9-5/8", 36#, NEW J-55, LTC casing to be set at ± ~~3525'~~ 4030.

Lead: 20 bbls FW, then 1005 sx EconoCem-HLC + 5% salt + 5 lbm/sk Kol-Seal (mixed at 12.9 ppg, 1.88 ft^3/sk, 9.61 gal/sx wtr)

Tail: 235 sx HalCem-C (mixed at 14.8 ppg, 1.33 ft^3/sk, 6.34 gal/sx wtr)
***All volumes 100% excess in open hole. Cement to surface.

C. **Production Casing:** 5-1/2", 17#, NEW P-110, BTC casing to be set at ± 16036'. Casing will be cemented for the completion.

Lead: 20 bbls FW, then 780 sx Tuned Light + 0.5 lbm/sk CFR-3 + 1.5 lbm/sk salt + 0.1% HR601 (mixed at 10.5 ppg, 2.66 ft^3/sk, 12.01 gal/sx wtr)

Tail: 1350 sx VersaCem PBHS2 + 0.5% LAP-2 + 0.25 lbm/sk D-air 5000 + 0.2% HR 601 (mixed at 13.2 ppg, 1.59 ft^3/sk, 8.29 gal/sx wtr)
***All volumes 30% excess in open hole. Planned top of cement 500' into intermediate casing shoe

5. PRESSURE CONTROL EQUIPMENT:

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. Max bottom hole pressure should not exceed 5000 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 13-5/8" 3M bradenhead and flange, the BOP test will be limited to 3000psi. When nippling up on the 9-5/8", the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M BOP diagram is attached. Blind rams will be function tested each trip, pipe rams will be function tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

6. PROPOSED MUD CIRCULATION SYSTEM:

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 1850' 1870	17-1/2"	FW/Native	8.5-8.8	35-40	NC
1850' to 3525' 4030	12-1/4"	Brine/Gel Sweeps	9.8-10.2	30-32	NC
3525' to 16036'	8-3/4"	FW / Cut Brine / Poly-Sweeps	8.6-8.8	29-32	NC - 20

See COA

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8ppg-10.2ppg brine mud will be used while drilling through the salt formation. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

A. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 13-3/8" casing.

8. LOGGING, CORING AND TESTING PROGRAM:

Mud Logger: Mud Logging Unit (2 man) on below intermediate casing.

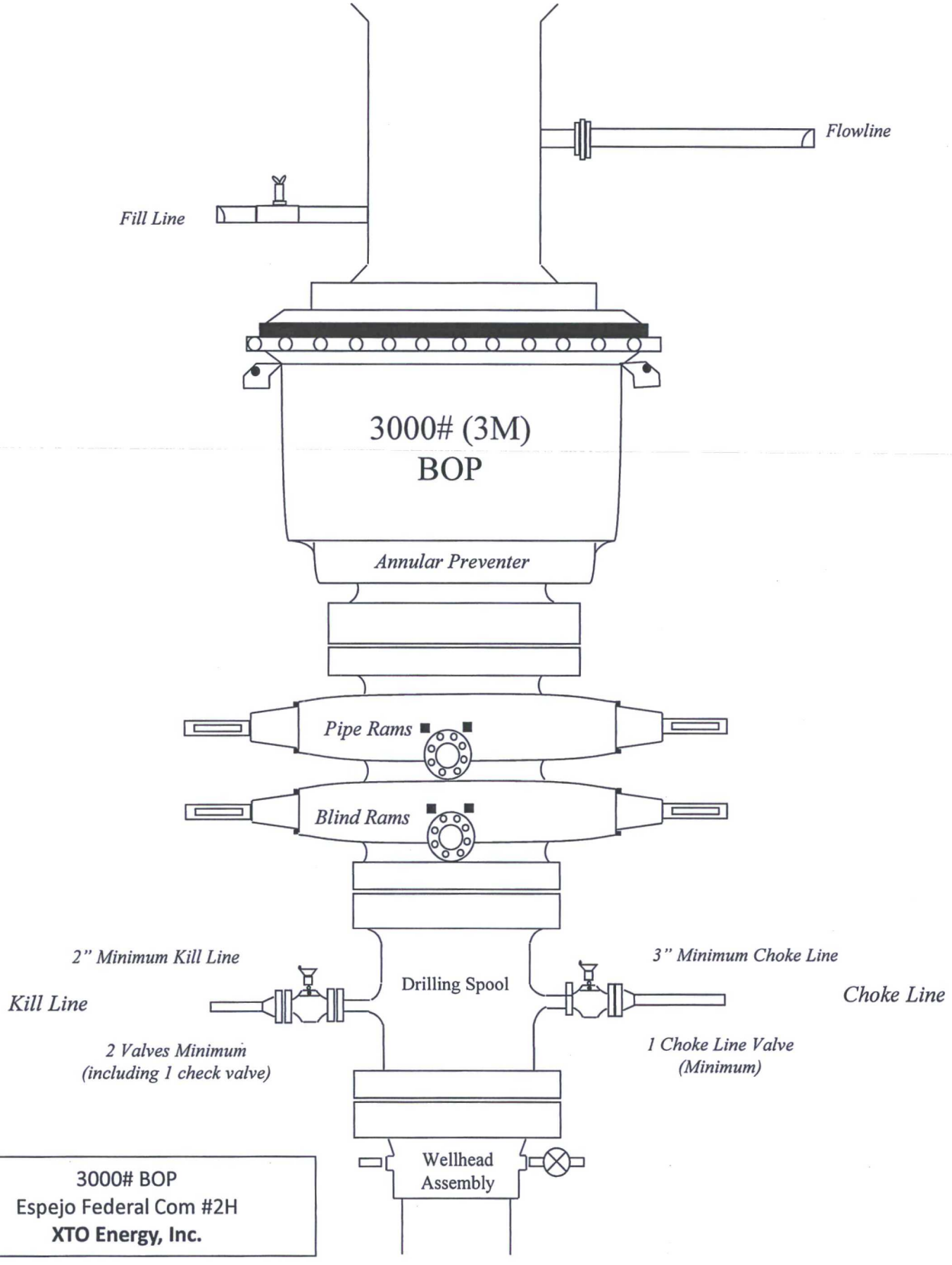
Open hole logging to include Density/Neutron/PE/Dual Laterlog/Spectral Gamma from kick-off point to intermediate casing shoe.

9. ABNORMAL PRESSURES AND TEMPERATURES / POTENTIAL HAZARDS:

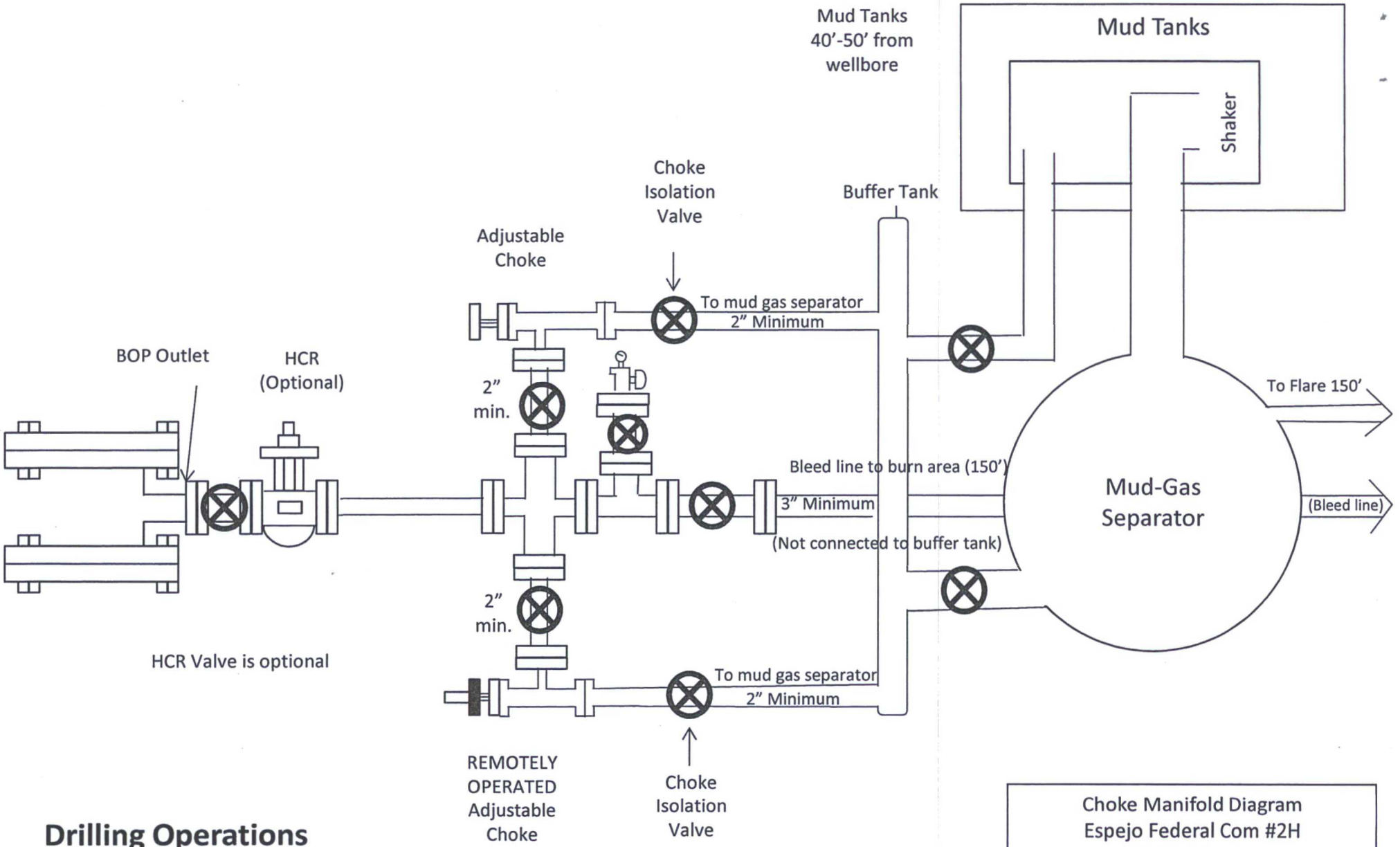
None anticipated. BHT of 180 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

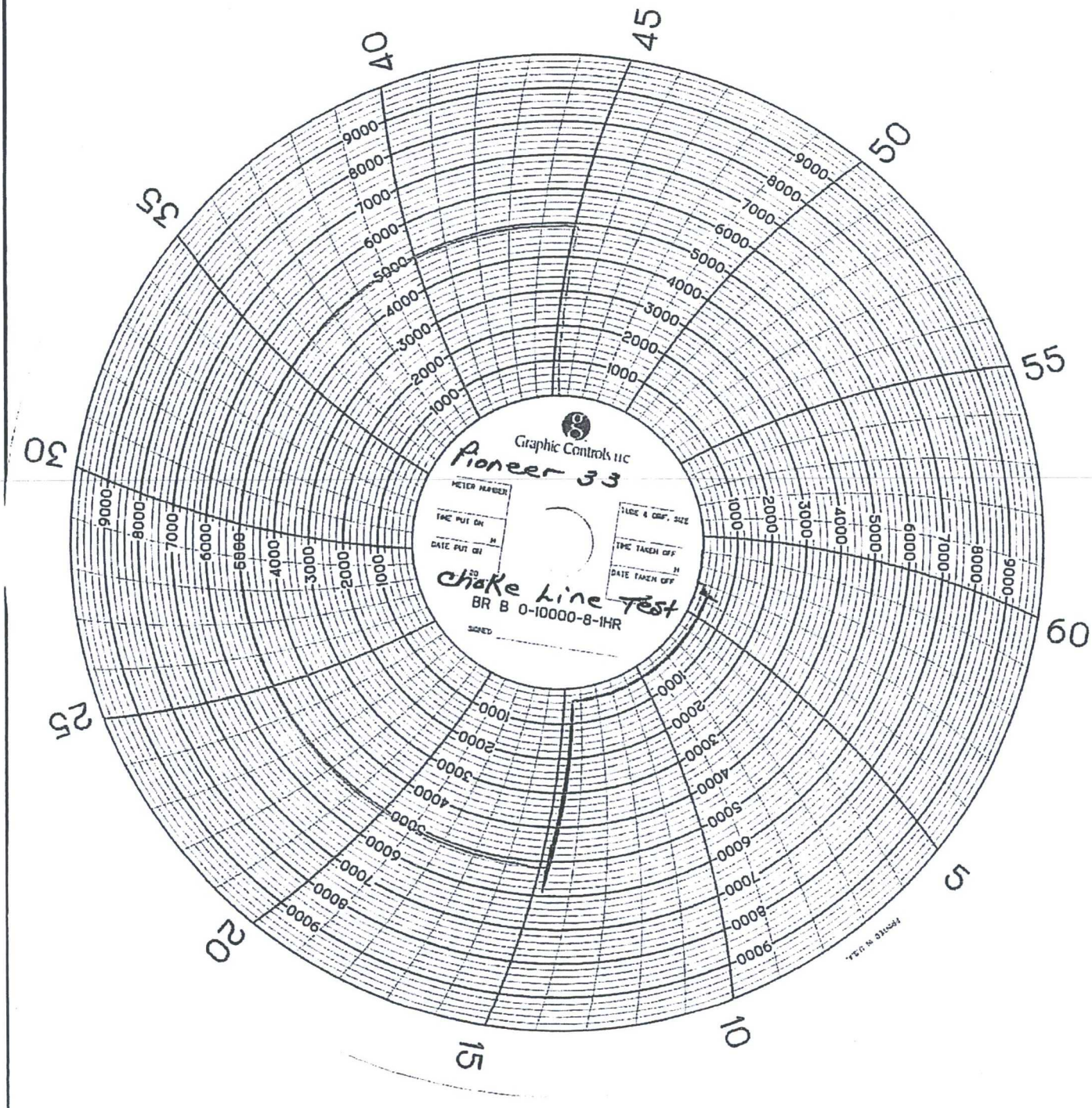


3000# BOP
Espejo Federal Com #2H
XTO Energy, Inc.



Drilling Operations
Choke Manifold

Choke Manifold Diagram
Espejo Federal Com #2H
XTO Energy, Inc..


Graphic Controls LLC
Pioneer 33
METER NUMBER
TIME PUT ON
DATE PUT ON
TIME TAKEN OFF
DATE TAKEN OFF
Chake Line Test
BR B 0-10000-8-1HR
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GATES E & S NORTH AMERICA, INC
DU-TEX
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: crpe&s@gates.com
WEB: www.gates.com

GRADE D PRESSURE TEST CERTIFICATE

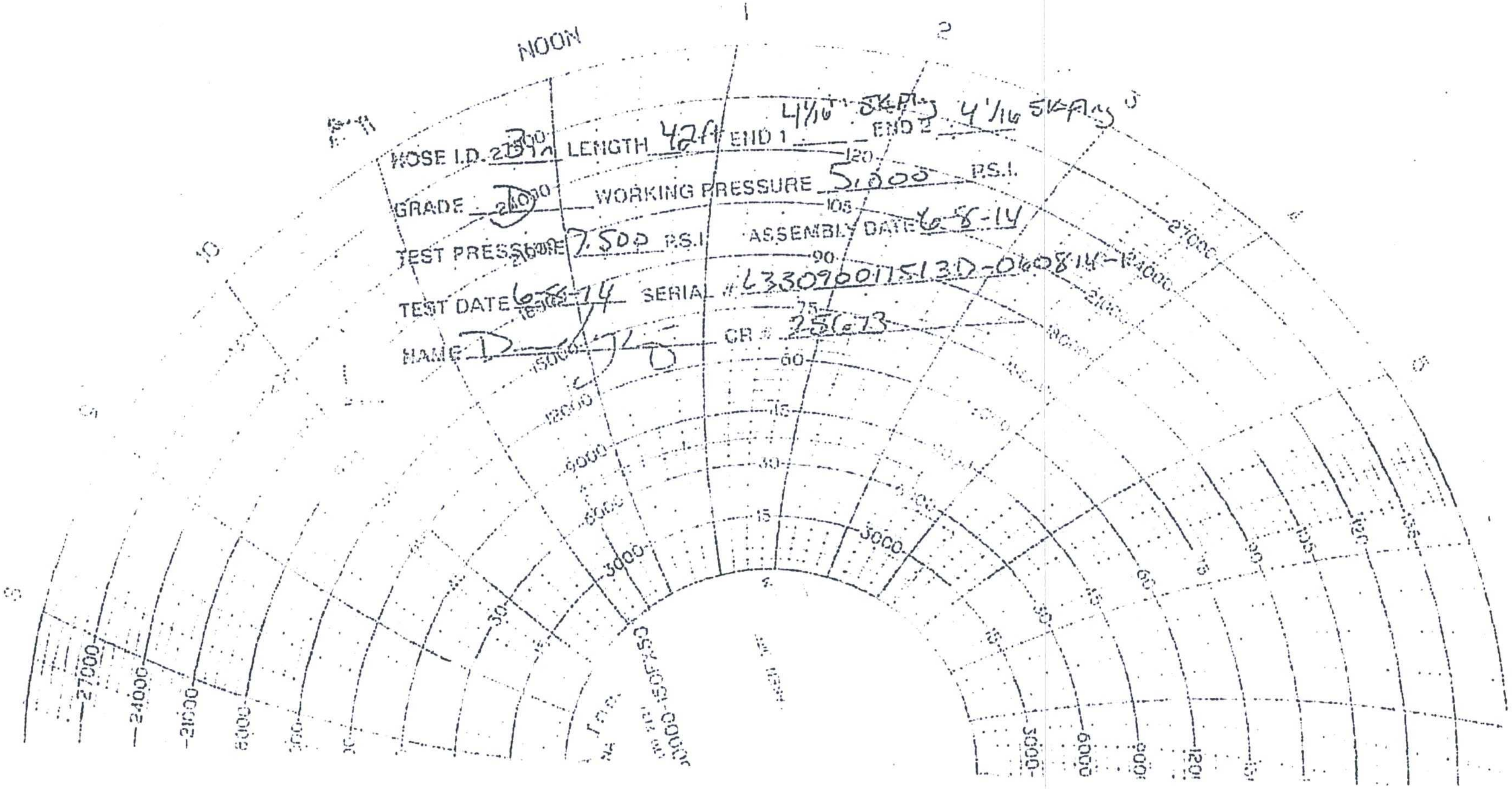
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

Product Description:	FD3.042.0R41/16.5KFLGE/E LE

End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality:	QUALITY	Technical Supervisor :	PRODUCTION
Date :	6/8/2014	Date :	6/8/2014
Signature :		Signature :	


NOON
HOSE I.D. 3" LENGTH 42ft END 1 4 1/16" 5K Flg END 2 4 1/16 5K Flg
GRADE D WORKING PRESSURE 5,000 P.S.I.
TEST PRESSURE 7,500 P.S.I. ASSEMBLY DATE 6-5-14
TEST DATE 6-5-14 SERIAL # 63309001151 3D-060814-1
NAME
CR # 25673