Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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 page 2

5. Lease Serial No.
NMNM25953

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.
KYLE 34 FEDERAL COM 5H

2. Name of Operator
BC OPERATING INC
Contact: SARAH PRESLEY
E-Mail: SPRESLEY@BCOPERATING.COM

9. API Well No.
30-015-43295-00-X1

3a. Address
MIDLAND, TX 79710

3b. Phone No. (include area code)
Ph: 432-684-9696

10. Field and Pool or Exploratory Area
WILLOW LAKE-BONE SPRING, SE

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 34 T24S R28E SESE 225FSL 990FEL
32.167025 N Lat, 104.069194 W Lon

11. County or Parish, State
EDDY COUNTY, NM

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original A PD
	☐ 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

BC OPERATING, INC. RESPECTFULLY REQUESTS TO:

1. CHANGE 7" CASING & CEMENT*
2. CHANGE 4.5" CASING & CEMENT*
3. UPDATE MUD PROGRAM*
4. TEST MULTIBOWL PROCEDURE ACCORRDING TO ONSHORE ORDER 2*

*SEE WORK INFO ATTACHMENT

NM OIL CONSERVATION
ARTESIA DISTRICT
JUL 03 2017
RECEIVED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

Electronic Submission #379107 verified by the BLM Well Information System
For BC OPERATING INC, sent to the Carlsbad
Committed to AFMSS for processing by DEBORAH MCKINNEY on 06/19/2017 (17DLM2069SE)

Name *(Printed/Typed)* SARAH PRESLEY — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 06/19/2017

APPROVED
JUN 20 2017
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Teungku Muchlis Krueng (BLM Approver Not Specified) — Title PETROLEUM ENGINEER — Date 06/20/2017

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 Carlsbad

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.

(Instructions on page 2)

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

7-3-17 RJP

KYLE 34 FEDERAL COM #5H
30-015-43295
EDDY COUNTY, NM

WORK INFO

(1) 7" Casing will be set and cement from ±9600'MD, ±9550' TVD – Casing will be set at roughly the top of the Wolfcamp and called via gamma.

- Reference Sheets (3 attachments from Halliburton) and volumes (1 attachment from Halliburton) attached for cementing changes

    - Single stage job with lighter blends in shallower hole section to achieve cement top. A Hz producing Delaware well is within 300' of our Delaware penetration point causing depeletion concerns

    - Tail @ 14.5ppg, 170sx, 30% excess in open hole

    - Lead 2 @ 11ppg, 230sx, 30% excess in open hole

    - Lead 1 @ 9.5ppg, 290sx, 50% excess in open hole

(2) 4-1/2" Cement – for volume reference, attachment from Propetro.

- Volumes attached for cement in the cement proposal include a high strength single slurry. The depths align relatively closely with the shortened lateral from the previously filed BC sundry.

    - Single slurry at 14.8ppg, 133bbls mixed at 1.87cuft/sx.

(3) Updated Mud Program: this sundry requests to use OBM after drilling out of the 7" casing string at ±9600' and drilling the Wolfcamp target with the mud parameters below

Target (ft)	Density (lb/gal)	Plastic Viscosity (cp)	Yield Point (lbf/100 f	WPS (ppm)	HTHP (mL/30	ES (V)	Excess Lime ppb	OWR	LGS%
10,000 – 14,321	11.5 – 12.2	18 - 28	12 - 16	220K – 250K	<10	250 - 400	1 - 2	65/35 – 70/30	<10%

- Displace to 11.5 ppg INTEGRADE OBM.
- Drill 6.125" production interval
- Monitor volumes, gas, and cuttings at shakers for formation indications
- Maintain mud properties as per program
- Set 4.5" Production Liner

(4) Multibowl procedure is attached for reference and will be included in the electronic filing. We will test in accordance with COAs and BLM onshore order 2 if seals are broken.

PROPETRO JOB BID

CEMENTING - TEXAS DIVISION

P.O. BOX 10688- MIDLAND TX, 97702- 432-688-0012

BC Operating - Kyle 34 Federal Com #5H - 4 1/2" Hanging Liner

WELL INFORMATION		
Production Casing	4 1/2"	Set @ 14321 ft
Previous Casing	7"	Set @ 10000 ft
Liner Top	4 1/2" Inside 7"	Set @ 9100 ft
Hole Size	6 1/8"	Set @ TD
TVD	9750 ft	

FLUID NAME	DENSITY (LB/GAL)	VOLUME (BBL)	EXCESS (%)	TOP OF FLUID (FT)
PRO-STOP LOSS	13.00	40	0	0
TAIL SLURRY	14.8	133.2	50%	9100
DISPLACEMENT	8.33	213	0	0

TAIL SLURRY	400 SACKS	14.8 PPG	1.87 CU/FT/SK	8.02 GAL/SK
PRO-VALUE H				
P-712	50.00%			
P-707	5 LBS PER SACK			
P-402	5.00%			
P-202	0.30%			
P-502	0.20%			
P-101	0.50%			
P-7	0.80%			
P-713	.003 GAL PER SACK			

TAXES WILL BE ADDED ON INVOICE

ANY QUESTIONS OR CONCERNS PLEASE CALL

OPERATIONS MANAGER CEMENT DIVISON

BEAU TENNEY

432-640-9756

BEAU.TENNEY@PROPETROSERVICES.COM

HALLIBURTON

Permian Basin, Odessa

Lab Results- Lead

Job Information

Request/Slurry	2380655/1	**Rig Name**		**Date**	15/JUN/2017
Submitted By	Laramie Poldrack	**Job Type**	Intermediate Casing	**Bulk Plant**	
Customer	Marathon	**Location**	Eddy	**Well**	11ppg reference

Well Information

Casing/Liner Size	7 in	**Depth MD**	10000 ft	**BHST**	150°F
Hole Size	8.75 in	**Depth TVD**	9750 ft	**BHCT**	110°F

Cement Information - Lead Design

Conc	UOM	Cement/Additive
100	% BWOC	NeoCem
17.35	gal/sack	Fresh Water

Cement Properties

Slurry Density	11	lbm/gal
Slurry Yield	2.807	ft3/sack
Water Requirement	17.35	gal/sack

Pilot Test Results Request ID 2380655/1

API Rheology

Temp (°F)	300	200	100	60	30	6	3	PV/YP
80	17	14	10	8	6	5	5	12.26 / 5.38

API Rheology

Temp (°F)	300	200	100	60	30	6	3	Cond Time (min)	Conditioning Temp (°F)	PV/YP
105	27	22	16	13	11	7	7	30	105	20.09 / 8.22

Free Fluid API 10B-2

Con. Temp (F)	Cond. Time (min)	Static time (min)	Incl. (deg)	% Fluid
105	30	120	0	0

API Fluid Loss

Test Temp (°F)	Test Pressure (psi)	Test Time (min)	Meas. Vol.	Calculated FL (<30 min)	Conditioning time (min)	Conditioning Temp (°F)
105	1000	11.4	101	328	30	105

Thickening Time - ON-OFF-ON

Test Temp (°F)	Pressure (psi)	Reached in (min)	70 Bc (hh:min)	Start Bc
105	4300	37	7:51	8

UCA Comp. Strength

End Temp (°F)	Pressure (psi)	50 psi (hh:mm)	8hr CS (psi)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)	End CS (psi)	End Time (hrs)
147	4000	3:39	214	346	454	470	470	48.12

HALLIBURTON

Permian Basin, Odessa

Lab Results- Tail

Job Information

Request/Slurry	2391823/2	**Rig Name**		**Date**	15/JUN/2017
Submitted By	Laramie Poldrack	**Job Type**	2nd Intermediate	**Bulk Plant**	
Customer	Marathon	**Location**	Eddy	**Well**	14.5 Reference

Well Information

Casing/Liner Size	7 in	**Depth MD**	9164 ft	**BHST**	146°F
Hole Size	8.75 in	**Depth TVD**	9164 ft	**BHCT**	106°F

Cement Information - Tail Design

Conc	UOM	Cement/Additive
100	% BWOC	VersaCem H
5.58	gal/sack	Fresh Water
0.4	% BWOC	HALAD-344 (PB)
0.1	% BWOC	HR-601

Cement Properties

Slurry Density	14.5	lbm/gal
Slurry Yield	1.222	ft3/sack
Water Requirement	5.579	gal/sack

Pilot Test Results Request ID 2391823/2

Thickening Time - ON-OFF-ON

Test Temp (°F)	Pressure (psi)	Batch Mix (min)	Reached in (min)	70 Bc (hh:min)	Start Bc
106	4900	0	25	5:18	19.2

API Rheology

Temp (°F)	300	200	100	60	30	6	3	PV/YP
80	81	57	33	22	14	4	3	77.76 / 4.75

API Rheology

Temp (°F)	300	200	100	60	30	6	3	Cond Time (min)	Conditioning Temp (°F)	PV/YP
106	51	36	20	13	8	2	1	30	106	50.09 / 1.96

API Fluid Loss

Test Temp (°F)	Test Pressure (psi)	Test Time (min)	API FL (cc/30 min)	Meas. Vol.	Conditioning time (min)	Conditioning Temp (°F)
106	0	30	52	27	30	106

Free Fluid API 10B-2

Con. Temp (F)	Con. Pr. (psi)	Cond. Time (min)	Cool Time (min)	Static T. (F)	Static time (min)	Incl. (deg)	% Fluid
106	0	30	120	80	120	90	0

UCA Comp. Strength

End Temp (°F)	Pressure (psi)	50 psi (hh:mm)	500 psi (hh:mm)	8hr CS (psi)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)
146	4000	5:21	12:43	198	456	1038	1724

HALLIBURTON

Permian Basin, Odessa

Lab Results- Lead

Job Information

Request/Slurry	2346648/4	**Rig Name**		**Date**	15/JUN/2017
Submitted By	Laramie Poldrack	**Job Type**	Intermediate Casing	**Bulk Plant**	
Customer	Marathon	**Location**	Eddy	**Well**	9.5 Reference

Well Information

Casing/Liner Size	7 in	**Depth MD**	10000ft	**BHST**	150°F
Hole Size	8.75 in	**Depth TVD**	9750 ft	**BHCT**	110°F

Cement Information - Lead Design

Conc	UOM	Cement/Additive
100	% BWOC	NeoCem
16.57	gal/sack	Fresh Water

Cement Properties

Slurry Density	9.5	lbm/gal
Slurry Yield	3.476	ft3/sack
Water Requirement	16.57	gal/sack

Pilot Test Results Request ID 2346648/4

Thickening Time - ON-OFF-ON

Test Temp (°F)	Pressure (psi)	Reached in (min)	70 Bc (hh:min)
111	4252	17	08:41

UCA Comp. Strength

End Temp (°F)	Pressure (psi)	50 psi (hh:mm)	500 psi (hh:mm)	8hr CS (psi)	12 hr CS (psi)	24 hr CS (psi)	48 hr CS (psi)	End CS (psi)	End Time (hrs)
153	4000	5:30	12:04	267	499	559	541	536	72

API Rheology

Temp (°F)	300	200	100	60	30	6	3	PV/YP
80	42	31	20	15	10	5	4	37.52 / 5.9

API Rheology

Temp (°F)	300	200	100	60	30	6	3	PV/YP
111	38	29	19	15	10	5	3	33.89 / 5.82

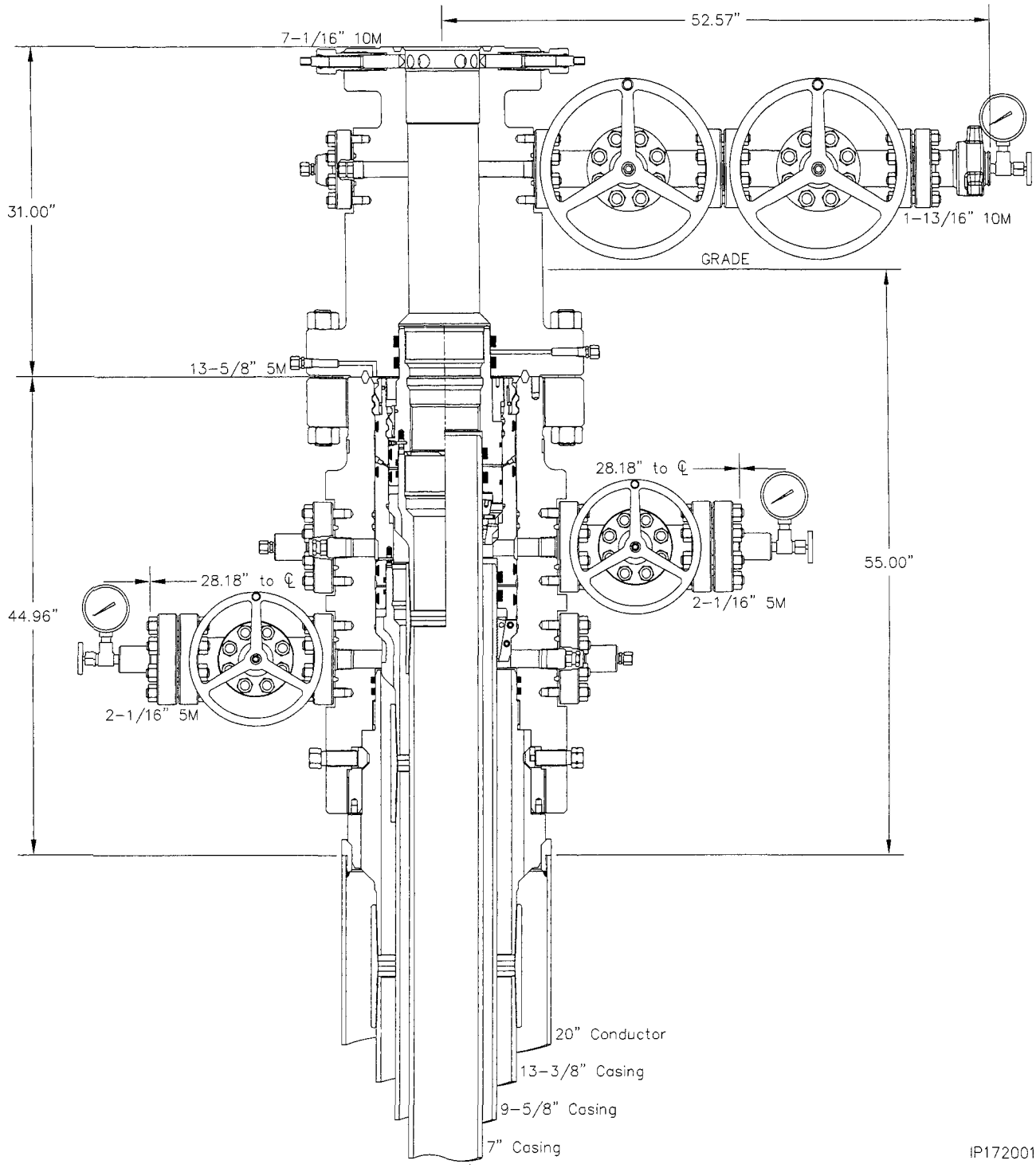
API Fluid Loss

Test Temp (°F)	Test Pressure (psi)	Test Time (min)	Meas. Vol.	Calculated FL (<30 min)	Conditioning time (min)	Conditioning Temp (°F)
111	1000	16	49	134.14	30	111

Free Fluid API 10B-2

Con. Temp (F)	Static T. (F)	Static time (min)	Incl. (deg)	% Fluid	Trace (Y/N)
111	80	120	0	0	N

System Drawing



Kyle 34 Federal Com #5H Conditions of Approval.

All previous COA still apply except the following:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.

a. **Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.**
b. **If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.**
c. **Manufacturer representative shall install the test plug for the initial BOP test.**
d. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
e. **If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.**