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SECRETARY'S POTASH

Split Estate

NO NOS

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

~~BLM Carlsbad Field Office~~
OCD Hobbs

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

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

2. Name of Operator
Nearburg Producing Company (15742)

3a. Address
3300 N A Street, Bldg 2, Ste 120, Midland, TX 79705

3b. Phone No. *(include area code)*
432-686-8235

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At Surface 330' FSL 2130' FWL
At proposed prod. Zone 330' FNL 21800' FWL *Horizontal Bone Spring test*

5. Lease Serial No.
SHL: NMLC066126; BHL: NMNM56265

6. If Indian, Allotee or Tribe Name

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

8. Lease Name and Well No. (40102)
Lea South 25 Federal Com #10H

9. API Well No.
30-025- 43409

10. Field and Pool, or Exploratory
Lea Bone Spring South (37580) KG

11. Sec., T. R. M. or Blk. and Survey or Area
25-20S-34E

14. Distance in miles and direction from nearest town or post office*
Approximately 22 miles NW of Eunice 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)	16. No of acres in lease	17. Spacing Unit dedicated to this well
330'	NMNM56265=240 acres; NMLC066126= 800 acres	160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on File**
150' from #6H	14,216' MD 9,800' TVD	NM2575; NMB000835
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3759' GR	02.15.14	35 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall 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 shall 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 authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
Tim Green	Tim Green	10.14.13

Title
Marketing and Production Services Manager

Approved By *(Signature)*	Name (Printed/Typed)	Date
/s/George MacDonell		AUG 26 2016
Title	**Office**	
FIELD MANAGER	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.S. 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 09/06/16

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

Operator - Landowner Agreement

Company: Nearburg Producing Company

Proposed Well: Lea South 25 Federal Com #10H

Federal Lease Number: SHL: NMLC066126; BHL: NMNM56265

Please be advised that Cimarex Energy Co. has an agreement with both Nearburg Producing Company for operating their lease as well as having an agreement with the property surface owner, Ms. Linda Jurva, Trustee for Ms. Martha Skeen, 6301 Porter Road, Carlsbad, NM 88220 (575) 910-6731, concerning entry and surface restoration after completion of drilling operations at the above described well.

After abandonment of the well, all pits will be filled and levelled and all equipment and trash will be removed from the well site. No other requirements were made concerning restoration of the well site.

October 14, 2013
Date

Signature

Tim Green, Marketing and
Production Services Manager
Nearburg Producing Company

Nearburg Producing Company

Exploration and Production
3300 North "A" Street
Building 2, Suite 120
Midland, TX 79705-5421
432-686-8235
FAX 432-686-7806

November 26, 2013

Bureau of Land Management
Attn: Johnny Dickerson
620 East Greene Street
Carlsbad, New Mexico 88220

Re: Lea, South Prospect
Lea County, New Mexico
APD - Lea South 25 Federal Com № 10H Well
330' FSL & 2130' FWL (SHL)
330' FNL & 2180 FWL (BHL)
Section 25, T-20-S, R-34-E, N.M.P.M.

Gentlemen:

Please find enclosed herewith Nearburg Producing Company Application to Drill pertaining to the subject well, along with Nearburg's Check № 0905255 dated November 25, 2013 in the amount of $6,500.00.

Further, enclosed is letter authorizing Cimarex Energy Co. to sign as agent for Nearburg Producing Company for submissions of Applications for Permits to Drill and other regulatory filings with the Bureau of Land Management as to Federal Leases and Lands described in said letter.

Please furnish our office with the fully approved APD at your earliest convenience. Should you have any questions and/or need any additional information or assistance regarding this matter, please feel free to contact me direct at (432) 818-2940.

Yours very truly,

Nearburg Producing Company

Tim Green
Manager of Marketing and Production Services

TG:lf

cc: Cimarex Energy Co.
Attn: Mark Compton and Terri Stathem
600 N. Marienfeld Street, Suite 600
Midland, Texas 79701

Application to Drill
Lea South 25 Federal Com #10H
Nearburg Producing Co. Agent: Cimarex Energy Co.
UL: N, Sec. 25-20S-34E
Lea Co., NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1 Location: SHL 330' FSL 2130' FWL
BHL 330' FNL 21800' FWL

2 Elevation above sea level: 3759' GR

3 Geologic name of surface formation: Quaternary Alluvium Deposits

4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5 Proposed drilling depth: 14,216' MD 9,800' TVD

6 Estimated tops of geological markers:

Formation	Est. Top	Bearing
Rustler	1650	NA
Top of Salt	1800	NA
Tansill	3400	NA
Yates	3645	NA
Capitan	3970	NA
Delaware	5700	Hydrocarbons
Bone Spring	8400	NA
Avalon Shale	8900	Hydrocarbons
1st Bone Spring Ss	9600	Hydrocarbons
2nd Bone Spring Ss	10150	Hydrocarbons
3rd Carbonate	10630	NA
3rd Bone Spring Ss	10925	NA
3rd Bone Spring C Ss	11015	Hydrocarbons

7 Possible mineral bearing formation:
Shown above

7A OSE Ground Water estimated depth: 100'

8 Casing Program:

Casing Depth From (ft)	Casing Setting Depth(ft) MD	Casing Setting Depth(ft) TVD	Open Hole Size (inches)	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Conditon	BHP (psig)	Anticipated Mud Weight (ppg)	Collapse SF (1.125)	Burst SF (1.125)	Cumulative Air Weight (lbs)	Cumulative Bouyed Weight (lbs)	Bouyant Tension SF (1.8)
Surface															
0'	~~1780'~~ 1850	~~1780'~~	17 1/2	13 3/8	54.5	J-55	ST&C	New	801	8.4	1.45	3.42	97,010	84,569	6.08
Intermediate															
0'	5700'	5700'	12 1/4	9 5/8	40	HCK-55	LT&C	New	2,565	10.2	1.40	1.54	228,000	192,495	3.61
Production															
0'	9323'	9323'	8 3/4	5 1/2	17	P-110	LT&C	New	2,254	9.2	1.68	4.72	166,600	143,200	3.11
9323'	14216'	9800'	8 3/4	5 1/2	17	P-110	BT&C	New	4,410	9.2	1.60	2.41	8,109	6,970	78.34

See COA

Casing Design Criteria and Casing Loading Assumptions:

Surface
Tension A 1.8 design factor with effects of buoyancy. 8.4 ppg
Collapse A 1.125 design factor with full internal evacuation and a collapse force equal to a 8.4 ppg mud gradient
Burst A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.

Intermediate
Tension A 1.8 design factor with effects of buoyancy. 10.2 ppg
Collapse A 1.125 design factor evacuated 1/3 TVD of next casing string with a collapse force equal to a 10.2 ppg mud gradient
Burst A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.

Production
Tension A 1.8 design factor with effects of buoyancy. 9.2 ppg
Collapse A 1.125 design factor with full internal evacuation and a collapse force equal to a 9.2 ppg mud gradient
Burst A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.

Drilling Plan
Lea South 25 Federal Com #10H
Nearburg Producing Co. Agent: Cimarex Energy Co.
UL: N, Sec. 25-20S-34E
Lea Co., NM

9 **Cementing Program:**

Surface	Sacks	Yield (cuft/sx)	Weight (ppg)	Cubic Feet	Cement Blend
Lead	1130	1.75	13.5	1979	Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
Tail	240	1.34	14.8	309	Class C + LCM, 6.32 gps water

TOC: 0' 85% Excess Centralizers per Onshore Order 2.III.B.1f

Intermediate	Sacks	Yield (cuft/sx)	Weight (ppg)	Cubic Feet	Cement Blend
Lead	1270	1.88	12.9	2387	35:65 (poz/C) + Salt + Bentonite + LCM + retarder , 9.65 gps water
Tail	300	1.34	14.8	392	Class C + retarder + LCM, 6.32 gps water

TOC: 0' 81% Excess

Production	Sacks	Yield (cuft/sx)	Weight (ppg)	Cubic Feet	Cement Blend
Lead	461	2.4	11.9	1105	35:65 (poz/H) + salt + Sodium Metasilcate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.8 gps water
Tail	1379	1.24	14.5	1710	50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder , 5.55 gps water

2nd COA

Cement volumes will be adjusted depending on hole size.

TOC: 5200' 25% Excess No centralizers planned in the lateral section. 1 every jt from EOC to KOP. 1 every 4th joint from KOP to 500' inside previous casing.

10 **Pressure Control Equipment:**

Exhibit "E-1". A BOP consisting of two rams with blind rams and pipe rams, and one annular preventer. Below the surface casing, a 2M system will be used. Below the intermediate casing, a 3M system will be used. See attachments for BOP and choke manifold diagrams. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A Rotating head may be installed as needed. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP and associated equipment will be installed, used, maintained, and tested in a manner necessary to assure well control and shall be in place and operational prior to drilling the surface casing shoe. The Annular Preventer shall be functioned at least weekly. The pipe and blind rams will be operated each trip. No abnormal pressure or temperature is expected while drilling.

BOPS will be tested by an independent service company. The ram preventers, choke manifold, and safety valves will be tested as follows: On the surface casing, pressure tests will be made to 250 psi low and 2000 psi high. On the intermediate casing, pressure tests will be made to 250 psi low and 3000 psi high.

The Annular Preventer will be tested to 250 psi low and 1000 psi high on the surface casing, and 250 low and 1500 high on the intermediate casing.

Cimarex Energy Co. of Colorado requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached (please see Exhibit F, F-1, F-2, F-3). The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used.

Application to Drill
Lea South 25 Federal Com #10H
Nearburg Producing Co. Agent: Cimarex Energy Co.
UL: N, Sec. 25-20S-34E
Lea Co., NM

11 Proposed Mud Circulating System:

Depth			Mud Wt	Visc	Fluid Loss	Type Mud
0'	to	~~1780'~~ 1850	8.4	28	NC	FW Spud Mud
~~1780'~~ 1850	to	5700'	10.2	30-32	NC	Brine water
5700'	to	14216'	9.2	30-32	NC	FW/Cut Brine

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

The Mud Monitoring System is an electronic Pason System satisfying requirements of Onshore Order 1.

12 Proposed Drilling Plan
Pilot Hole TD: No Pilot Hole KOP: 9,323' EOC: 10073'
Set Surface and Intermediate casing strings. Drill production hole to KOP. Continue drillling lateral through the curve to TD. Run prod casing & cement.

13 Testing, Logging and Coring Program:
A. Mud logging program: 2 man unit from 5700' to TD
B. Electric logging program: CNL / LDT / CAL / GR, DLL /GR -- Inter. Csg to TD
CNL /GR -- Surf to Inter. Csg
C. No DSTs or cores are planned at this time.
D. CBL w/ CCL from as far as gravity will let it fall to TOC

14 Potential Hazards:
No abnormal pressures or temperatures are expected. In accordance with Onshore Order 6, Cimarex does not anticipate that there will be enough H_2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H_2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H_2S Safety package on all wells, attached is an "H_2S Drilling Operations Plan." Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

Estimated BHP **4410 psi** Estimated BHT **160°**

15 Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved.
Drilling expected to take : **35 days**
If production casing is run an additional 30 days will be required to complete and construct surface facilities.

16 Other Facets of Operations:
After running casing, cased hole gamma ray neutron collar logs will be run from TD over possible pay intervals.
Bone Spring pay will be perforated and stimulated.
The proposed well will be tested and potentialed as **Oil**

Drilling 12-1/4" hole
below 13 3/8" Casing

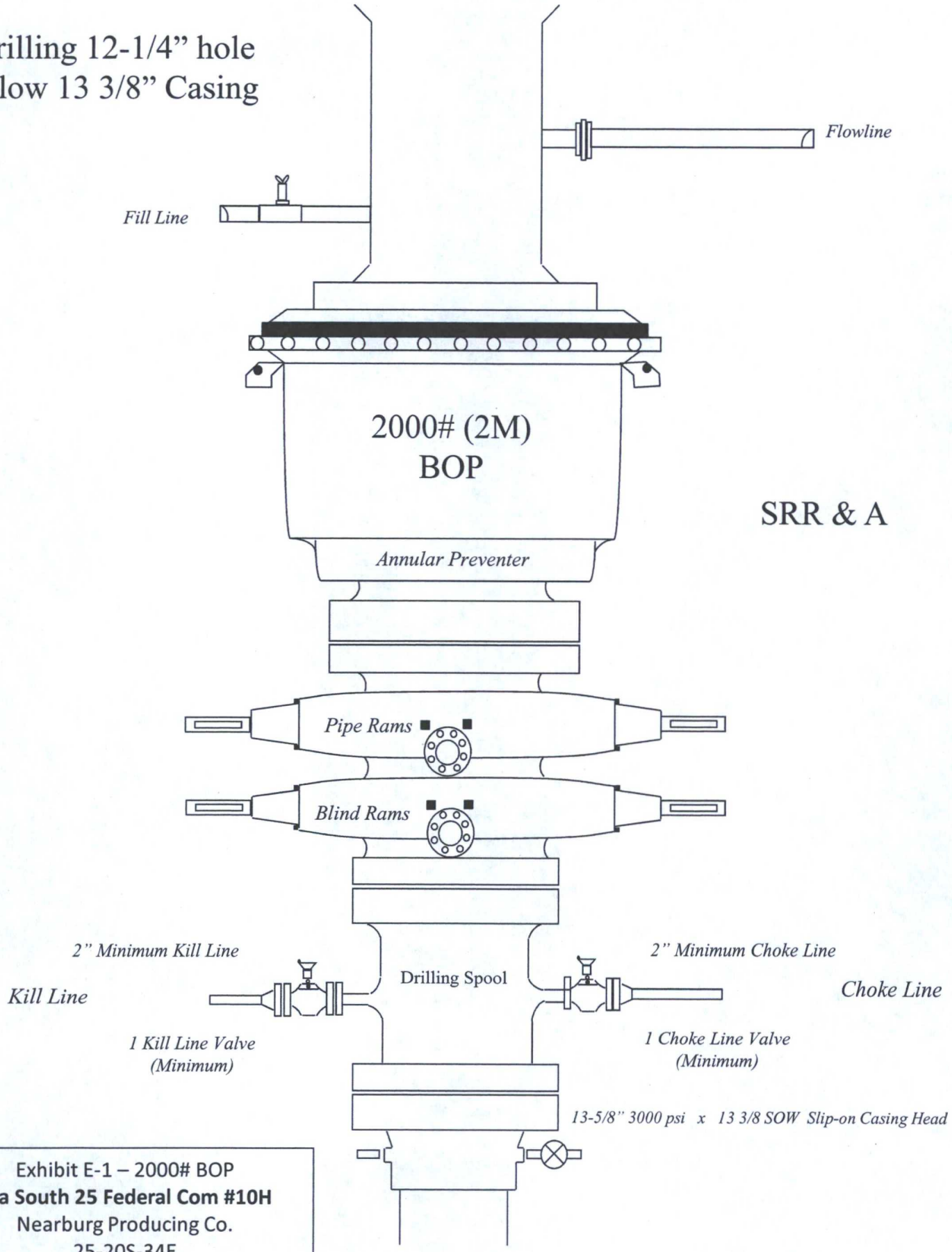
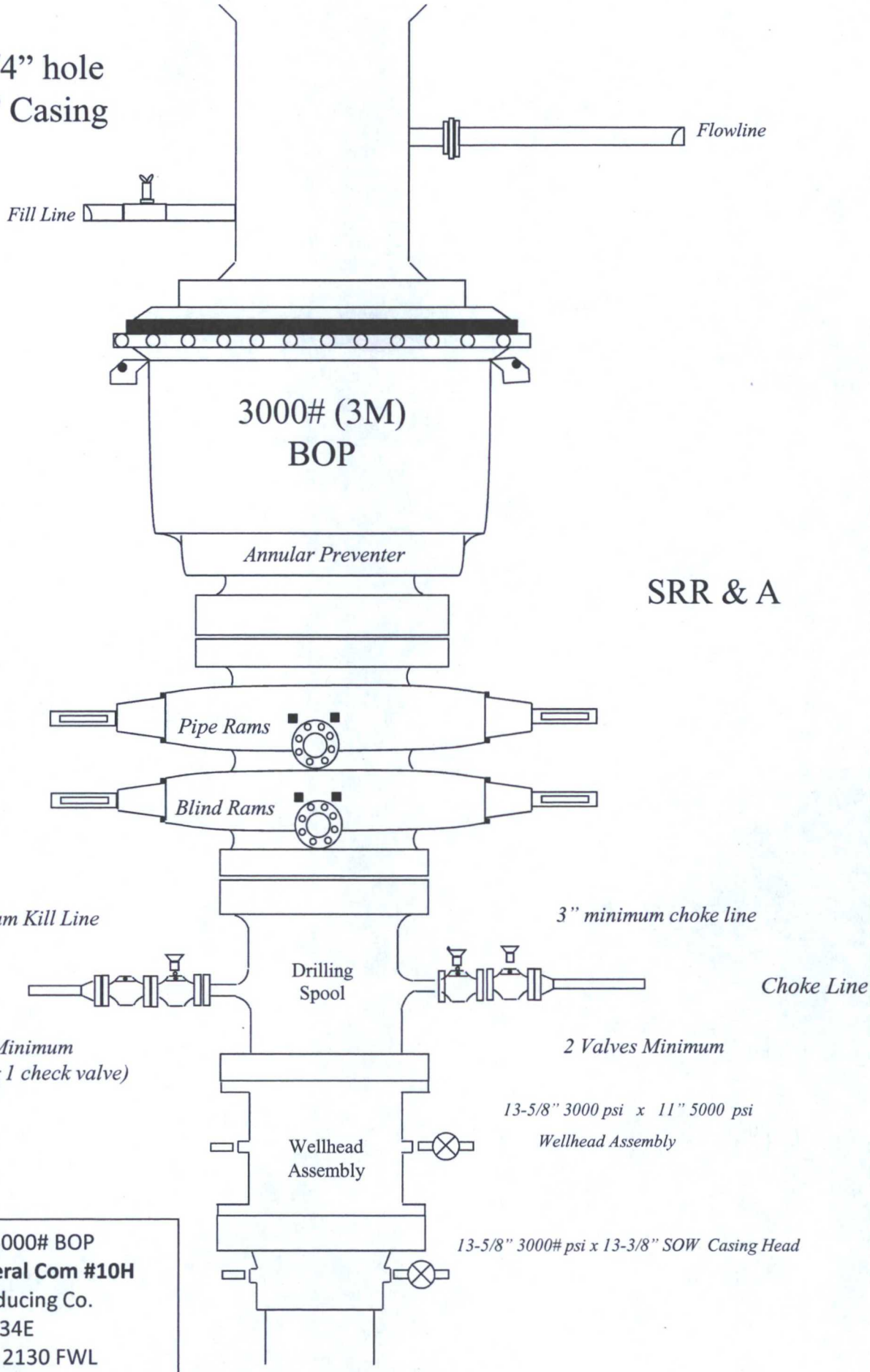


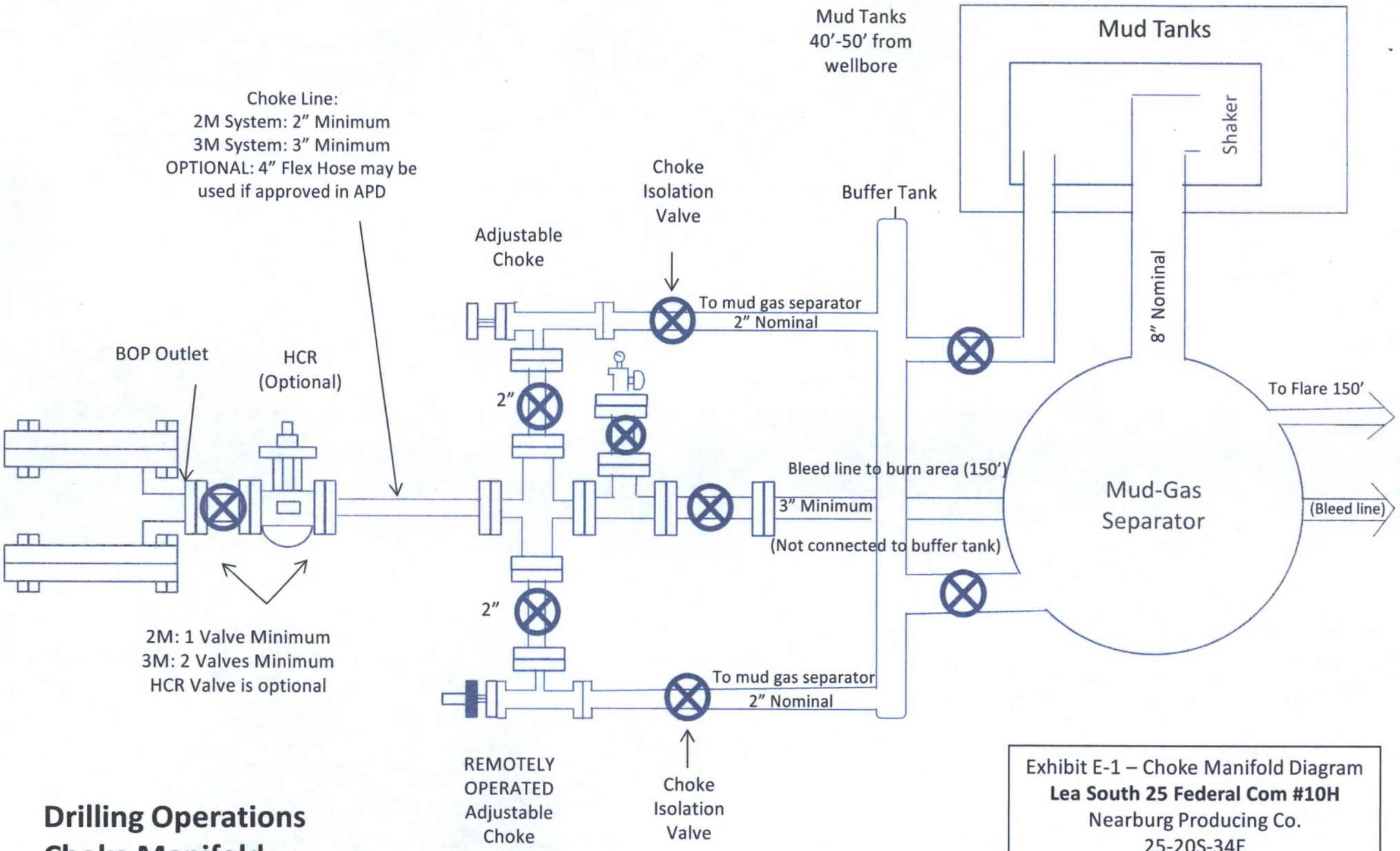
Exhibit E-1 – 2000# BOP
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM

Drilling 8-3/4" hole
below 9 5/8" Casing



SRR & A

Exhibit E-1 – 3000# BOP
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM



Drilling Operations
Choke Manifold
2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM

Midwest Hose & Specialty, Inc.

Exhibit F-1 – Co-Flex Hose Hydrostatic Test
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM

INTERNAL HYDROSTATIC TEST REPORT

Customer:	P.O. Number:
Oderco Inc	odyd-271

HOSE SPECIFICATIONS

Type: Stainless Steel Armor Choke & Kill Hose	Hose Length: 45'ft.
I.D. 4 INCHES	O.D. 9 INCHES

WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE
10,000 PSI	15,000 PSI	0 PSI

COUPLINGS

Stem Part No.	Ferrule No.
OKC OKC	OKC OKC
Type of Coupling: Swage-It	

PROCEDURE

Hose assembly pressure tested with water at ambient temperature.

TIME HELD AT TEST PRESSURE	ACTUAL BURST PRESSURE:
15 MIN.	0 PSI
Hose Assembly Serial Number: 79793	Hose Serial Number: OKC

Comments:

Date:	Tested:	Approved:
3/8/2011		

Midwest Hose & Specialty, Inc.

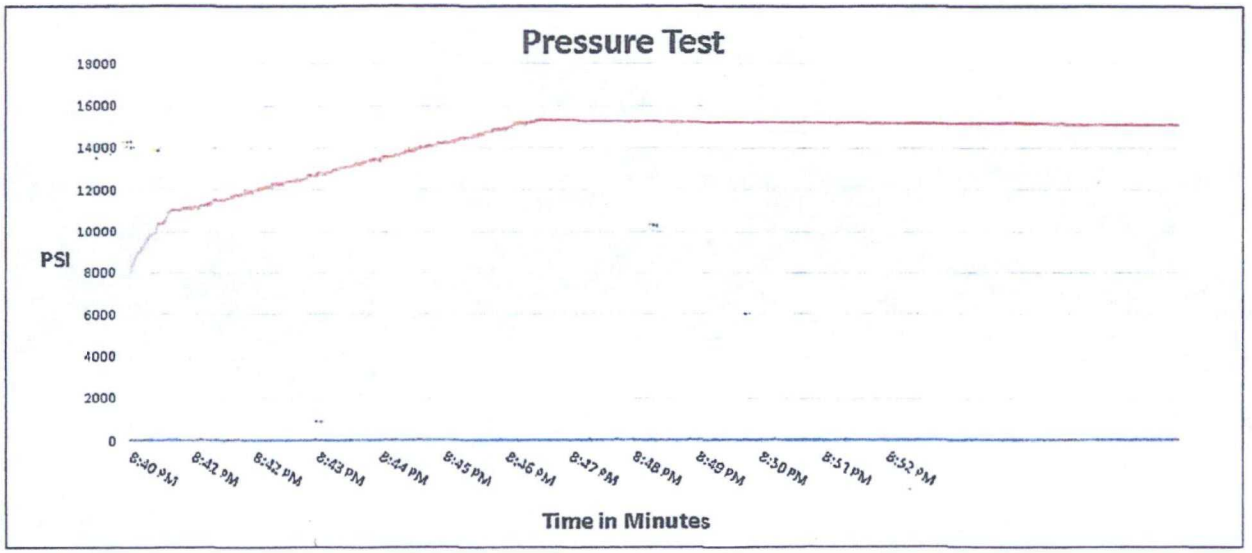
Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

Pick Ticket #: 94260

Hose Specifications		Verification	
Hose Type	**Length**	**Type of Fitting**	**Coupling Method**
C & K	45'	4 1/16 10K	Swage
I.D.	**O.D.**	**Die Size**	**Final O.D.**
4"	6.09"	6.38"	6.25"
Working Pressure	**Burst Pressure**	**Hose Serial #**	**Hose Assembly Serial #**
10000 PSI	Standard Safety Multiplier Applies	5544	79793



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	11 Minutes		15483 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Zac Mcconnell*

Approved By: *Kim Thomas*

Exhibit F-1 – Co-Flex Hose Hydrostatic Test
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM

Midwest Hose & Specialty, Inc.

Exhibit F -3– Co-Flex Hose
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM

Specification Sheet
Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium componets.The reinforcement cables, inner liner and cover are made of the highest quality material to handle the tough drilling applications of today's industry. The end connections are available with API flanges, API male threads, hubs, hammer unions or other special fittings upon request. Hose assembly is manufactured to API 7K. This assembly is wrapped with fire resistant vermculite coated fiberglass insulation, rated at 2000 degrees with stainless steel armor cover.

Working Pressure:	5,000 or 10,000 psi working pressure
Test Pressure:	10,000 or 15,000 psi test pressure
Reinforcement:	Multiple steel cables
Cover:	Stainless Steel Armor
Inner Tube:	Petroleum resistant, Abrasion resistant
End Fitting:	API flanges, API male threads, threaded or butt weld hammer unions, unibolt and other special connections
Maximum Length:	110 Feet
ID:	2-1/2", 3", 3-1/2". 4"
Operating Temperature:	-22 deg F to +180 deg F (-30 deg C to +82 deg C)

P.O. Box 96558 – 1421 S.E. 29th St. Oklahoma City, OK 73143 * (405) 670-6718 * Fax: (405) 670-6816

Exhibit F-2 – Co-Flex Hose
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: DEM	**PO** ODYD-271
SPECIFICATIONS	
Sales Order 79793	**Dated:** 3/8/2011

We hereby cerify that the material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards

Supplier:
Midwest Hose & Specialty, Inc.
10640 Tanner Road
Houston, Texas 77041

Comments:

Approved: Jamal Garcia	**Date:** 3/8/2011

Exhibit F – Co-Flex Hose

Lea South 25 Federal Com #10H

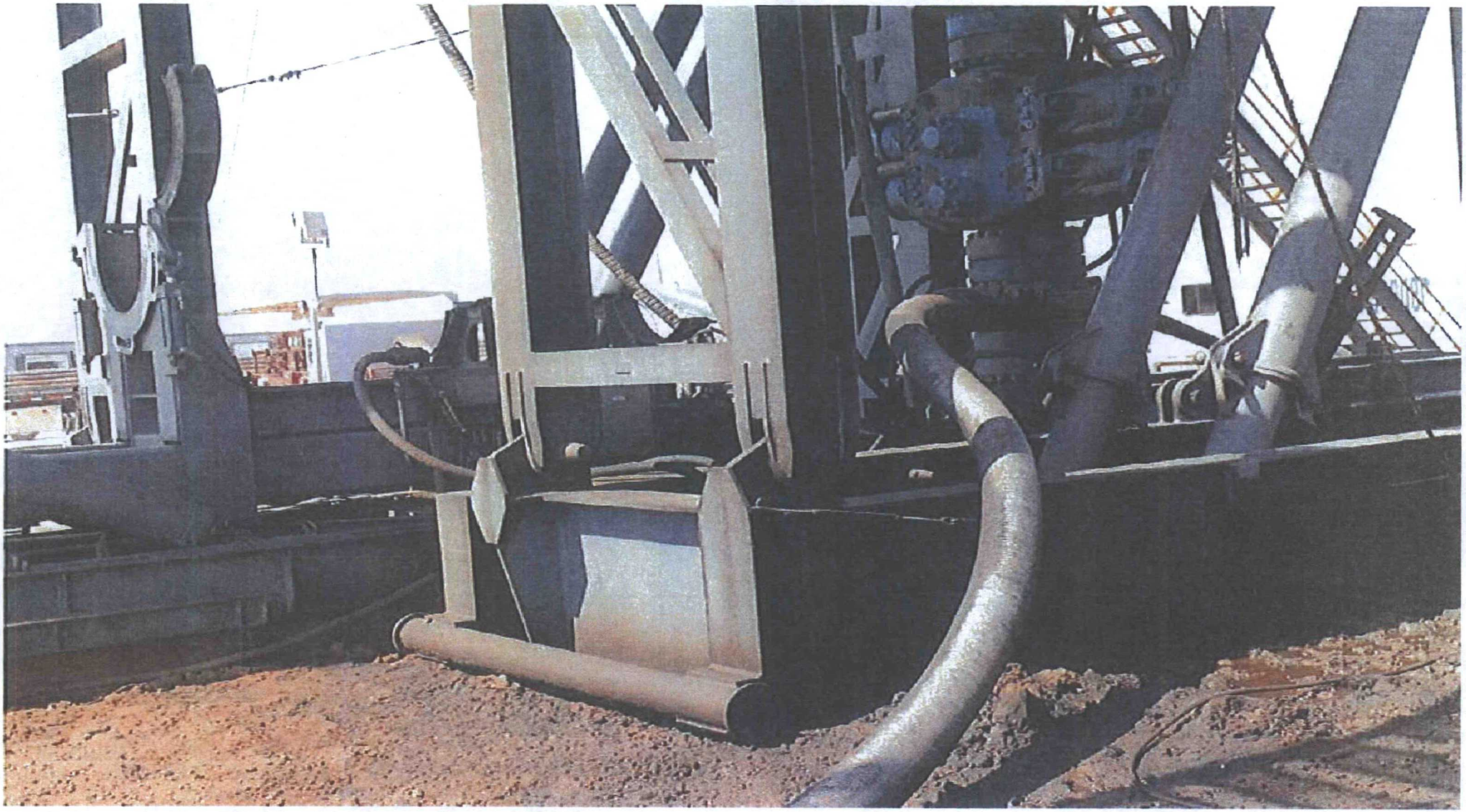
Nearburg Producing Co.

25-20S-34E

SHL 330 FSL & 2130 FWL

BHL 330 FNL & 2180 FWL

Lea County, NM



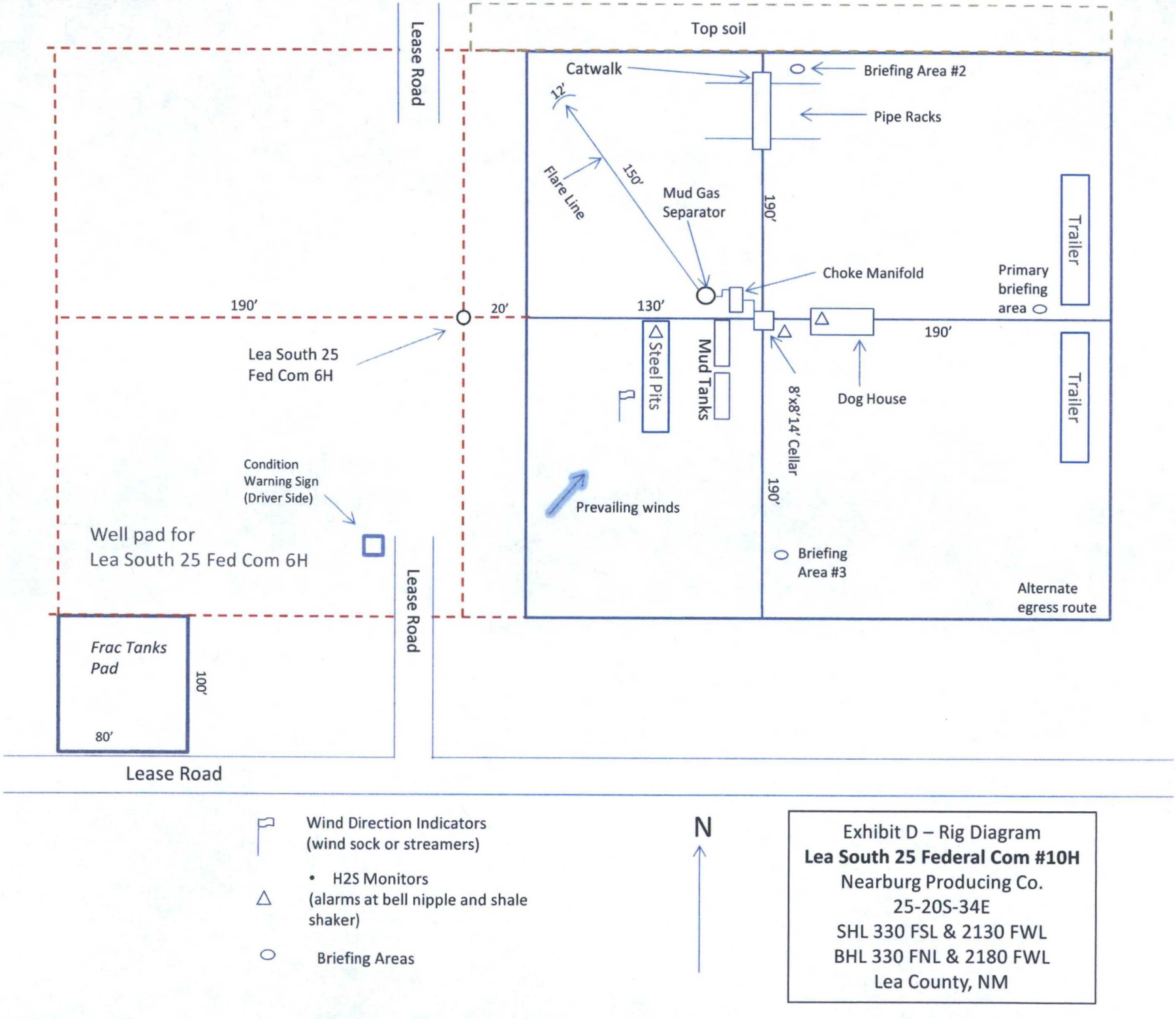


Exhibit D – Rig Diagram
Lea South 25 Federal Com #10H
Nearburg Producing Co.
25-20S-34E
SHL 330 FSL & 2130 FWL
BHL 330 FNL & 2180 FWL
Lea County, NM