16-389

Form 3160-3
(March 2012)

HOBBS OCD
NOV 22 2016
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FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM015091

6. If Indian, Allotee or Tribe Name: ---

1a. Type of Work: [✓] DRILL [ ] REENTER

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

1b. Type of Well: [✓] Oil Well [ ] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.: Rojo A 7811 JV-P Federal #5H (317125)

2. Name of Operator: BTA OIL PRODUCERS, LLC (260297)

9. API Well No.: 30-025- 43472

3a. Address: 104 South Pecos, Midland, TX 79701

3b. Phone No. (include area code): 432-682-3753

10. Field and Pool, or Exploratory: Red Hills; Upper Bone Spring Shale 97900

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: 480' FSL & 620' FWL Unit Letter M (SWSW) SHL Sec 27-T25S-R33E
At proposed prod. Zone: 330' FNL & 330' FWL Unit Letter D (NWNW) BHL Sec 27-T25S-R33E

11. Sec., T.R.M. or Blk and Survey or Area: Section 27 - T25S - R33E

14. Distance in miles and direction from nearest town or post office*: Approximately 20 miles from Jal

12. County or Parish: Lea County

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. Unit line, if any): 330'

16. No. of acres in lease: 840

17. Spacing Unit dedicated to this well: 160

18. Distance from location* to nearest well, drilling, completed, applied for, on this lease, ft.: SHL: 4334' BHL: 467'

19. Proposed Depth: TVD: 9,251' MD: 13,709' PH: 12,650'

20. BLM/BIA Bond No. on file: NM1195 & NMB000849

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3333.0' GL

22. Approximate date work will start*: 11/1/2016

23. Estimated duration: 30 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: Pam Inskeep — Name (Printed/Typed): Pam Inskeep — Date: 10/12/2016

Title: Regulatory Administrator

Approved by (Signature): /s/Cody Layton — Name (Printed/Typed): — Date: NOV 11 2016

Title: FIELD MANAGER — Office: CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legan or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations theron.
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)

Carlsbad Controlled Water Basin

KZ 11/23/16

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

BTA Oil Producers, LLC – Rojo A 7811 JV-P Federal 5H

1. Geologic Formations

TVD of target	9251'	Pilot hole depth	12,650'
MD at TD:	13,709'	Deepest expected fresh water:	625

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1036	Water	
Top of Salt	1365	Salt	
Base of Salt	4685	Salt	
Lamar	4941	Barren	
Bell Canyon	4973	Oil/Gas	
Cherry Canyon	6036	Oil/Gas	
Brushy Canyon	7531	Oil/Gas	
Bone Spring Lime	9039	Oil/Gas	
U. Avalon Shale	9219	Oil/Gas Target Zone	
L. Avalon Shale	9531	Oil/Gas	
1st Bone Spring Sand	10084	Oil/Gas	
2nd Bone Spring Sand	10628	Oil/Gas	
3rd Bone Spring Sand	11817	Oil/Gas	
Wolfcamp	12151	Oil/Gas	
Strawn	14045	Not Penetrated	

2. Casing Program - See COA

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17.5"	0	~~1065~~ 1090'	13.375"	54.5	J55	STC	1.379	1.167	8.856
12.25"	0	4300	9.625"	40	J55	LTC	1.127	1.141	2.629
12.25"	4300	4945'	9.625"	40	N80	LTC	1.178	1.661	3.675
8.75"	0	13,709	5.5"	17	P110	LTC	1.702	2.427	2.826
				BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h
Intermediate and Production Burst based on Pore Pressure (9.1 ppge) at Lateral TVD minus Gas Gradient (0.1 psi/ft).
Intermediate casing will always be kept 1/3 full while running as additional collapse protection.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y

Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program – See COA

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	480	13.5	1.75	9	12	Lead: Class C + 4% Gel + 2% CaCl2
	350	14.8	1.34	4.8	8	Tail: Class C + 2% CaCl2
Inter.	1100	12.7	1.99	10	12	1st stage Lead: Econocem HLC 65:35:6 + 5% Salt
	250	14.8	1.34	6.4	8	1st stage Tail: Class C + 2% CaCl
Prod.	450	10.3	3.62	21.9	72	1st Lead: Halliburton Tune Lite Blend
	1175	14.4	1.24	5.7	20	1st Tail: Versacem 50:50:2 Class H + 1% Salt
Plug 1	175	11.9	2.51	14.2	72	Econocem H Plug Back 12,650' – 11,650'
Plug 2	175	11.9	2.51	14.2	72	Econocem H Plug Back 11,650' – 10,650'
Plug 3	175	11.9	2.51	14.2	72	Econocem H Plug Back 10,650' – 9650'
KO Plug	450	17.2	.98	4	8	Class H Neat (Kick Off Plug 9650' – 8650')

Low Cement

Pilot Hole Plug Back Volumes based on Bit Size + 5% Excess.
Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results.
Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess/Comments
Surface	0'	75%
Intermediate	0'	75%
Production	3945'	17% OH in Lateral (KOP to EOL) – 40% OH in Vertical (to KOP) - Tie In 1000' Inside 9-5/8" Casing Shoe @ 4945'

4. Pressure Control Equipment - See COA

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12-1/4"	13-5/8"	2M	Annular	x	2000 psi
			Blind Ram		2M
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4"	11"	5M	Annular	x	50% testing pressure
			Blind Ram	x	5M
			Pipe Ram	x	
			Double Ram		
			Other *		

*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.	
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?
N	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.	

See COA

See COA

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6-8.8	28-34	N/C
Surf csg	Int shoe	Saturated Brine	10.0-10.2	28-34	N/C
Int shoe	TD@13,709	Cut Brine	8.5-9.3	28-34	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures - See COA

Logging, Coring and Testing.	
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
Y	No Logs are planned based on well control or offset log information.
N	Drill stem test? If yes, explain
Y	Coring? If yes, explain

Additional logs planned		Interval
Y	Resistivity	Intermediate shoe to PHTD
Y	Density	Intermediate shoe to PHTD
Y	CMR	Intermediate shoe to PHTD
Y	Mud log	Intermediate shoe to PHTD & TD
Y	CBL	Production casing (If cement not circulated to surface)

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5986 psi at 12,650' TVD
Abnormal Temperature	NO (180 DEG. F)

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

~~N~~ Y	H2S is present -> H2S might be present - See COA
Y	H2S Plan attached

8. Other facets of operation

Is this a walking operation? NO If yes, describe.
Will be pre-setting casing? NO If yes, describe.

Attachments

- Directional Plan
- BOP & Choke Schematics
- C102 and supporting maps
- Rig plat
- H2S schematic
- H2S contingency plan
- Interim reclamation plat
- Flex Hose Variance

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 27 Township: 25S Range: 33E

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Twn	Rng	X	Y	Depth Well	Depth Water	Water Column
C 02312		LE	1	2	1	05	25S	33E	632241	3559687*	150	90	60
C 02313		LE	2	3	3	26	25S	33E	636971	3552098*	150	110	40
C 02373 CLW317846	O	LE	2	1	1	13	25S	33E	638518	3556544*	625	185	440
C 02373 S		LE	1	2	1	13	25S	33E	638721	3556549*	625	185	440

Average Depth to Water: **142 feet**

Minimum Depth: **90 feet**

Maximum Depth: **185 feet**

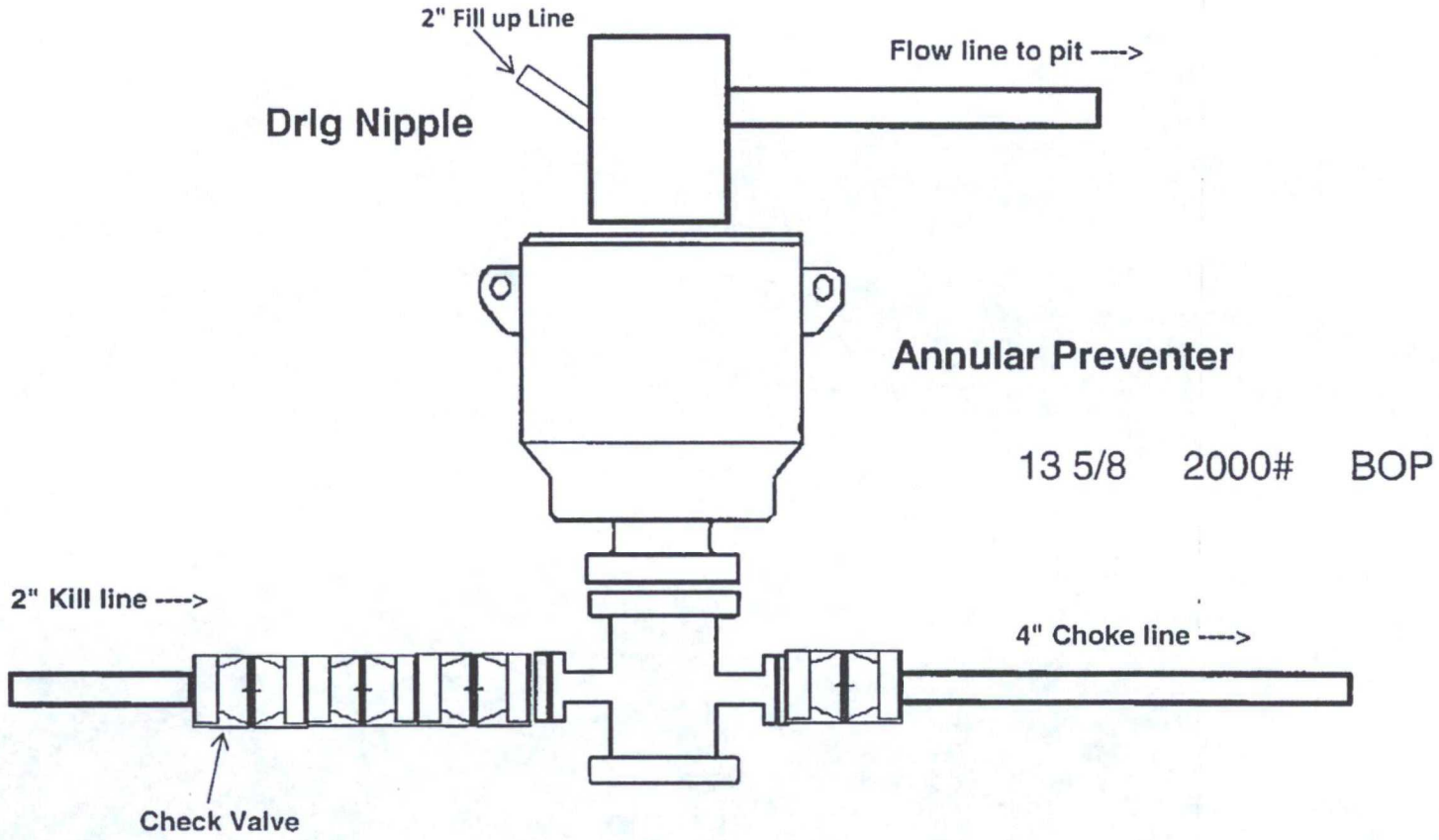
Record Count: 4

PLSS Search:

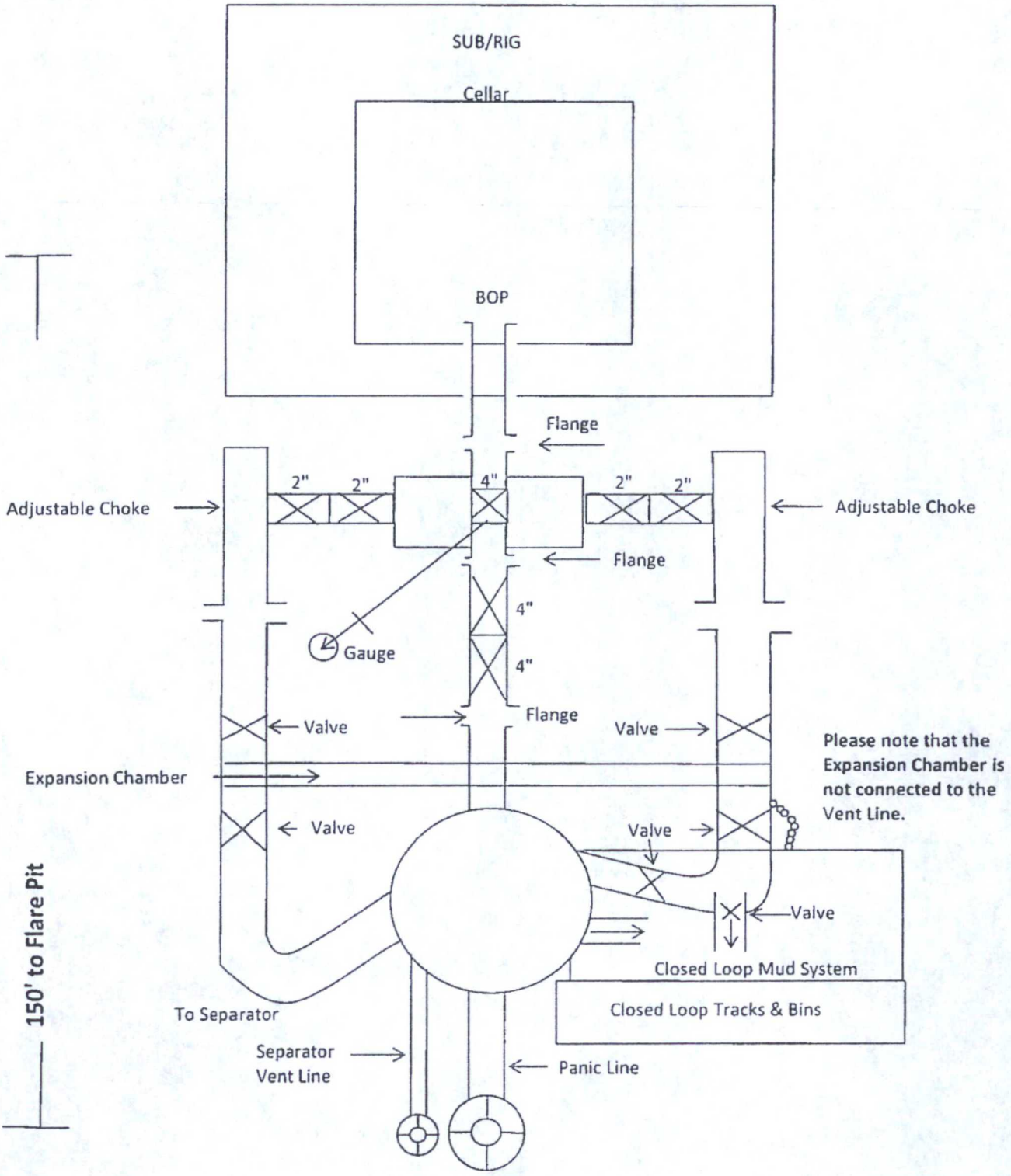
Township: 25S **Range:** 33E

***UTM location was derived from PLSS - see Help**

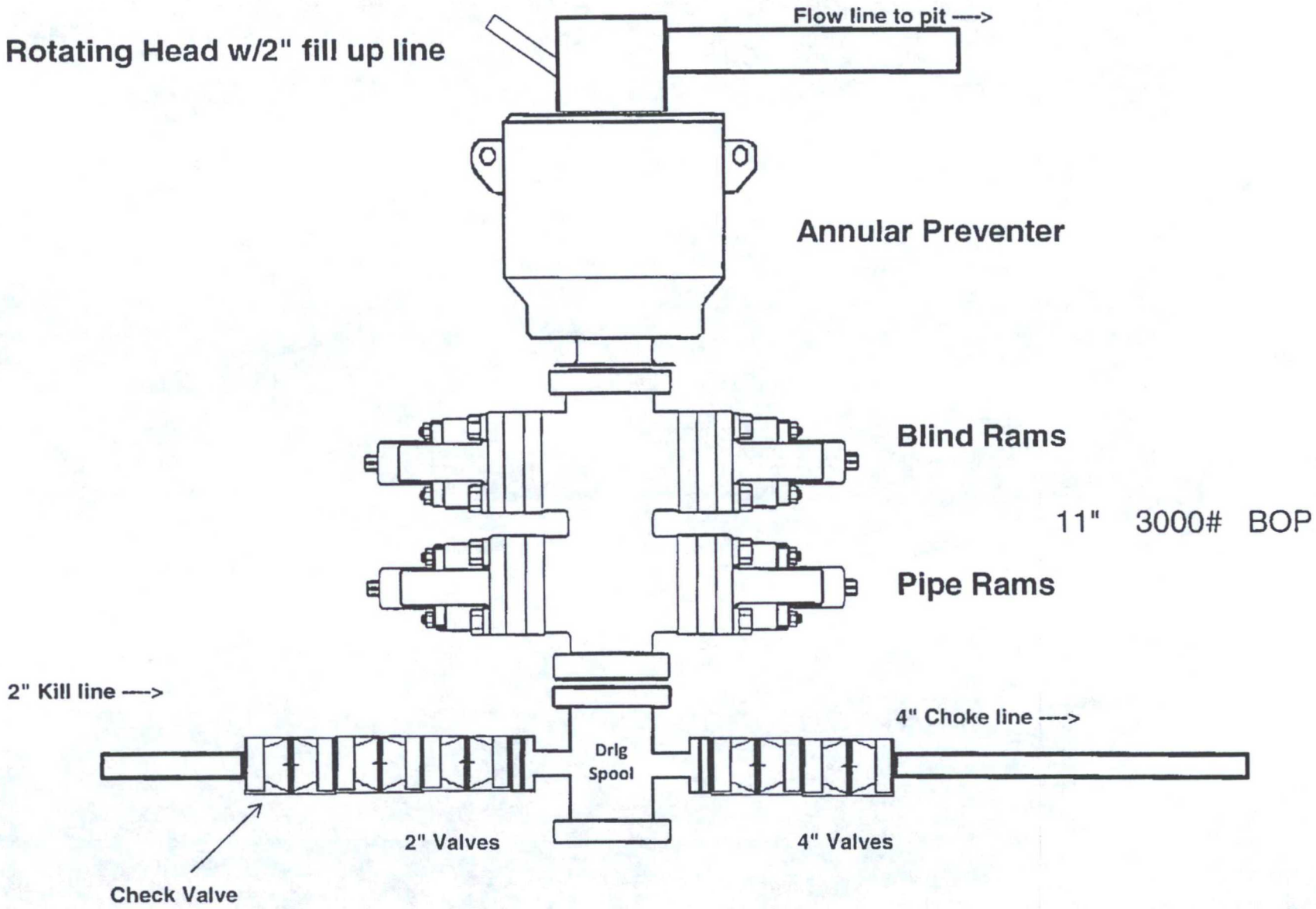
2,000 psi BOP Schematic



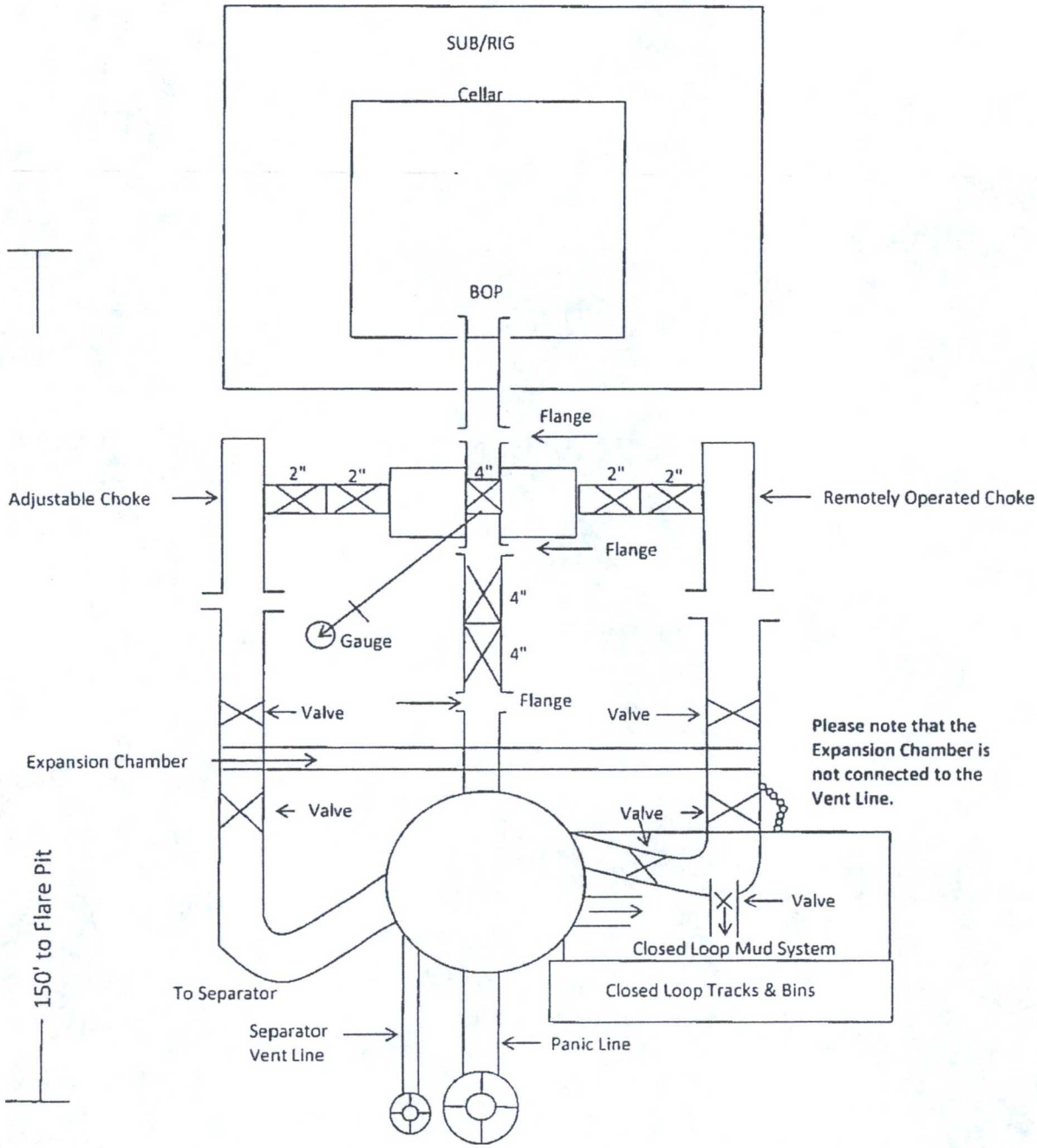
2M Choke Manifold Equipment



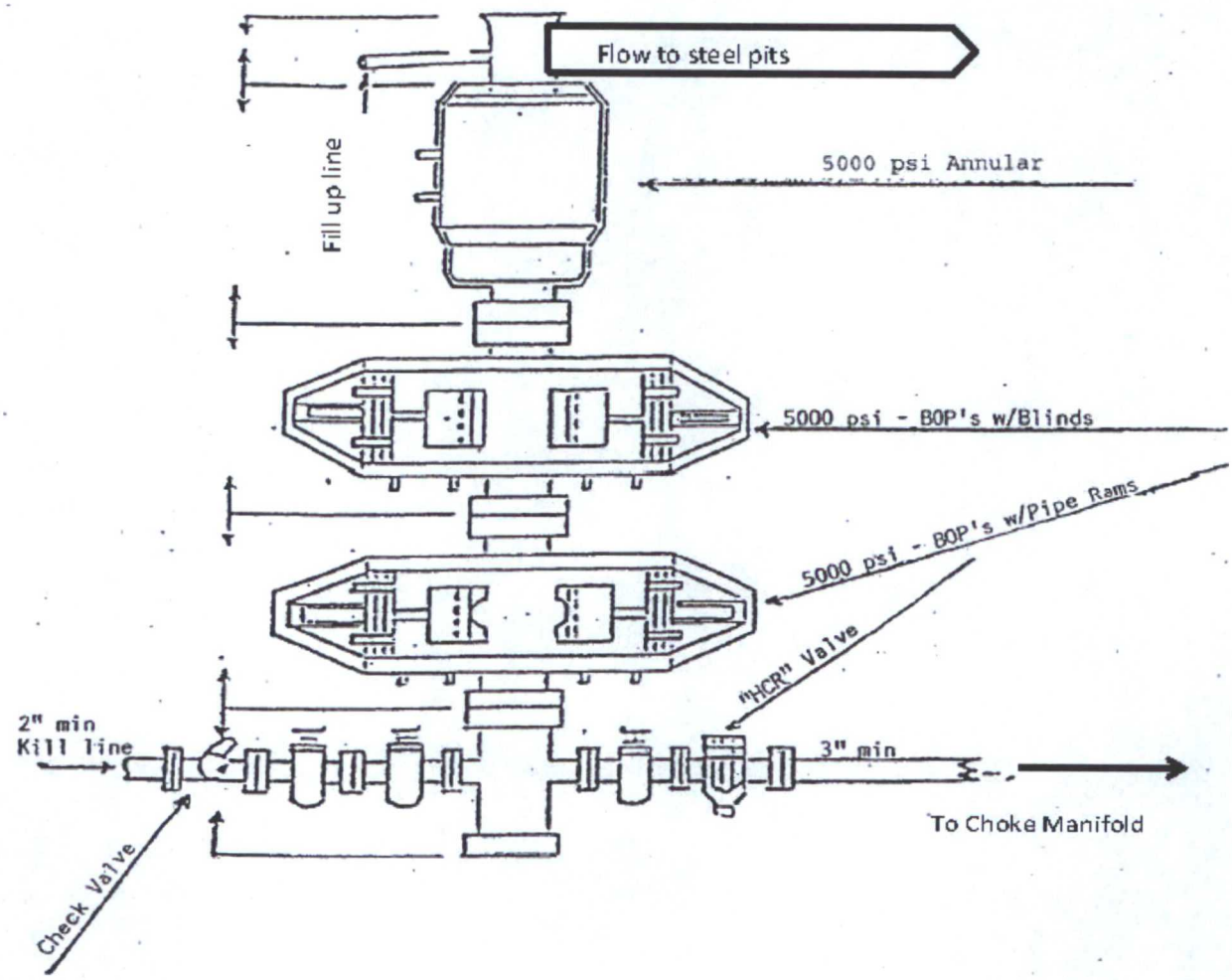
3,000 psi BOP Schematic



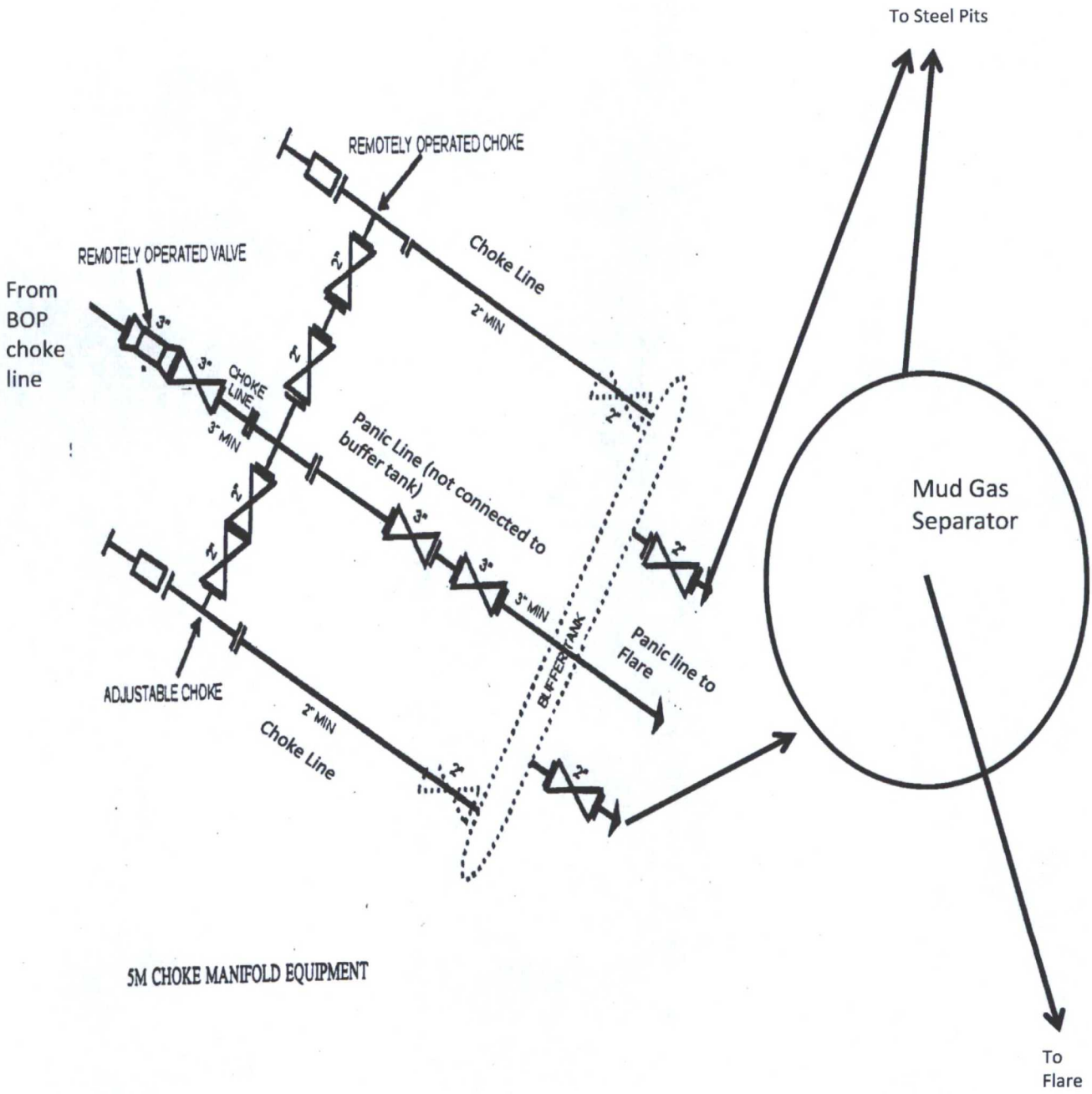
3M Choke Manifold Equipment



13-5/8" 5,000 PSI BOP

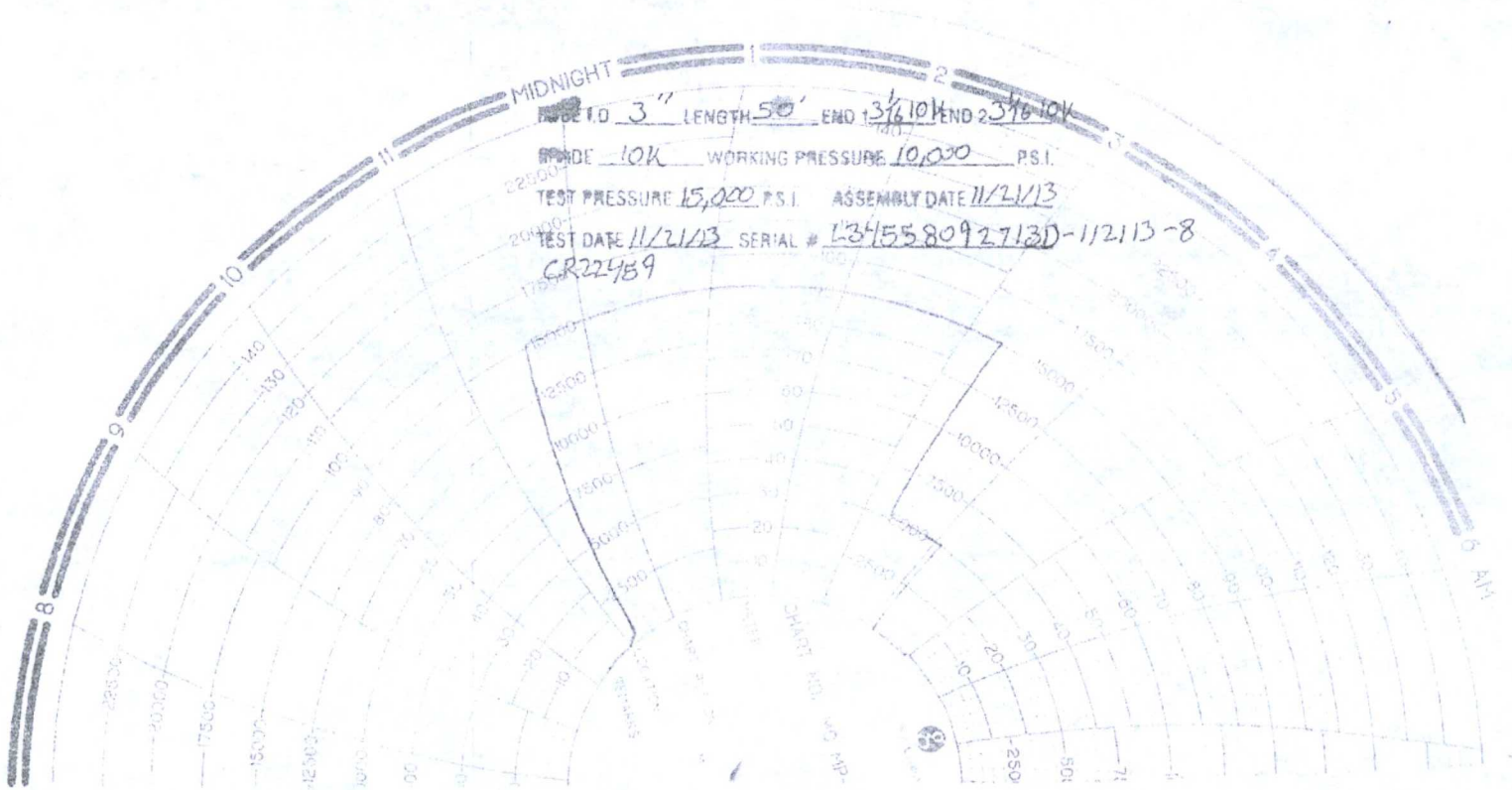


BTA OIL PRODUCERS, LLC
Rojo A 7811 JV-P #5H
Sec. 27 T25S, R33E
Lea County, New Mexico



5M CHOKE MANIFOLD EQUIPMENT

BTA Oil Producers LLC
Rojo A 7811 JV-P #5H
Sec. 27 T25S, R33E
Lea County, New Mexico


MIDNIGHT
HOSE I.D. 3" LENGTH 50' END 1 3 1/16 10K END 2 3 1/16 10K
GRADE 10K WORKING PRESSURE 10,000 P.S.I.
TEST PRESSURE 15,000 P.S.I. ASSEMBLY DATE 11/21/13
TEST DATE 11/21/13 SERIAL # 134558092713D-112113-8
CR22489

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

10K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

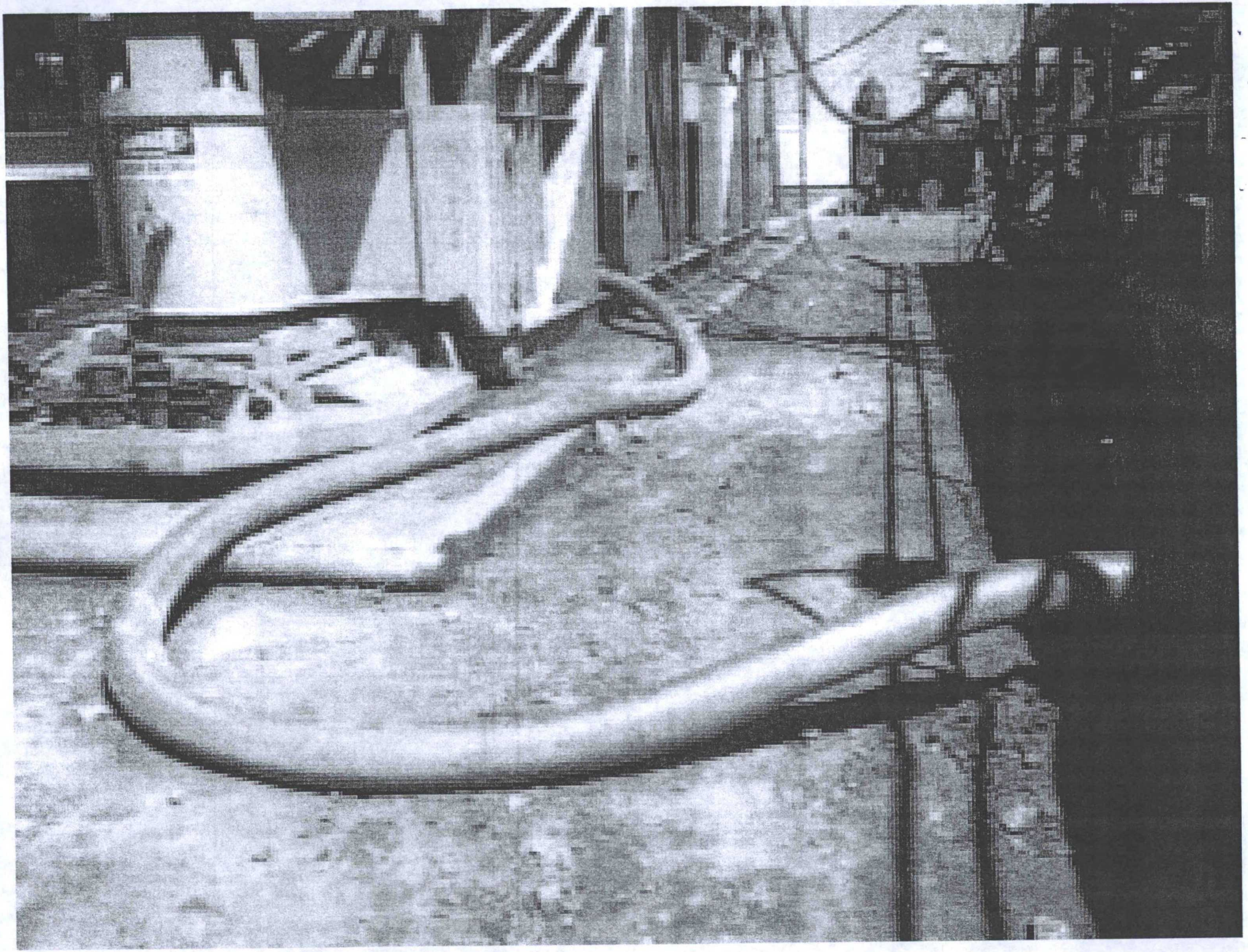
Customer :	SPECIALTY SALES, INC.	Test Date:	11/21/2013
Customer Ref. :	49680-S	Hose Serial No.:	D-112113-8
Invoice No. :	197465	Created By:	Norma M.

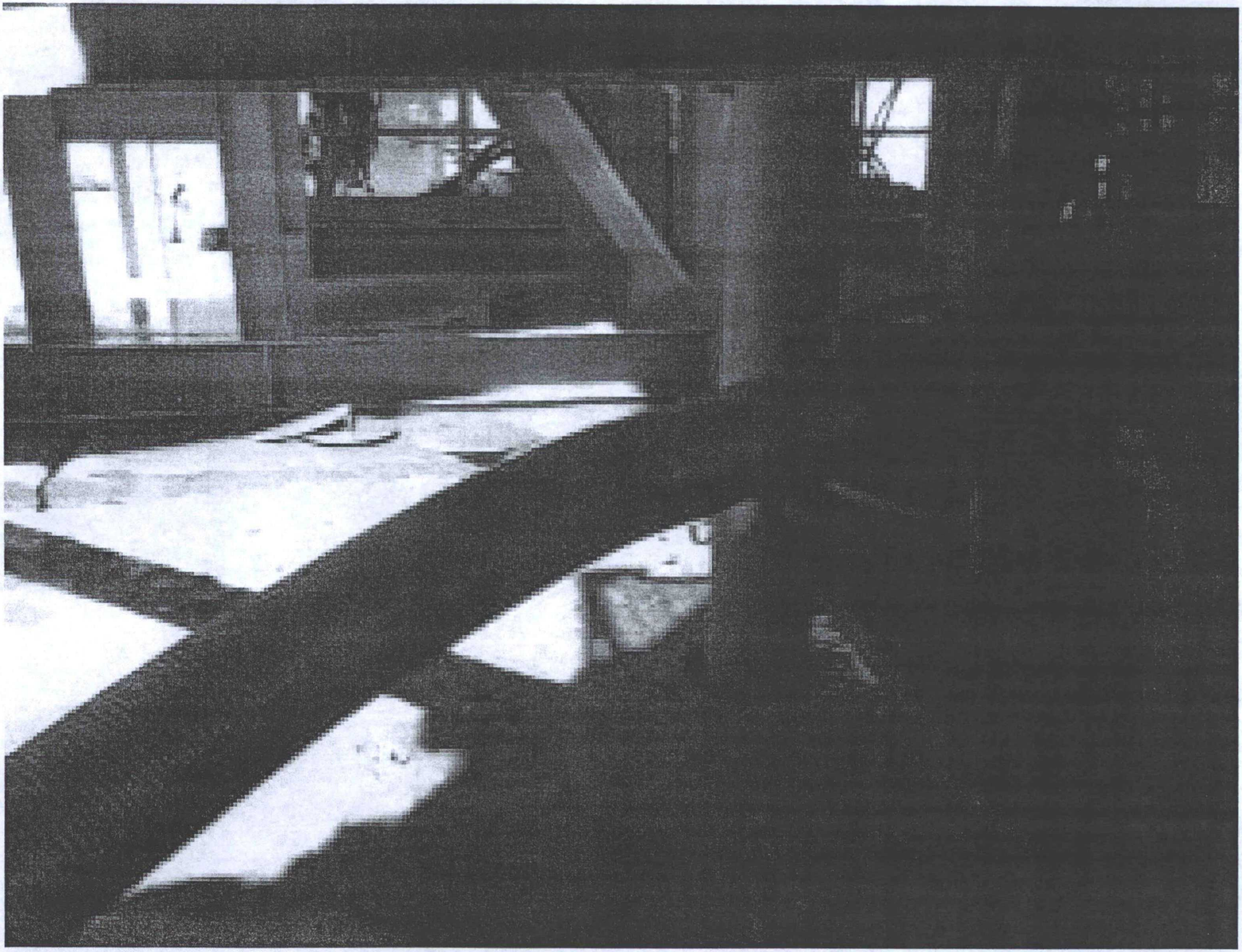
Product Description:	10K3.050.0CK31/1610KFLGE/E

End Fitting 1 :	3 1/16 10K FLG	End Fitting 2 :	3 1/16 10K FLG
Gates Part No. :	47773-4290	Assembly Code :	L34558092713D-112113-8
Working Pressure :	10,000 PSI	Test Pressure :	15,000 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 15,000 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 Manager :	QUALITY	Technical Supervisor :	PRODUCTION
Date :	11/22/2013	Date :	11/22/2013
Signature :		Signature :	

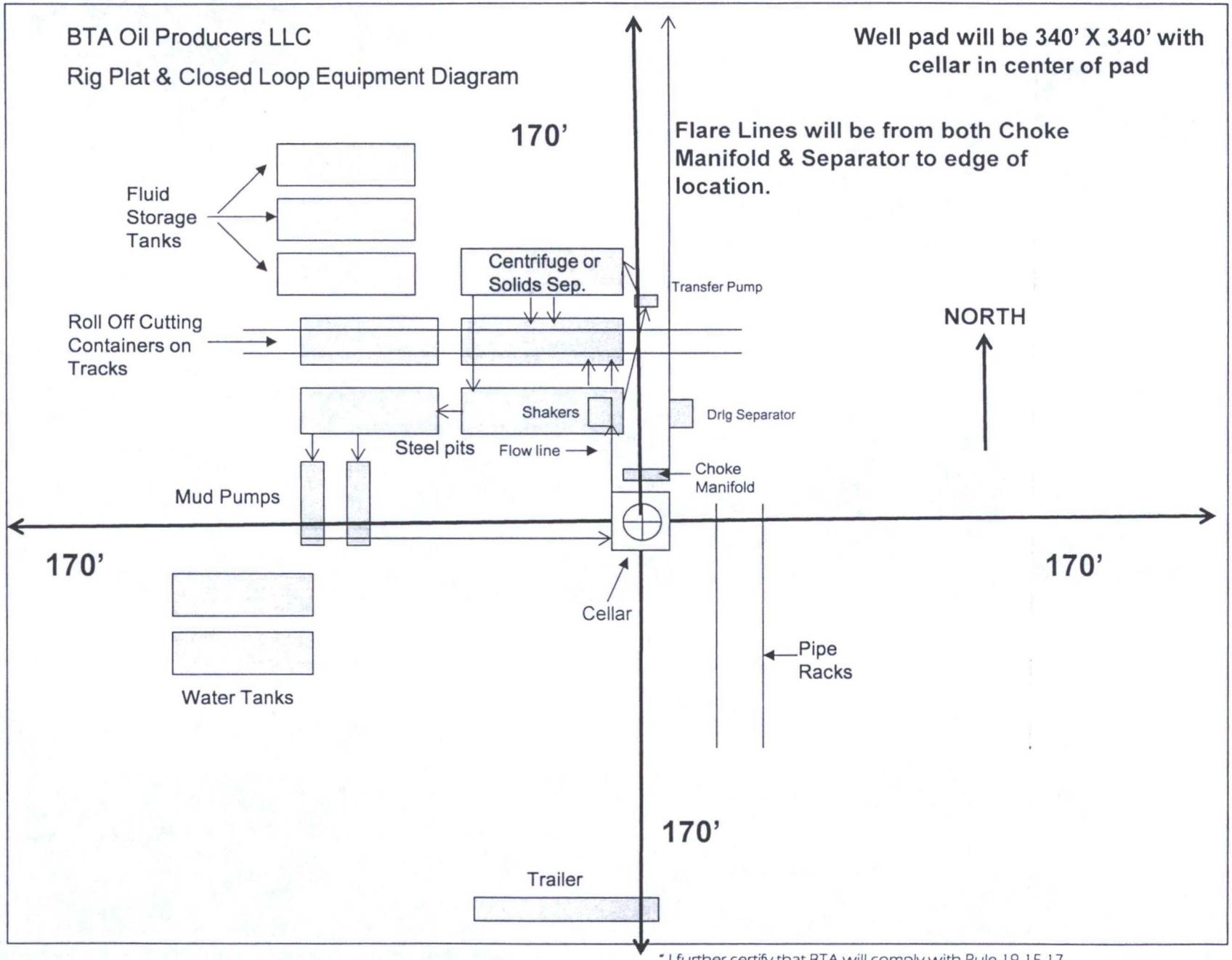




BTA Oil Producers LLC

Rig Plat & Closed Loop Equipment Diagram

Well pad will be 340' X 340' with cellar in center of pad



"I further certify that BTA will comply with Rule 19.15.17 NMAC by using a Closed Loop System."