PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA Oil Producers, LLC
LEASE NO.:	NMNM82799
WELL NAME & NO.:	5H – Grama 8817 16-9 Federal Com
SURFACE HOLE FOOTAGE:	200'/S & 330'/E
BOTTOM HOLE FOOTAGE	200'/N & 330'/E, 09
LOCATION:	Section 16 T.22 S., R.34 E., NMPM
COUNTY:	Lea County, New Mexico

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Below Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

G. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on both sides of the road.

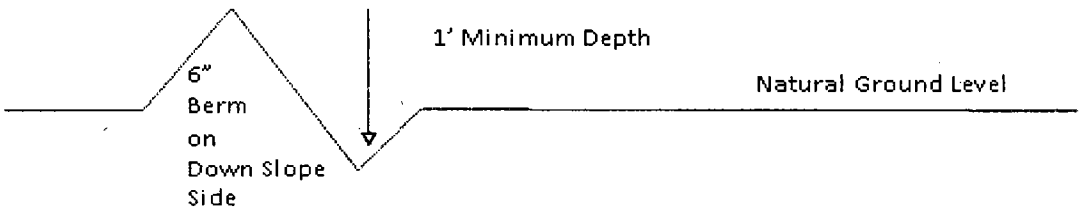
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

Fence Requirement

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

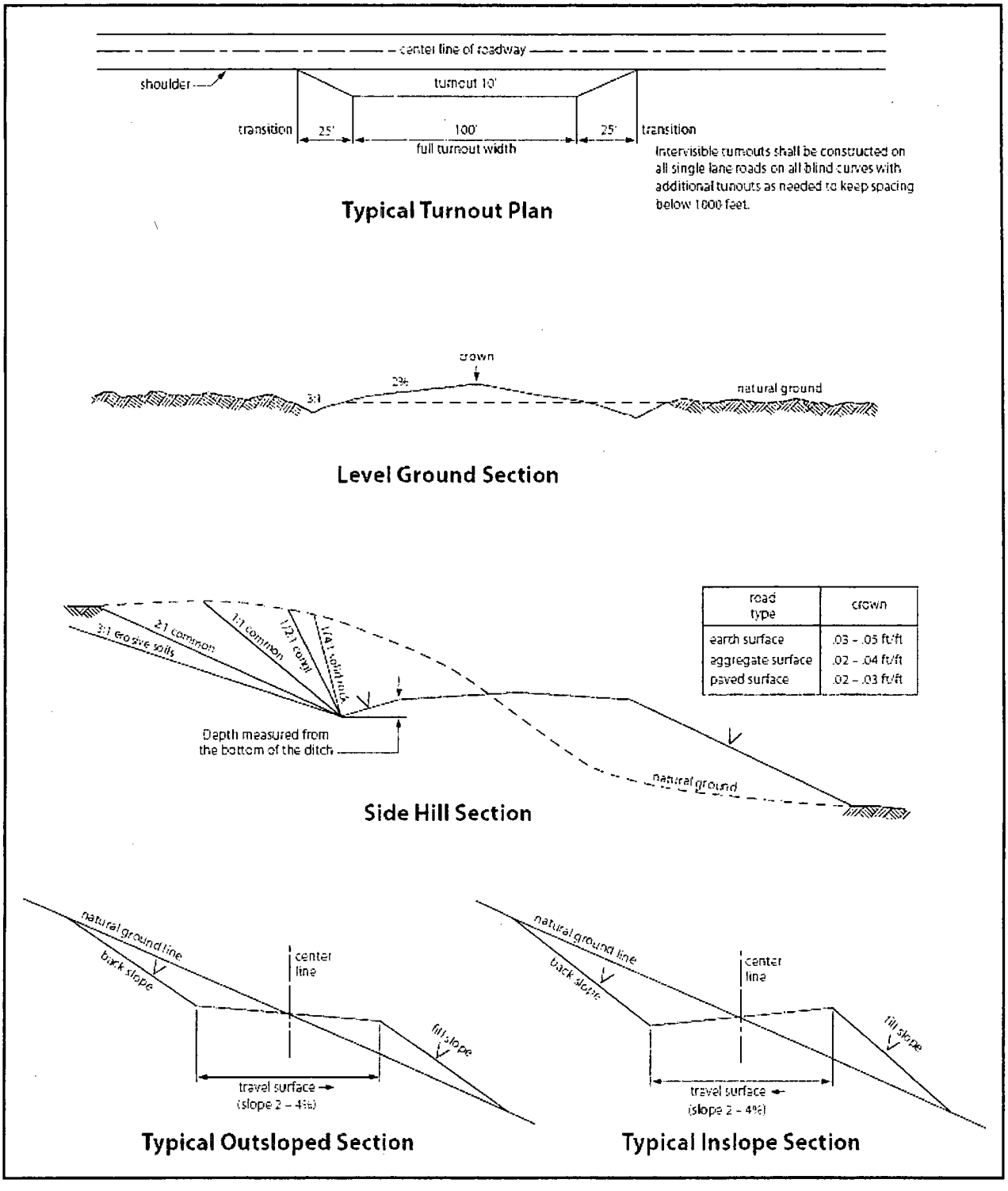


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Shale Green** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES
STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (*see* 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third

is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

17. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

18. Special Stipulations:

a. **Lesser Prairie-Chicken:** Oil and gas activities will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Normal vehicle use on existing roads will not be restricted.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and

loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Below Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture for LPC Sand/Shinnery Sites

Holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed shall be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed shall be either certified or registered seed. The seed container shall be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). Holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. Seeding shall be repeated until a satisfactory stand is established as determined by the Authorized Officer. Evaluation of growth may not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Operator Certification Data Report
06/07/2017

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Kayla McConnell **Signed on:** 11/14/2016

Title: Regulatory Analyst

Street Address: 104 S. Pecos

City: Midland **State:** TX **Zip:** 79701

Phone: (432)682-3753

Email address: kmcconnell@btaoil.com

Field Representative

Representative Name: Nick Eaton

Street Address: 104 South Pecos

City: Midland **State:** TX **Zip:** 79701

Phone: (432)682-3753

Email address: neaton@btaoil.com

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Application Data Report

06/07/2017

APD ID: 10400007085 **Submission Date:** 11/14/2016

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

APD ID: 10400007085 **Tie to previous NOS?** **Submission Date:** 11/14/2016

BLM Office: HOBBS **User:** Kayla McConnell **Title:** Regulatory Analyst

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM82799 **Lease Acres:** 640

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO **APD Operator:** BTA OIL PRODUCERS LLC

Operator letter of designation:

Keep application confidential? YES

Operator Info

Operator Organization Name: BTA OIL PRODUCERS LLC

Operator Address: 104 S. Pecos **Zip:** 79701

Operator PO Box:

Operator City: Midland **State:** TX

Operator Phone: (432)682-3753

Operator Internet Address: pinskeep@btaoil.com

Section 2 - Well Information

Well in Master Development Plan? NO **Mater Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** GRAMA RIDGE **Pool Name:** BONE SPRING, WEST

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Is the proposed well in an area containing other mineral resources? USEABLE WATER

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: SINGLE WELL **Multiple Well Pad Name:** **Number:**

Well Class: HORIZONTAL **Number of Legs:**

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 19 Miles **Distance to nearest well:** 1612 FT **Distance to lease line:** 200 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: GRAMA 8817 16-9 FED COM 5H C102_11-14-2016.pdf

Well work start Date: 02/01/2017 **Duration:** 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NGVD29

Survey number:

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.384996	**Longitude:** -103.467478	
SHL	**Elevation:** 3479	**MD:** 0	**TVD:** 0
Leg #: 1	**Lease Type:** STATE	**Lease #:** STATE	
	NS-Foot: 200	**NS Indicator:** FSL	
	EW-Foot: 330	**EW Indicator:** FEL	
	Twsp: 22S	**Range:** 34E	**Section:** 16
	Aliquot: SESE	**Lot:**	**Tract:**

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.384996	**Longitude:** -103.467478	
KOP	**Elevation:** -6398	**MD:** 9877	**TVD:** 9877
Leg #: 1	**Lease Type:** STATE	**Lease #:** STATE	
	NS-Foot: 200	**NS Indicator:** FSL	
	EW-Foot: 330	**EW Indicator:** FEL	
	Twsp: 22S	**Range:** 34E	**Section:** 16
	Aliquot: SESE	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.385353	**Longitude:** -103.467477	
PPP	**Elevation:** -6971	**MD:** 10777	**TVD:** 10450
Leg #: 1	**Lease Type:** STATE	**Lease #:** STATE	
	NS-Foot: 330	**NS Indicator:** FSL	
	EW-Foot: 330	**EW Indicator:** FEL	
	Twsp: 22S	**Range:** 34E	**Section:** 16
	Aliquot: SESE	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.41257	**Longitude:** -103.467407	
EXIT	**Elevation:** -6971	**MD:** 20236	**TVD:** 10450
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM82799	
	NS-Foot: 330	**NS Indicator:** FNL	
	EW-Foot: 330	**EW Indicator:** FEL	
	Twsp: 22S	**Range:** 34E	**Section:** 9
	Aliquot: NENE	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.412928	**Longitude:** -103.467406	
BHL	**Elevation:** -6971	**MD:** 20366	**TVD:** 10450
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM82799	
	NS-Foot: 200	**NS Indicator:** FNL	
	EW-Foot: 330	**EW Indicator:** FEL	

APD ID: 10400007085 **Submission Date:** 11/14/2016

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - Geologic Formations

ID: Surface formation **Name:** UNKNOWN

Lithology(ies):

ALLUVIUM

Elevation: 3479 **True Vertical Depth:** 0 **Measured Depth:** 0

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 1 **Name:** RUSTLER ANHYDRITE

Lithology(ies):

Elevation: 1904 **True Vertical Depth:** 1575 **Measured Depth:** 1575

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2 **Name:** TOP OF SALT

Lithology(ies):

Elevation: 1454 **True Vertical Depth:** 2025 **Measured Depth:** 2025

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 3 **Name:** BASE OF SALT

Lithology(ies):

Elevation: 24 **True Vertical Depth:** 3455 **Measured Depth:** 3455

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 4 **Name:** CAPITAN REEF

Lithology(ies):

Elevation: -620 **True Vertical Depth:** 4099 **Measured Depth:** 4099

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 5 **Name:** DELAWARE

Lithology(ies):

Elevation: -1856 **True Vertical Depth:** 5335 **Measured Depth:** 5335

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 6 **Name:** CHERRY CANYON

Lithology(ies):

Elevation: -2576 **True Vertical Depth:** 6055 **Measured Depth:** 6055

Mineral Resource(s):

NATURAL GAS

OIL

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Is this a producing formation? N

ID: Formation 7 **Name:** BRUSHY CANYON

Lithology(ies):

Elevation: -3566 **True Vertical Depth:** 7045 **Measured Depth:** 7045

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 8 **Name:** BONE SPRING LOWER

Lithology(ies):

Elevation: -5031 **True Vertical Depth:** 8510 **Measured Depth:** 8510

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 9 **Name:** BONE SPRING 2ND

Lithology(ies):

Elevation: -6971 **True Vertical Depth:** 10450 **Measured Depth:** 10777

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

Section 2 - Blowout Prevention

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Pressure Rating (PSI): 3M **Rating Depth:** 11000

Equipment: The blowout preventer equipment (BOP) shown in Exhibit A will consist of a (3M system) double ram type (3000 psi WP) preventer and a bag-type (Hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4-½" drill pipe rams on bottom. The BOP's will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested as per BLM drilling Operations Order No. 2. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 3000 psi WP rating.

Requesting Variance? YES

Variance request: A Choke Hose variance is requested. See attached test chart and spec.

Testing Procedure: Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log.

Choke Diagram Attachment:

Grama 8817 16-9 Fed Com 3M Choke Manifold_11-14-2016.pdf

Choke_Hose___Test_Chart_and_Specs_03-09-2017.pdf

BOP Diagram Attachment:

Grama 8817 16-9 Fed Com 3M BOP Schematic_11-14-2016.pdf

Section 3 - Casing

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

String Type: SURFACE **Other String Type:**

Hole Size: 17.5

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -6971

Bottom setting depth MD: 1625 **Bottom setting depth TVD:** 1625

Bottom setting depth MSL: -8596

Calculated casing length MD: 1625

Casing Size: 13.37 **Other Size**

Grade: J-55 **Other Grade:**

Weight: 54.5

Joint Type: STC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.6 **Burst Design Safety Factor:** 3.88

Joint Tensile Design Safety Factor type: DRY **Joint Tensile Design Safety Factor:** 5.8

Body Tensile Design Safety Factor type: DRY **Body Tensile Design Safety Factor:** 9.7

Casing Design Assumptions and Worksheet(s):

Grama 8817 16-9 Fed Com 5H Casing Assumption_11-14-2016.pdf

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

String Type: INTERMEDIATE **Other String Type:**

Hole Size: 12.25

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -6971

Bottom setting depth MD: 5300 **Bottom setting depth TVD:** 5300

Bottom setting depth MSL: -12271

Calculated casing length MD: 5300

Casing Size: 9.625 **Other Size**

Grade: J-55 **Other Grade:**

Weight: 40

Joint Type: LTC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.6 **Burst Design Safety Factor:** 1.4

Joint Tensile Design Safety Factor type: DRY **Joint Tensile Design Safety Factor:** 2.1

Body Tensile Design Safety Factor type: DRY **Body Tensile Design Safety Factor:** 2.9

Casing Design Assumptions and Worksheet(s):

Grama 8817 16-9 Fed Com 5H Casing Assumption_11-14-2016.pdf

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

String Type: PRODUCTION **Other String Type:**

Hole Size: 8.75

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -6971

Bottom setting depth MD: 20366 **Bottom setting depth TVD:** 10450

Bottom setting depth MSL: -17421

Calculated casing length MD: 20366

Casing Size: 5.5 **Other Size**

Grade: P-110 **Other Grade:**

Weight: 17

Joint Type: LTC **Other Joint Type:** BTC

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.6 **Burst Design Safety Factor:** 2.1

Joint Tensile Design Safety Factor type: DRY **Joint Tensile Design Safety Factor:** 2.5

Body Tensile Design Safety Factor type: DRY **Body Tensile Design Safety Factor:** 3.1

Casing Design Assumptions and Worksheet(s):

Grama 8817 16-9 Fed Com 5H Casing Assumption_11-14-2016.pdf

Section 4 - Cement

Casing String Type: SURFACE

Stage Tool Depth:

Lead

Top MD of Segment: 0	**Bottom MD Segment:** 1265	**Cement Type:** Class C
Additives: 4% Gel	**Quantity (sks):** 1035	**Yield (cu.ff./sk):** 1.75
Density: 13.5	**Volume (cu.ft.):** 1811	**Percent Excess:** 81

Tail

Top MD of Segment: 1265	**Bottom MD Segment:** 1625	**Cement Type:** Class C
Additives: 2% CaCl2	**Quantity (sks):** 200	**Yield (cu.ff./sk):** 1.34
Density: 14.8	**Volume (cu.ft.):** 268	**Percent Excess:** 81

Casing String Type: INTERMEDIATE

Stage Tool Depth:

Lead

Top MD of Segment: 0	**Bottom MD Segment:** 4240	**Cement Type:** Class C
Additives: 6% Gel	**Quantity (sks):** 1085	**Yield (cu.ff./sk):** 2.18
Density: 12.7	**Volume (cu.ft.):** 2365	**Percent Excess:** 61

Tail

Top MD of Segment: 4240	**Bottom MD Segment:** 5300	**Cement Type:** Class C
Additives: 0.004 GPS cf-41L	**Quantity (sks):** 250	**Yield (cu.ff./sk):** 1.33
Density: 14.8	**Volume (cu.ft.):** 332	**Percent Excess:** 61

Casing String Type: PRODUCTION

Stage Tool Depth:

Lead

Top MD of Segment: 3800	**Bottom MD Segment:** 8896	**Cement Type:** 50:50 H
Additives: 0.004 gps CF-41L	**Quantity (sks):** 415	**Yield (cu.ff./sk):** 4.43
Density: 10.5	**Volume (cu.ft.):** 1838	**Percent Excess:** 42

Tail

Top MD of Segment: 8896	**Bottom MD Segment:** 20366	**Cement Type:** 50:50 H
Additives: 0.004 gps cf-41L	**Quantity (sks):** 2725	**Yield (cu.ff./sk):** 1.22
Density: 14.4	**Volume (cu.ft.):** 3324	**Percent Excess:** 15

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Top Depth: 0

Bottom Depth: 1625

Mud Type: SPUD MUD

Min Weight (lbs./gal.): 8.3

Max Weight (lbs./gal.): 8.4

Density (lbs/cu.ft.):

Gel Strength (lbs/100 sq.ft.):

PH:

Viscosity (CP):

Filtration (cc):

Salinity (ppm):

Additional Characteristics:

Top Depth: 1625

Bottom Depth: 5300

Mud Type: SALT SATURATED

Min Weight (lbs./gal.): 9.8

Max Weight (lbs./gal.): 10

Density (lbs/cu.ft.):

Gel Strength (lbs/100 sq.ft.):

PH:

Viscosity (CP):

Filtration (cc):

Salinity (ppm):

Additional Characteristics:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Top Depth: 5300 **Bottom Depth:** 10450

Mud Type: WATER-BASED MUD

Min Weight (lbs./gal.): 8.6 **Max Weight (lbs./gal.):** 8.9

Density (lbs/cu.ft.): **Gel Strength (lbs/100 sq.ft.):**

PH: **Viscosity (CP):**

Filtration (cc): **Salinity (ppm):**

Additional Characteristics:

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Drill Stem Tests will be based on geological sample shows

List of open and cased hole logs run in the well:

CBL,GR,MUDLOG

Coring operation description for the well:

None Planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4987 **Anticipated Surface Pressure:** 2688

Anticipated Bottom Hole Temperature(F): 165

Anticipated abnormal proessures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? NO

Hydrogen sulfide drilling operations plan:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: GRAMA 8817 16-9 FEDERAL COM **Well Number:** 5H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Grama 8817 16-9 Fed Com 5H directional plan_11-14-2016.pdf

Grama 8817 16-9 Fed Com 5H wall plot_11-14-2016.pdf

Other proposed operations facets description:

A variance is requested for a Multi Bowl Wellhead. See the attached schematic and running procedure.

Other proposed operations facets attachment:

H2S Equipment Schematic - Grama 8817 16-9 Fed Com_11-14-2016.pdf

H2S Plan - Grama 8817 16-9 Fed Com_11-14-2016.pdf

Other Variance attachment:

Multi Bowl Wellhead Schematic_11-14-2016.pdf

Wellhead System and Testing_11-14-2016.pdf

Rig 94 Asset 24455

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

CERT. N°: 1592

PURCHASER:	ContiTech Oil & Marine Corp.	P.O. N°:	4500461753
CONTITECH ORDER N°:	539225	HOSE TYPE: 3" ID	Choke & Kill Hose
HOSE SERIAL N°:	68547	NOMINAL / ACTUAL LENGTH:	7,62 m / 7,66 m
W.P. 68,9 MPa 10000 psi	T.P. 103,4 MPa 15000 psi	Duration:	60 min.

Pressure test with water at ambient temperature

See attachment. (1 page)

→ 10 Min.

↑ 50 MPa

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with	2574 5533	AISI 4130	A1582N H8572
4 1/16" 10K API Swivel Flange end		AISI 4130	58855
Hub		AISI 4130	A1199N A1423N

Not Designed For Well Testing — **API Spec 16 C**

Fire Rated — **Temperature rate:"B"**

All metal parts are flawless

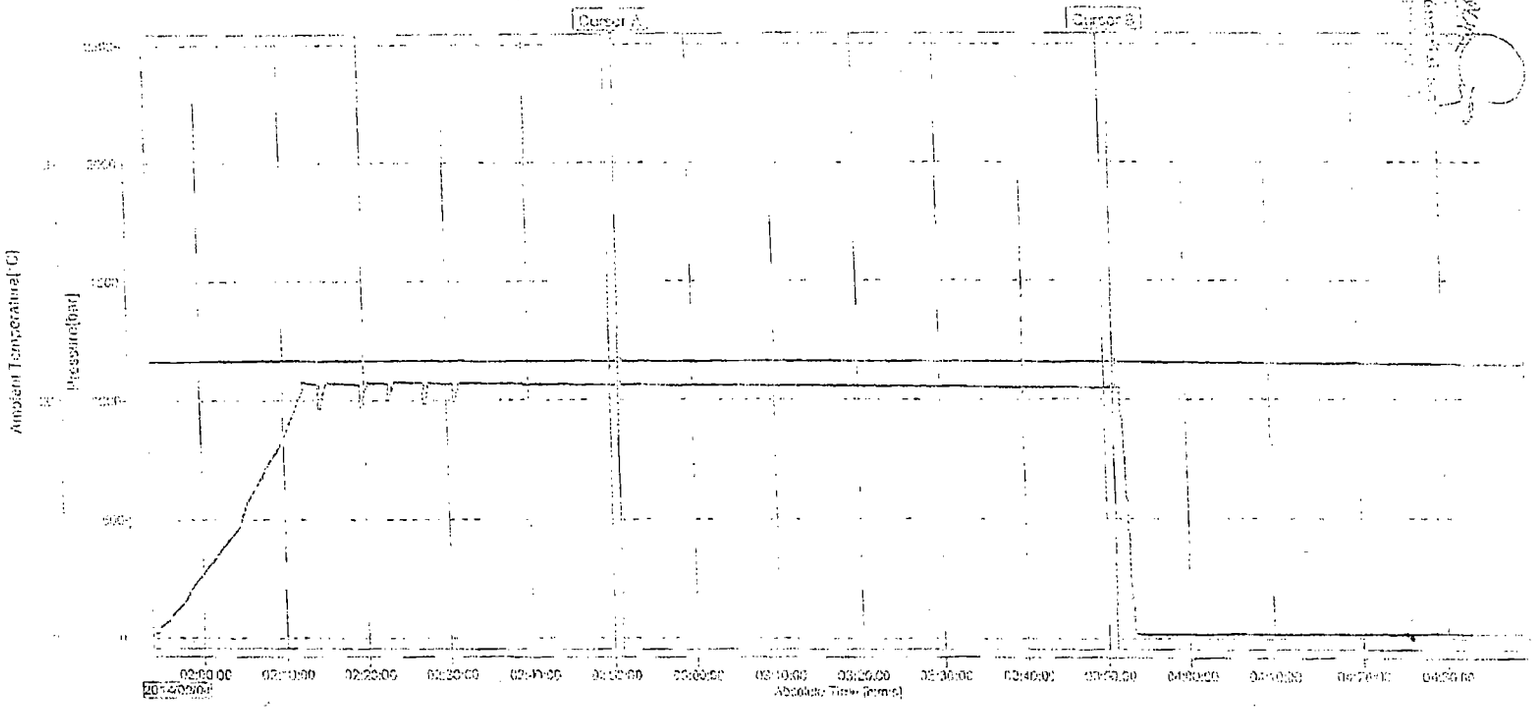
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

Date:	Inspector	Quality Control
04 September 2014.		

File Name	: 000220_68543,68545+547.GEV.....000236_68543,68545+547.GEV		
File Message	: 68543,68545,68547		
Device Type	: GX10	Sampling Int.	: 1.000 sec
Serial No.	: S6P606399	Start Time	: 2014/09/04 01:53:54.000
Data Count	: 9048	Stop Time	: 2014/09/04 04:39:39.000
Plot Group	: Press-Temp		
Plot Range	: 2014/09/04 01:53:54.000 - 2014/09/04 04:39:39.000		
Comment	:		

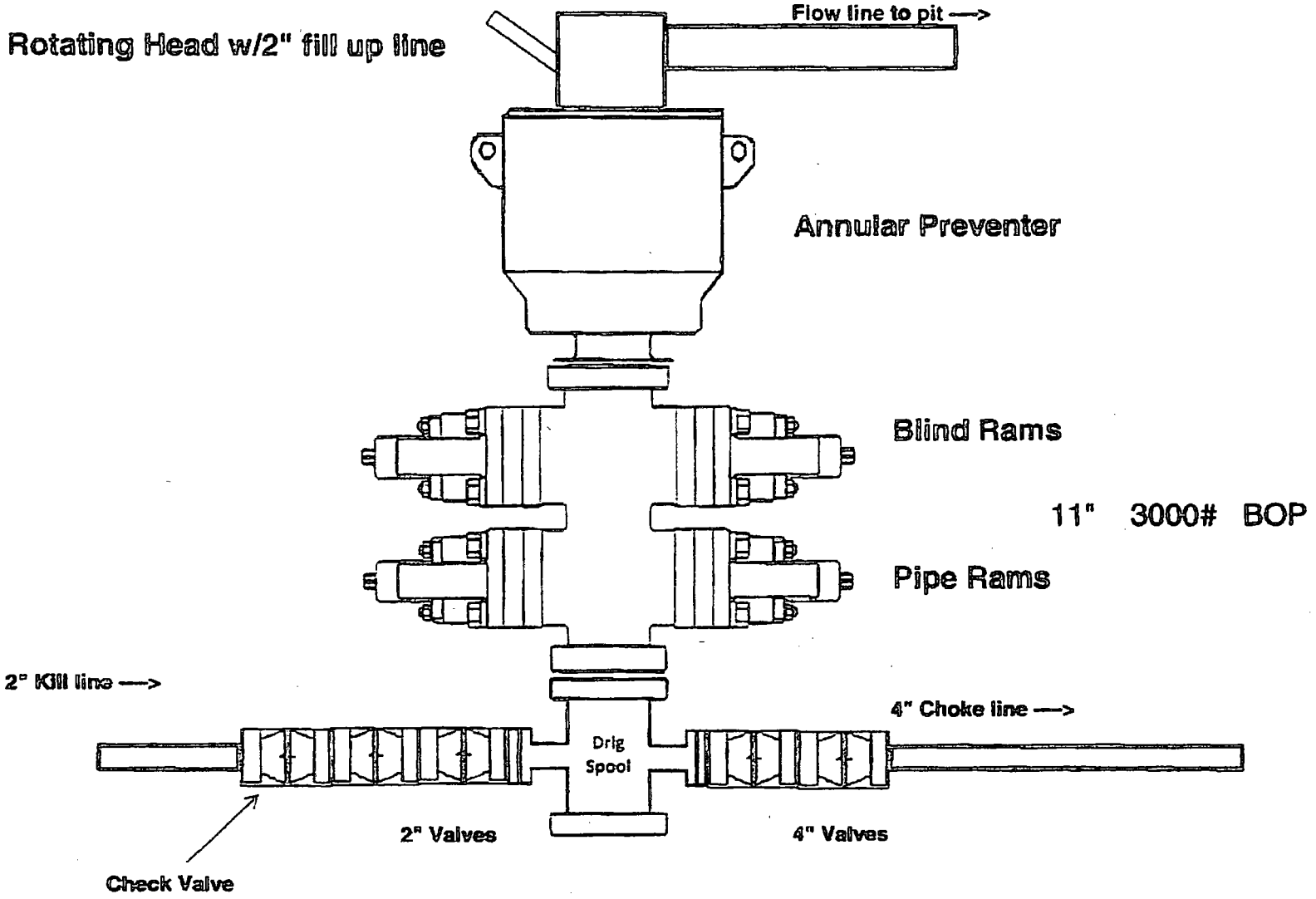
	Cursor A	Cursor B	Difference
Data No.	2438	7632	5194
Absolute Time	2014/09/04 03:04:00.000	2014/09/04 03:51:06.000	01:06:06.000
Sig.Comment	Value A	Value B	Value B-A
Pressure[bar]	1060.02	1048.62	-11.39
Ambient Temperature[°C]	22.24	22.14	-0.10



ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No. 1585, 1590, 1592

Page 1 / 1

3,000 psi BOP Schematic



BTA Oil Producers, LLC

Well: Grama 8817 16-9 Federal Com #5H

Casing Assumption

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
17.50	13.375	0	1625	0	1625	No	54.5	J-55	STC	1.6	3.86	9.5	5.7	Dry	8.4
12.25	9.625	0	5300	0	5300	No	40.0	J-55	LTC	1.6	1.4	2.9	2.1	Dry	10.0
8.75	5.50	0	20366	0	10450	No	17.0	P-110	LTC	1.5	2.1	3.1	2.5	Dry	9.2

BTA Oil Producers, LLC

Well: Grama 8817 16-9 Federal Com #5H

Casing Assumption

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
17.50	13.375	0	1625	0	1625	No	54.5	J-55	STC	1.6	3.86	9.5	5.7	Dry	8.4
12.25	9.625	0	5300	0	5300	No	40.0	J-55	LTC	1.6	1.4	2.9	2.1	Dry	10.0
8.75	5.50	0	20366	0	10450	No	17.0	P-110	LTC	1.5	2.1	3.1	2.5	Dry	9.2