Form 3160-3 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR

5. Lease Serial No. NMNM019143

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

BUKEAU OF LAND MANA	JEMENI		I I I I I I I I I I I I I I I I I I I	
APPLICATION FOR PERMIT TO DE	ILL OR REENT	ER	6. If Indian, Allotee	or Tribe Name
1b. Type of Well: Oil Well Gas Well Oth	ENTER er ele Zone	e Zone	8. Lease Name and MAXUS 8026 FEE	
2. Name of Operator BTA OIL PRODUCERS LLC 260297 3a. Address	b. Phone No. (include	area code)	9. API-Well No. 30-025- 10, Field and Pool,	46815 or Exploratory 972
	432)682-3753		ANTELOPE RIDG	E / BONE SPRING, NO
4. Location of Well (Report location clearly and in accordance wi	-		11. Sec., T. R. M. o	F Blk. and Survey or Area
At surface NENE / 300 FNL / 1230 FEL / LAT 32.35459			SEC 341 1223 / R	COAL / IMINIF
At proposed prod. zone SWNE / 2590 FNL / 2100 FEL / L		G -103.45622		
14. Distance in miles and direction from nearest town or post office 18 miles	, *		12. County or Paris LEA	NM
location to nearest 300 feet	16. No of acres in lease 480.09	17. Spac	ing Unit dedicated to	this well
to nearest well drilling completed	19. Proposed Depth 0375 feet / 18061 fe	\sim 1/	1/BIA Bond No. in file MB001711	
	22 Approximate date v 0/15/2019	work will start*	23. Estimated durat 30 days	ion
Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	Lands, the Lands, the 5. Operation 6. Such o	0 above). tor certification.	·	n existing bond on file (see s may be requested by the
25. Signature (Electronic Submission)	Name (Printed/T	<i>yped)</i> Ph: (432)682-375	3	Date 05/15/2019
Title				<u> </u>
Regulatory Analyst Approved by (Signature)	Name (Printed/I	ivned)	<u> </u>	Date
(Electronic Submission)		h: (575)234-5959)	01/24/2020
Title / / Assistant Field Manager Lands & Minerals	Office CARLSBAD			
Application approval does not warrant or certify that the applicant applicant to conduct operations thereon. Conditions of approval, if any, are attached.	nolds legal or equitable	e title to those right	s in the subject lease w	which would entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, ma of the United States any false, fictitious or fraudulent statements or			d willfully to make to s jurisdiction.	any department or agency
GCARSE 01/29/2020	ED WITH CO	NDITIONS	s jurisdiction.	rord
(Continued on page 2)	ED ALLU CO		*(In	estructions on page 23
/**		/2020	` •	~ h1b 4

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state of tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CRR \$160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Form 3160-3, page 2)

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.



- completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

- 2. The 9-5/8 inch intermediate casing shall be set at approximately 5596 feet. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 - ❖ In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following: (Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **50 feet** on top of Capitan Reef top. If cement does not circulate see B.1.a, c-d above.

Page 2 of 8

Approval Date: 01/24/2020

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - Eddy County
 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - ✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)393-3612
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - 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. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - 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.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

Page 6 of 8

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

OTA01092020

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.

Page 2 of 12

Approval Date: 01/24/2020

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that would not promote further erosion.

Temporary Fresh Water Frac Line: once the temporary use exceeds the timeline of 180 days and/or with a 90 day extension status; further analysis will be required if the applicant pursues to turn the temporary ROW into a permanent ROW.

Fence

The proponent shall not damage the allotment boundary fence during construction of this proposed action. If fence is damaged the proponent shall notify blm and halt construction till fence is repaired back to its original condition.

Page 4 of 12

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

Page 6 of 12

Construction Steps

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

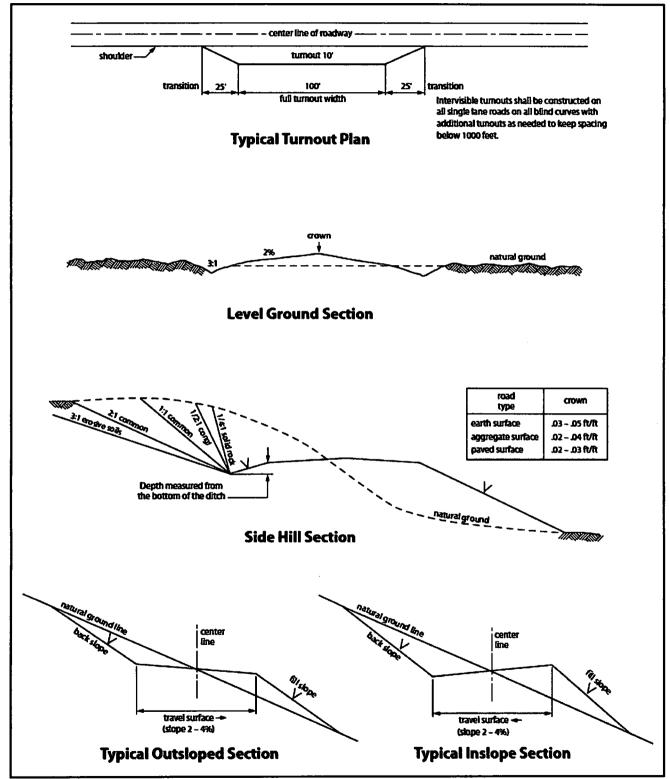


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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).

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.

Page 10 of 12

Approval Date: 01/24/2020

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 <u>no</u> 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	<u>lb/acre</u>
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

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



APD ID: 10400041856

Submission Date: 05/15/2019

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MAXUS 8026 FED

Well Type: OIL WELL

Well Number: 3H

Well Work Type: Drill



Show Final Text

Section 1 - General

APD ID:

10400041856

Tie to previous NOS?

Submission Date: 05/15/2019

BLM Office: CARLSBAD

User: Sammy Hajar

Title: Regulatory Analyst

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM019143

Lease Acres: 1480.09

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:

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:

Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: MAXUS 8026 FED

Well Number: 3H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: ANTELOPE RIDGE Pool Name: BONE SPRING, NORTH

Is the proposed well in an area containing other mineral resources? NONE

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

Well Name: MAXUS 8026 FED

Submission Date: 05/15/2019

Operator Name: BTA OIL PRODUCERS LLC

Well Number: 3H

Show Final Text

01/27/2020

Well Type: OIL WELL

APD ID: 10400041856

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
456394							
456408							
456397							
456399							÷
534846						0 T	· · · · · · · · · · · · · · · · · · ·
456398							
456411							
456412							
456404							
456409							
456405							
456413							
456407							

Section 2 - Blowout Prevention

Casing Attachments
Casing ID: 1 String Type: SURFACE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
Maxus_3H_casing_assumption_20190514163946.JPG
Casing ID: 2 String Type: INTERMEDIATE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
Maxus_3H_casing_assumption_20190514163941.JPG
Casing ID: 3 String Type: PRODUCTION
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
Maxus_3H_casing_assumption_20190514163935.JPG

Well Number: 3H

Operator Name: BTA OIL PRODUCERS LLC

Section 4 - Cement

Well Name: MAXUS 8026 FED

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MAXUS 8026 FED

Well Number: 3H

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: 5071

Anticipated Surface Pressure: 2788.5

Anticipated Bottom Hole Temperature(F): 163

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

H2S_Plan_20181129153648.pdf

H2S Equipment_Schematic_20181129153733.pdf

BTA_Oil_Producers_LLC___EMERGENCY_CALL_LIST_20190205154800.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Maxus 03H_directional_plan_20190514164527.pdf

Maxus 03H Wall plot 20190514164528.pdf

Maxus_3H_Gas_Capture_Plan_20190514164542.pdf

Other proposed operations facets description:

A variance is requested for a Multi Bowl Wellhead. See the attached schematic and running procedure. *All strings will be kept 1/3 full while running.

Other proposed operations facets attachment:

Other Variance attachment:

Casing_Head_Running_Procedure_20181129153916.pdf WH_SCHEMATIC_13.375_9.625_5.5_20190514121902.pdf

Continental 4

Condifect

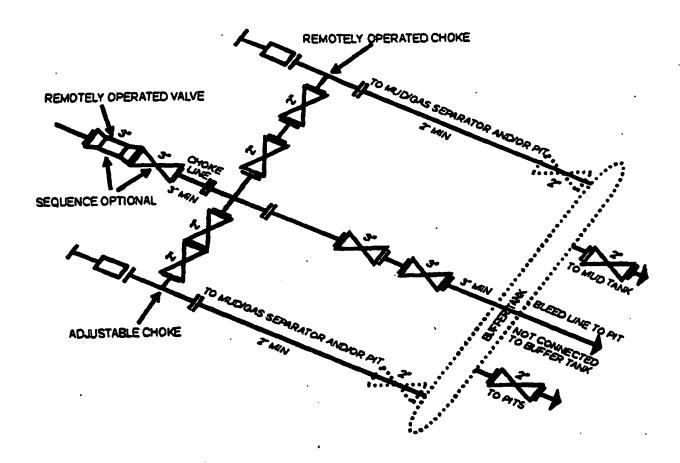
CONTITECH RUBBER Industrial Kft.

No:QC-DB- 599/ 2014

Page:

16 / 176

Ria 94				2	1226	TE	244	55
QUAI INSPECTION	ITY CONT		CATE		CERT.	V°:	1592)
PURCHASER:	****************	Oil & Marine C	COL CONTRACTOR	PROPERTY LINES AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROP	P.O. N°	G and any or	4500461	1753
CONTITECH ORDER N°:	539225	HOSE TYPE:	3"	ID	L	Choke	& Kill Hose	
HOSE SERIAL N°		NOMINAL / AC	TUAL L	ENGTH:		7,62 m	/ 7,66 m	
W.P. 68,9 MPa	10000 psi	T.P. 103,4	MPa	1500)() psi	Duration:	60	min
-→ 10 m	in.	'See attacl	nment.	(1 pa	ge)			
↑ 50 M	Pa ************************************	r-up : 		menje	antiani N	, , , , , , , , , , , , , , , , , , , 		Marie Company
COUPLINGS T	уре	Seria	l Ne	<u> </u>	Qua	ality	Hea	l Nº
3" coupling w	ith	2574	553	3	AISI	4130	A1582N	H8572
4 1/16" 10K API Swive	Flange end				AISI	1	588	
Hub Not Designed Cov	Mall Tacking				AISI		A1199N	
Not Designed For Fire Rated	AAen restint	9					API Spec	
All metal parts are flawless						1011	iperature	iato. D
WE CERTIFY THAT THE ABO	VE HOSE HAS BEI		RED IN A	CCORDA	NCE WITH	H THE TERM	S OF THE OR	DER
INSPECTED AND PRESSURE STATEMENT OF CONFORM conditions and specification accordance with the reference	SITY: We hereby of the above Purc	certify that the abor	ve denis/c	quipment	t supplied i	re labricated	I inspected and	l tested in
Date: 04. September 2014.	Inspector	Handertopte residency (Arte	Quality	y Control	ំ ៤៦គង់ វិពព៌	aci, kubia istrial Kii, Control De	ĺ	174



5M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

Although not required for any of the choke manifold systems, buffer tanks are sometimes installed downstream of the choke assemblies (or the purpose of manifolding the bleed lines together. When buffer tanks are employed, valves shall be installed upstream to isolate a failure or mailtunction without interrupting flow control. Though not shown on 2M, 3M, 10M, OR 15M drawings, it would also be applicable to those situations.

[54 FR 39528, Sept. 27, 1989]

BTA Oil Producers, LLC 104 S Pecos Midland, TX 79701

WELL: Maxus #03H

TVD: 10375 MD: 18061

DRILLING PLAN

Casing Program

Hole Size	Cag.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Buret	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
17 1/2	13 3/8	0	1200	o	1200	No	54.5	J-55	STC	2.2	5.3	13.0	7.9	Dry	8.3
12 1/4	9 5/8	0	5598	0	5598	No	40	J-65	LTC	1.7	1.4	2.8	2.3	עזכD	10
8 3/4	5.5	0	18081	0	10375	No	17	P110	Buttress	1.4	1.4	1.8	1.8	Dry	9.4



BTA Oil Producers, LLC 104 S Pecos Midland, TX 79701

WELL: Maxus #03H

TVD:

10375

18061

DRILLING PLAN

Casing Program

Hole Size	Cag.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 1/2	19 3/8	0	1200	0	1200	No	54.5	J - 55	STC	2.2	5.3	19.0	7.9	Dry	8.3
12 1/4	9 5/8	0	5598	0	5598	No	40	J - 55	LTC	1.7	1.4	2.8	2.3	Dry	10
8 3/4	5.5	0	18081	o	10375	No	17	P110	Buttress	1.4	1.4	1.8	1.8	Dry	9.4

- 2 portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:

 Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
 The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:
 All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:
 Company vehicles equipped with cellular telephone.

WARNING

YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED
- 2. HARD HATS REQUIRED
- 3. SMOKING IN DESIGNATED AREAS ONLY
- 4. BE WIND CONSCIOUS AT ALL TIMES
- 5. CK WITH BTA OIL PRODUCERS LLC FOREMAN AT MAIN OFFICE

BTA OIL PRODUCERS LLC

1-432-682-3753

EMERGENCY CALL LIST

1	OFFICE	MOBILE
BTA Oil Producers LLC OFFICE	432-682-3753	
BEN GRIMES, Operations	432-682-3753	432-559-4309
NICK EATON, Drilling	432-682-3753	432-260-7841
TRACE WOHLFAHRT, Completions	432-682-3753	

EMERGENCY RESPONSE NUMBERS

	OFFICE
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451

Microsoft

Planning Report - Geographic

Database:

Old

Company:

BTA Oil Producers, LLC

Project:

Lea County, NM (NAD 83)

Site:

Maxus

Well: Wellbore: Maxus #03H

Wellbore #1

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: **Survey Calculation Method:** Well Maxus #03H

GL @ 3411.0usft GL @ 3411.0usft

Grid

Minimum Curvature

Design: Project

Lea County, NM (NAD 83), Lea County, NM

Map System: Geo Datum:

US State Plane 1983

North American Datum 1983

New Mexico Eastern Zone

System Datum:

Ground Level

Using geodetic scale factor

Site

Map Zone:

Maxus

Site Position:

Northing:

486,041.54 usft

Latitude:

Longitude:

32° 19' 59.511 N

Position Uncertainty:

Map

Easting: Slot Radius: 810,169.59 usft 13-3/16 "

Grid Convergence:

103° 27' 46.626 W 0.47°

Well

From:

Maxus #03H

Well Position

+N/-S +E/-W 0.0 usft 0.0 usft

0.0 usft

Northing: Easting:

493,850.00 usft

Latitude: Longitude: 32° 21' 16.540 N

Position Uncertainty

0.0 usft

Wellhead Elevation:

813,066.00 usft

7.70

Ground Level:

103° 27' 12.123 W

3,411.0 usft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

Declination

Dip Angle

Field Strength

IGRF200510

12/31/2009

(°)

(°)

(nT)

48,885.17078587

Design

Design #1

Audit Notes:

Version:

Phase:

PROTOTYPE

Tie On Depth:

60.38

Vertical Section:

Depth From (TVD) (usft)

0.0

+N/-S (usft)

0.0

+E/-W (usft)

0.0

0.0 Direction

(°)

186.17

Plan Survey Tool Program

Depth From

(usft)

4/22/2019 Date

Depth To

(usft)

Survey (Wellbore)

Tool Name

Remarks

0.0

18,061.7 Design #1 (Wellbore #1)

an Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,315.5	0.00	0.00	3,315.5	0.0	0.0	0.00	0.00	0.00	0.00	
3,815.5	10.00	287.84	3,812.9	13.3	-41.4	2.00	2.00	0.00	287.84	
8,577.4	10.00	287.84	8,502.5	266.7	-828.6	0.00	0.00	0.00	0.00	
9,077.4	0.00	0.00	9,000.0	280.0	-870.0	2.00	-2.00	0.00	180.00	
9,879.5	0.00	0.00	9,802.0	280.0	-870.0	0.00	0.00	0.00	0.00	
10,779.5	90.00	179.63	10,375.0	-292.9	-866.3	10.00	10.00	0.00	179.63	
18,061.7	90.00	179.63	10,375.0	-7,575.0	-819.0	0.00	0.00	0.00	0.00	Maxus #3H BHL

Microsoft

Planning Report - Geographic

Database:

Old

Company:

BTA Oil Producers, LLC

Project: Site:

Lea County, NM (NAD 83)

Well:

Wellbore: Design:

Maxus #03H Wellbore #1 Design #1

Maxus

North Reference: Survey Calculation Method:

TVD Reference:

MD Reference:

Local Co-ordinate Reference:

Well Maxus #03H

GL @ 3411.0usft

GL @ 3411.0usft Grid

Minimum Curvature

D	lanr	had	S	vev
М	ıanr	180	Sui	vev

anned Survey	•								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,300.0	10.00	287.84	5,274.9	92.3	-286.8	493,942.31	812,779.18	32° 21′ 17.476 N	103° 27' 15.457 W
5,400.0	10.00	287.84	5,373.4	97.6	-303.3	493,947.63	812,762.65	32° 21' 17.530 N	103° 27' 15.650 W
5,500.0	10.00	287.84	5,471.9	102.9	-319.9	493,952.95	812,746.12	32° 21' 17.584 N	103° 27' 15.842 W
5,600.0	10.00	287.84	5,570.4	108.3	-336.4	493,958.27	812,729.59	32° 21′ 17.638 N	103° 27' 16.034 W
5,700.0	10.00	287.84	5,668.8	113.6	-352.9	493,963.59	812,713.06	32° 21' 17.692 N	103° 27' 16.226 W
5,800.0	10.00	287.84	5,767.3	118.9	-369.5	493,968.91	812,696.53	32° 21' 17.746 N	103° 27' 16.418 W
5,900.0	10.00	287.84	5,865.8	124.2	-386.0	493,974.23	812,680.00	32° 21' 17.800 N	103° 27' 16.610 W
6,000.0	10.00	287.84	5,964.3	129.5	-402.5	493,979.55	812,663.47	32° 21' 17.854 N	103° 27' 16.803 W
6,100.0	10.00	287.84	6,062.8	134.9	-419.1	493,984.87	812,646.94	32° 21' 17.908 N	103° 27' 16.995 W
6,200.0	10.00	287.84	6,161.2	140.2	-435.6	493,990.19	812,630.41	32° 21' 17,962 N	103° 27' 17.187 W
6,300.0	10.00	287.84	6,259.7	145.5	-452.1	493,995.51	812,613.88	32° 21' 18.016 N	103° 27' 17.379 W
6,400.0	10.00	287.84	6,358.2	150.8	-468.6	494,000.83	812,597.35	32° 21' 18.070 N	103° 27' 17.571 W
6,500.0		287.84	6,456.7	156.1	-485.2	494,006.15	812,580.82	32° 21' 18.124 N	103° 27' 17,764 W
6,600.0	10.00	287.84	6,555.2	161.5	-501.7	494,011.47	812,564.29	32° 21' 18.178 N	103° 27' 17.956 W
6,700.0	10.00	287.84	6,653.6	166.8	-518.2	494,016.79	812,547.76	32° 21' 18.232 N	103° 27' 18.148 W
6,800.0	10.00	287.84	6,752.1	172.1	-534.8	494,022.11	812,531.23	32° 21' 18.286 N	103° 27' 18.340 W
6,900.0	10.00	287.84	6,850.6	177.4	-551.3	494,027.43	812,514.71	32° 21' 18.340 N	103° 27' 18.532 W
7,000.0	10.00	287.84	6,949.1	182.7	-567.8	494,032.75	812,498.18	32° 21' 18.394 N	103° 27' 18.724 W
7,100.0	10.00	287.84	7,047.6	188.1	-584.4	494,038.07	812,481.65	32° 21' 18.448 N	103° 27' 18.917 W
7,200.0	10.00	287.84	7,146.0	193.4	-600.9	494,043.39	812,465.12	32° 21' 18.502 N	103° 27' 19.109 W
7,300.0	10.00	287.84	7,244.5	198.7	-617.4	494,048.71	812,448.59	32° 21' 18.556 N	103° 27' 19.301 W
7,400.0	10.00	287.84	7,343.0	204.0	-633.9	494,054.03	812,432.06	32° 21' 18.610 N	103° 27' 19.493 W
7,500.0	10.00	287.84	7,441.5	209.3	-650.5	494,059.35	812,415.53	32° 21' 18.664 N	103° 27' 19.685 W
7,600.0	10.00	287.84	7,540.0	214.7	- 667.0	494,064.67	812,399.00	32° 21' 18.718 N	103° 27' 19.878 W
7,700.0	10.00	287.84	7,638.5	220.0	-683.5	494,069.99	812,382.47	32° 21' 18.772 N	103° 27' 20.070 W
7,800.0	10.00	287.84	7,736.9	225.3	-700.1	494,075.31	812,365.94	32° 21' 18.826 N	103° 27' 20.262 W
7,900.0	10.00	287.84	7,835.4	230.6	-716.6	494,080.63	812,349.41	32° 21' 18.880 N	103° 27' 20.454 W
8,000.0	10.00	287.84	7,933.9	235.9	-733.1	494,085.95	812,332.88	32° 21' 18.934 N	103° 27' 20.646 W
8,100.0	10.00	287.84	8,032.4	241.3	-749.7	494,091.27	812,316.35	32° 21' 18.988 N	103° 27' 20,838 W
8,200.0	10.00	287.84	8,130.9	246.6	-766.2	494,096.59	812,299.82	32° 21' 19.042 N	103° 27' 21.031 W
8,300.0	10.00	287.84	8,229.3	251.9	-782.7	494,101.91	812,283.29	32° 21' 19.096 N	103° 27' 21.223 W
8,400.0	10.00	287.84	8,327.8	257.2	-799.2	494,107.23	812,266.76	32° 21' 19.150 N	103° 27' 21.415 W
8,500.0	10.00	287.84	8,426.3	262.5	-815.8	494,112.55	812,250,23	32° 21' 19,204 N	103° 27' 21.607 W
8,577.4	10.00	287.84	8,502.5	266.7	-828.6	494,116.67	812,237.43	32° 21' 19.246 N	103° 27' 21.756 W
8,600.0	9.55	287.84	8,524.8	267.8	-832.2	494,117.84	812,233.78	32° 21' 19.258 N	103° 27' 21.798 W
8,700.0	7.55	287.84	8,623.7	272.4	-846.4	494,122.39	812,219.63	32° 21' 19.304 N	103° 27' 21.963 W
8,800.0	5.55	287.84	8,723.0	275.9	-857.2	494,125.89	812,208.78	32° 21' 19.339 N	103° 27' 22.089 W
8,900.0	3.55	287.84	8,822.7	278.3	-864.8	494,128.32	812,201.23	32° 21' 19.364 N	103° 27' 22.177 W
9,000.0	1.55	287.84	8,922.6	279.7	-869.0	494,129.68	812,197.00	32° 21' 19.378 N	103° 27' 22.226 W
9,077.4	0.00	0.00	9,000.0	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,100.0	0.00	0.00	9,022.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19,381 N	103° 27' 22.238 W
9,200.0	0.00	0.00	9,122.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,300.0	0.00	0.00	9,222.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,400.0	0.00	0.00	9,322.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,500.0	0.00	0.00	9,422.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,600.0	0.00	0.00	9,522.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,700.0	0.00	0.00	9,622.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,800.0	0.00	0.00	9,722.6	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,879.5	0.00	0.00	9,802.0	280.0	-870.0	494,130.00	812,196.00	32° 21' 19.381 N	103° 27' 22.238 W
9,900.0	2.05	179.63	9,822.6	279.6	-870.0	494,129.63	812,196.01	32° 21' 19.377 N	103° 27' 22.238 W
	12.05	179.63	9,921.7	267.4	-869.9	494,117.37	812,196.09	32° 21' 19.256 N	103° 27' 22.238 V
10,000.0					-869.7	494,088.08	812,196.28	32° 21' 18.966 N	103° 27' 22.238 W
10,100.0	22.05	179.63	10,017.2	238.1 192.7	-869.4	· ·	812,196.57	32° 21' 18.517 N	103° 27' 22.239 W
10,200.0	32.05	179.63	10,106.1	192.7 132.5		494,042.65 493,982,47	•	32° 21' 17.921 N	103° 27' 22.241 W
10,300.0	42.05	179.63	10,185.8	132.5	-869.0	493,982.47	812,196.96 812,197.44		
10,400.0	52.05	179.63	10,253.9	59.4	-868.6	493,909.37	812,197.44	32° 21' 17.198 N	103° 27' 22.242 V

Microsoft

Planning Report - Geographic

Database:

Old

Company:

BTA Oil Producers, LLC

Project:

Lea County, NM (NAD 83)

Site: Well: Maxus

Wellbore:

Maxus #03H Wellbore #1

Wellbore Design:

Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

. North Reference:

Survey Calculation Method:

Well Maxus #03H

GL @ 3411.0usft GL @ 3411.0usft

Grid

Minimum Curvature

nned Survey	,								
Measured Depth (usft)	inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,900.0	90.00	179.63	10,375.0	-5,413.4	-833.0	488,436.65	812,232.96	32° 20' 23.044 N	103° 27' 22.350
16,000.0	90.00	179.63	10,375.0	-5,513.4	-832.4	488,336.66	812,233.61	32° 20' 22.054 N	103° 27' 22.352
16,100.0	90.00	179.63	10,375.0	-5,613.4	-831.7	488,236.66	812,234.26	32° 20' 21.065 N	103° 27' 22.354
16,200.0	90.00	179.63	10,375.0	-5,713.4	-831.1	488,136.66	812,234.91	32° 20' 20.075 N	103° 27' 22.356
16,300.0	90.00	179.63	10,375.0	-5,813.4	-830.4	488,036.66	812,235.56	32° 20' 19.086 N	103° 27' 22.358
16,400.0	90.00	179.63	10,375.0	-5,913.4	-829.8	487,936.67	812,236,21	32° 20' 18.096 N	103° 27' 22.360
16,500.0	90.00	179.63	10,375.0	-6,013.4	-829.1	487,836.67	812,236.86	32° 20' 17.107 N	103° 27' 22.362
16,600.0	90.00	179.63	10,375.0	-6,113.4	-828.5	487,736.67	812,237.51	32° 20' 16.117 N	103° 27' 22.364
16,700.0	90.00	179.63	10,375.0	-6,213.4	-827.8	487,636.68	812,238.16	32° 20' 15.128 N	103° 27' 22,366
16,800.0	90.00	179.63	10,375.0	-6,313.4	-827.2	487,536.68	812,238.81	32° 20' 14.138 N	103° 27' 22,368
16,900.0	90.00	179.63	10,375.0	-6,413.4	-826.5	487,436.68	812,239.46	32° 20' 13.149 N	103° 27' 22.370
17,000.0	90.00	179.63	10,375.0	-6,513.4	-825.9	487,336.68	812,240.11	32° 20' 12.159 N	103° 27' 22.372
17,100.0	90.00	179.63	10,375.0	-6,613.4	-825.2	487,236.69	812,240.75	32° 20' 11.170 N	103° 27' 22.374
17,200.0	90.00	179.63	10,375.0	-6,713.4	-824.6	487,136.69	812,241.40	32° 20′ 10.180 N	103° 27' 22,376
17,300.0	90.00	179.63	10,375.0	-6,813.4	-824.0	487,036.69	812,242.05	32° 20' 9.191 N	103° 27' 22.378
17,400.0	90.00	179.63	10,375.0	-6,913.4	-823.3	486,936.69	812,242.70	32° 20' 8.201 N	103° 27' 22.380
17,500.0	90.00	179.63	10,375.0	-7,013.3	-822.7	486,836.70	812,243.35	32° 20' 7.212 N	103° 27' 22,382
17,600.0	90.00	179.63	10,375.0	-7,113.3	-822.0	486,736.70	812,244.00	32° 20' 6.222 N	103° 27' 22.384
17,700.0	90.00	179.63	10,375.0	-7,213.3	-821.4	486,636.70	812,244.65	32° 20' 5.233 N	103° 27' 22.386
17,800.0	90.00	179.63	10,375.0	-7,313.3	-820.7	486,536.71	812,245.30	32° 20' 4.243 N	103° 27' 22.388
17,900.0	90.00	179.63	10,375.0	-7,413.3	-820.1	486,436.71	812,245.95	32° 20' 3,254 N	103° 27' 22.390
18,000.0	90.00	179.63	10,375.0	-7,513.3	-819.4	486,336.71	812,246.60	32° 20' 2,264 N	103° 27' 22.392

Design Targets			-			·			
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Maxus #3H BHL - plan hits target cer - Point	0.00 nter	0.00	10,375.0	-7,575.0	-819.0	486,275.00	812,247.00	32° 20′ 1.654 N	103° 27' 22.393 W

-819.0

486,275.00

812,247.00

32° 20' 1.654 N

-7,575.0

18,061.7

90.00

179.63

10,375.0

103° 27' 22.393 W

Uncontrolled Copy

Install the Casing Head

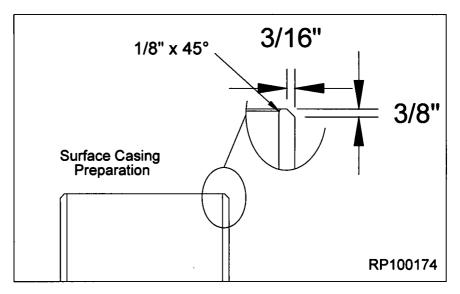
- Examine the WFT Casing Head. Verify the following:
 - · bore is clean and free of debris
 - seal areas, threads and ring grooves are clean and undamaged
 - o-ring is properly installed, clean and undamaged
 - all peripheral equipment is intact and undamaged
- 2. Measure the pocket depth of the Casing Head and record this dimension.
- 3. Run the surface casing and cement as required.
- Determine the required elevation of the Casing Head as required by the Drilling Supervisor.
- Use the following calulation to determine the correct final cut location of the surface casing.

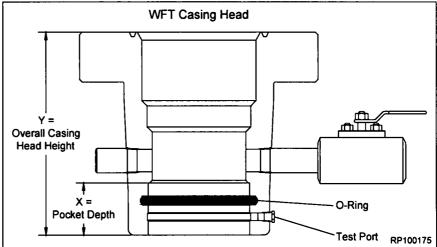
X = Pocket Depth

Y = Overall Casing Head Height

Y-X = Distance from correct elevation point to surface casing cutoff height.

- Lift the riser assembly high enough to rough cut the surface casing a minimum of 12" above the anticipated final cut location, if applicable.
- Remove the spent portion of surface casing and the riser assembly and set aside.
- 8. Determine the correct elevation for the wellhead assembly.
- Rough cut the surface casing a minimum of 12" above the final cut location.
- Cut the conductor pipe a comfortable level below the final cut location of the surface casing.





11. Final cut the surface casing at the correct elevation.

NOTE: Ensure the cut on the surface casing is level as this will determine the orientation of the remainder of the wellhead equipment.

- 12. Bevel the surface casing with a 3/16" x 3/8" bevel and remove any sharp edges from the OD of the casing.
- 13. Break a 1/8" x 45° bevel on the ID of the surface casing.

*	WFT Casing Head (Slip on Weld with O-Ring)	Approved By:	Reviewed By:	RP-001
Weatherford	Running Procedure	BO	Benco T. Rous	Rev 0
5-2-GL-GL-WES-00052		Date: Oct 21, 2010	Date: Oct 21, 2010	Page 1

Uncontrolled Copy

Recommended Procedure for Field Welding Pipe to Wellhead Parts for Pressure Seal

 Introduction and Scope. The following recommended procedure has been prepared with particular regard to attaining pressure-tight weld when attaching casing heads, flanges, etc., to casing. Although most of the high strength casing used (such as N-80) is not normally considered field weldable, some success may be obtained by using the following or similar procedures.

Caution: In some wellheads, the seal weld is also a structural weld and can be subjected to high tensile stresses. Consideration must therefore be given by competent authority to the mechanical properties of the weld and its heat affected zone.

- a. The steels used in wellhead parts and in casing are high strength steels that are susceptible to cracking when welded. It is imperative that the finished weld and adjacent metal be free from cracks. The heat from welding also affects the mechanical properties. This is especially serious if the weld is subjected to service tension stresses.
- b. This procedure is offered only as a recommendation. The responsibility for welding lies with the user and results are largely governed by the welder's skill. Weldability of the several makes and grades of casing varies widely, thus placing added responsibility on the welder. Transporting a qualified welder to the job, rather than using a less-skilled man who may be at hand, will, in most cases, prove economical. The responsible operating representative should ascertain the welder's qualifications and, if necessary, assure himself by instruction or demonstration, that the welder is able to perform the work satisfactorily.
- 2. Welding Conditions. Unfavorable welding conditions must be avoided or minimized in every way possible, as even the most skilled welder cannot successfully weld steels that are susceptible to cracking under adverse working conditions, or when the work is rushed. Work above the welder on the drilling floor should be avoided> The weld should be protected from dripping mud, water, and oil and from wind, rain, or other adverse weather conditions. The drilling mud, water, or other fluids must be lowered in the casing and kept at a low level until the weld has properly cooled. It is the responsibility of the user to provide supervision that will assure favorable working conditions, adequate time, and the necessary cooperation of the rig personnel.
- Welding. The welding should be done by the shielded metal-arc or other approved process.

- Filler Metals. For root pass, it's recommended to use E6010, E6011 (AC), E6019 or equivalent electrodes. The E7018 or E7018-A1 electrodes may also be used for root pass operations but has the tendency to trap slag in tight grooves. The E6010, E6011 and E6019 offer good penetration and weld deposit ductility with relatively high intrinsic hydrogen content. Since the E7018 and E7018-A1 are less susceptible to hydrogen induced cracking, it is recommended for use as the filler metal for completion of the weld groove after the root pass is completed. The E6010, E6011 (AC), E6019, E7018 and E7018-A1 are classified under one of the following codes AWS A5.1 (latest edition): Mild Steel covered electrodes or the AWS A5.5 (latest edition): Low Alloy Steel Covered Arc-Welding Electrodes. The low hydrogen electrodes, E7018 and E7018-A1, should not be exposed to the atmosphere until ready for use. It's recommended that hydrogen electrodes remain in their sealed containers. When a job arises, the container shall be opened and all unused remaining electrodes to be stored in heat electrode storage ovens. Low hydrogen electrodes exposed to the atmosphere, except water, for more than two hours should be dried 1 to 2 hours at 600°F to 700 °F (316°C to 371 °C) just before use. It's recommended for any low hydrogen electrode containing water on the surface should be scrapped.
- 5. Preparation of Base Metal. The area to be welded should be dry and free of any paint, grease/oil and dirt. All rust and heat-treat surface scale shall be ground to bright metal before welding.
- 6. Preheating. Prior to any heating, the wellhead member shall be inspected for the presence of any o-rings or other polymeric seals. If any o-rings or seals are identified then preheating requires close monitoring as noted in paragraph 6a. Before applying preheat, the fluid should be bailed out of the casing to a point several inches (>6" or 150 mm) below the weld joint/location. Preheat both the casing and wellhead member for a minimum distance of three (3) inches on each side of the weld joint using a suitable preheating torch in accordance with the temperatures shown below in a and b. The preheat temperature should be checked by the use of heat sensitive crayons. Special attention must be given to preheating the thick sections of wellhead parts to be welded, to insure uniform heating and expansion with respect to the relatively thin casing.
 - a. Wellhead members containing o-rings and other polymeric seals have tight limits on the preheat and interpass temperatures. Those temperatures must be controlled at 200°F to 325°F or 93 °C to 160°C and closely monitored to prevent damage to the o-ring or seals.
 - b. Wellhead members not containing o-rings and other polymeric seals should be maintained at a preheat and interpass temperature of 400°F to 600°F or 200°C to 300°C.

\	WFT Casing Head (Slip on Weld with O-Ring)	Approved By:	Reviewed By:	RP-001
Weatherford	Running Procedure	R	Benco T. Rose	Rev 0
5-2-GL-GL-WES-00052		Date: Oct 21, 2010	Date: Oct 21, 2010	Page 3



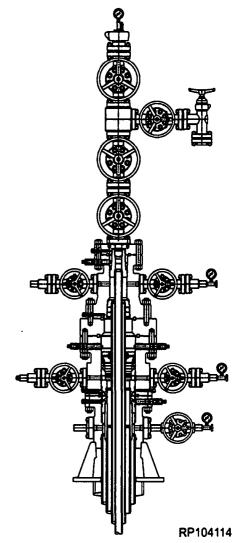
Weatherford®

Wellhead Field Service Manual

WFT-SB Wellhead System Running Procedure

Publication: SM-11-1

Release Date: December 2014



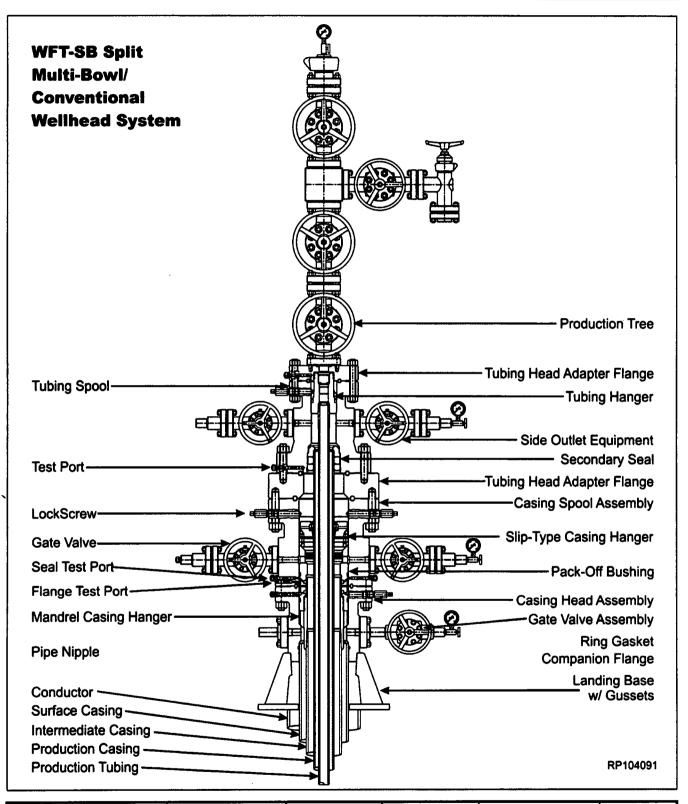
©2014 Weatherford International Ltd. All Rights Reserved

₩ Weatherford
5-3-GL-GL-WES-00XXX

Field Service Manual

Prepared By:	Reviewed By:	Approved By:	SM-11-1	
Hoston Robertson	Bruce Ross	Manuel Zaragoza	Rev WIP	
Marion Robertson	Bruce Ross	Manuel Zaragoza	Dans 4 of 24	
Dec 2014	Dec 2014	Dec 2014	Page 1 of 24	

WFT Split Bowl (SB) Wellhead System



~	Field Comics	Prepared By:	Reviewed By:	Approved By:	SM-13-1
Mostharfard	Field Service Manual	Mason Roberton	Brad Franks	Manual Zaragoza	Rev WIP
Weatherford	Haildai	Marion Robertson	Brad Franks	Manual Zaragoza	Page 3 of 24
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	- Fage 3 01 24

- 14. Slowly and carefully lower the assembly over the casing stub until the stub bottoms in the casing socket.
- 15. Remove the test fitting from the casing head test port, and set aside.
- **16.** Ensure that the WFT-SB Casing Head/Spool Assembly is plumb and level.
- 17. Weld and test the surface casing using the recommended welding procedure located in the Appendices Section of this manual.

Testing the BOP Stack

- Examine the Test Plug/Running & Retrieval Tool. Verify the following:
- Elastomer seals, threads and plugs are intact and in good condition.
- Drill pipe threads are correct size, clean and in good condition.
- Install a new, appropriately sized ring gasket in the ring groove of the WFT-SB Spool and make up the BOP stack.

NOTE

Immediately after make-up of the BOP stack and periodically during drilling of hole for the casing string, the BOP stack (flanged connections and rams) must be tested.

Orient the test plug with elastomer down/ACME threads up, and make up a joint of drill pipe to the test plug.

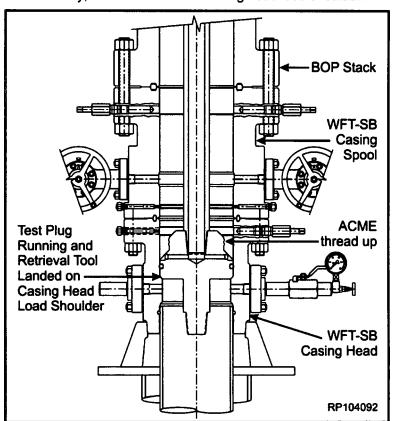
NOTE

If pressure is to be supplied through the drill pipe, remove the pipe plug from the weep port.



Ensure that the test plug elastomer is down and Acme threads are up when testing.

- 4. Fully retract all lockscrews in the entire WFT-SB casing head/spool assembly.
- 5. Lubricate the test plug elastomer seal with a light oil or grease.
- 6. Lower the test plug through the BOP stack into the WFT-SB assembly, until it lands on the casing head load shoulder.



*	Field Occasion	Prepared By:	Reviewed By:	Approved By:	SM-13-1
Mosthantand	Field Service Manual	Macon Roberton	Brad Franks	Manual Zaragoza	Rev WIP
Weatherford	Mailuai	Marion Robertson	Brad Franks	Manual Zaragoza	Page 5 of 24
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	1 Page 5 01 24

- 4. Make-up a drill pipe joint to the Running Tool.
- Thread Running Tool into the Long Bowl Protector, rotating two turns counterclockwise.
- Verify that all lockscrews in the WFT-SB Casing Head/Spool Assembly are fully retracted.
- Slowly lower the Running Tool/Bowl Protector Assembly through the BOP stack and into the WFT-SB Casing Head/Spool Assembly, until it lands securely on the casing head load shoulder.
- On WFT-SB Casing Spool, run in two Lockscrews ("snug" tight ONLY), 180 degrees apart, to hold Bowl Protector in place.



Do NOT over tighten the lockscrews, as this will cause damage to the Bowl Protector and the lockscrews.

- Remove the running tool from the bowl protector, by rotating the drill pipe clockwise two turns while lifting straight up.
- Drill out and prepare to run the casing string per the drilling supervisor's instruction.

Retrieving the Bowl Protector after Drilling

- 1. Make-up the retrieval tool to the drill pipe, with Acme threads down.
- 2. Slowly lower the retrieval tool through the BOP Stack into the Bowl Protector.
- Rotate the retrieval Tool counterclockwise, two turns, to engage with bowl protector Acme threads.

4. Fully retract both lockscrews on the WFT-SB casing spool, and retrieve the bowl protector.

NOTE

Ensure that all lockscrews in both the upper flange (casing spool) and lower flange (casing head) of the wellhead Assembly are fully retracted from well bore.

5. Remove the bowl protector and the running and retrieval tool from the drill floor.

Hanging off the Intermediate Casing

1. Run the intermediate casing as required and space out appropriately for the mandrel casing hanger.

NOTE

If the intermediate casing becomes stuck and the mandrel casing hanger cannot be landed, refer to STAGE 4B.

- 2. Examine the WFT-SBD-SN Mandrel Casing Hanger. Verify the following:
 - Bore drift is correct size, clean and free of debris
 - All threads are clean and undamaged.
 - Flow-By flutes are clear and unobstructed.
 - Slick Neck seal area is clean and undamaged.
- 3. Examine the Mandrel Casing Hanger Running Tool. Verify the following:
 - Threads are clean and in good condition.
 - O-ring seals are clean and undamaged.
- 4. Thread the mandrel hanger onto the last joint of casing to be run. Torque the connection thread to manufacturer's optimum "make-up" torque value.
- 5. Make up a landing joint to the top of the running tool.

 Torque the connection to thread manufacturer's maximum "make-up" torque valve.



If Steps 4 and 5 were performed prior to being shipped to location, the hanger running tool should be backed off and made back up to ensure it will back off freely.

*	Field Comics	Prepared By:	Reviewed By:	Approved By:	SM-13-1
Mostharford	Field Service Manual	Marcon Roberton	Brad Franks	Manual Zaragoza	Rev WIP
Weatherford	Manual	Marion Robertson	Brad Franks	Manual Zaragoza	Page 7 of 24
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	7 Faye / 0124

- 16. Drain the BOP stack through the casing head side outlet valves.
- 17. Remove the pipe plug from the casing head flange port marked "Inspection Port."
- 18. Visually verify that the running tool groove is in the center of the inspection port, and that the mandrel hanger has landed properly.
- 19. Reinstall the pipe plug and tighten securely.
- 20. Place a paint mark on the landing joint level with the rig floor, and cement casing as required.

NOTE

If the casing is to be reciprocated during cementing, it is advisable to pick up the mandrel hanger a minimum of eight feet above the landing point. Place a mark on the landing joint, level with the rig floor, and then reciprocate above that point. If at any time resistance is felt, land the mandrel casing hanger immediately.

21. Retrieve the hanger running tool and landing joint by rotating landing joint clockwise (to the right), fourteen full turns.

Hanging off Intermediate Casing – Contingency Completion

NOTE

The following procedure should ONLY be followed if the intermediate casing should become stuck in the hole. If the casing did NOT get stuck and is successfully hung off with the mandrel casing hanger, skip this stage.

- Cement the intermediate casing in accordance with the program, taking returns through the flow-by flutes of the mandrel casing hanger as required.
- 2. Drain the casing head bowl through the side outlet.
- 3. Separate the WFT-SB casing spool from the casing head.
- Pull up on WFT-SB casing spool and suspend it above casing head, high enough to install a WFT-21 Slip Type Casing Hanger.
- 5. Wash out as required.
- 6. Examine the WFT-21 slip type casing hanger. Verify the following:
 - Hanger is correct size, clean and undamaged.
 - Slip segments are sharp and in proper position.
 - All screws are in place.
- 7. Remove the latch screw to open the slip type hanger.
- 8. Place two boards on the casing head flange, against the casing, to support the hanger.
- 9. Wrap the hanger around the casing and replace the latch screw.
- 10. Prepare to lower the hanger into the casing head bowl.
- 11. Grease the WFT-21 slip type casing hanger body and remove the slip retaining cap screws.
- 12. Remove the boards and allow the hanger to slide down into the casing head.

*	Field Coming	Prepared By:	Reviewed By:	Approved By:	SM-13-1
Moothorford	Field Service Manual	Marcon Roberton	Brad Franks	Manual Zaragoza	Rev WIP
Weatherford	Mariuar	Marion Robertson	Brad Franks	Manual Zaragoza	Page 9 of 24
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	- Fage 5 01 24

- 4. Examine the pack-off bushing running tool. Verify the following:
 - All elastomer seals are properly installed, clean and undamaged
 - Threads are clean, undamaged and free of debris
 - Bore and ports are clean and unobstructed.
- Make-up a landing joint to the running tool and rack back assembly.
- Run two or three stands of heavy weight drill pipe or collars in the hole and set floor slips.

NOTE

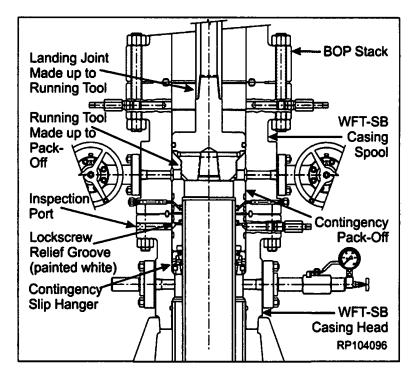
Use heavy weight drill pipe or drill collars. Weight required to push Pack-Off Bushing into Casing Head, over Mandrel Hanger slick neck, is approximately 14,000 lbs.



When lowering the drill pipe into the well, extreme caution must be taken to not damage the top of the mandrel hanger with the end of the drill pipe. It is recommended that the drill pipe be centralized to the hanger inner diameter, as closely as possible, when entering the hanger.

- 7. Carefully lower the bushing over the drill pipe and set it on top of floor slips.
- Make up the landing joint/running tool assembly to the drill pipe suspended in floor slips.
- Carefully pick up the pack-off bushing, thread the bushing into the running tool, then rotate the bushing approximately two turns counterclockwise (to the left), coming to a positive stop.

 Lower the assembly through the BOP Stack and the WFT-SB spool assembly until the pack-off bushing lands on the casing hanger.



- 11. Verify, through inspection port that the pack-off bushing has landed properly after:
 - ensuring well is stable and no pressure buildup or mud flow is occurring.
 - drain BOP Stack through Casing Head side outlet
 valves
 - remove Pipe Plug (1"-NPT) from Casing Head flange port marked "Inspection Port".
 - Check, to ensure, bottom of Lockscrew relief groove (painted white) on Support Bushing is at bottom of inspection port.
 - Reinstall Pipe Plug and tighten securely.
- 12. Fully run in all Casing Head Lockscrews (lower flange), in an alternating cross pattern.
- Using two chain tongs, 180 apart, rotate Landing Joint/Running Tool approximately 2 turns clockwise (to the

~	5 '. 1 . 1 0	Prepared By:	Reviewed By:	Approved By:	SM-13-1
Weetherford	Field Service Manual	Mason Roberton	Brad Franks	Manual Zaragoza	Rev WIP
Weatherford	Mailuai	Marion Robertson	Brad Franks	Manual Zaragoza	Page 11 of
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	24

- Locate the "SEAL TEST" fitting, slightly below and 90 degrees from the injection fittings. Remove the dust cap from this fitting.
- 11. Attach a test pump to the fitting.
- 12. Pump clean test fluid between the P-Seals until a test pressure of 5,000 psi or 80% of casing collapse pressure is attained, whichever is lower.



Do NOT exceed 80% of casing collapse pressure when a slip type casing hanger and contingency pack-off bushing are utilized.

- 13. Hold test pressure for 15 minutes or as required by the drilling supervisor.
- 14. If pressure drops, a leak has developed. Take the appropriate action per the following table:

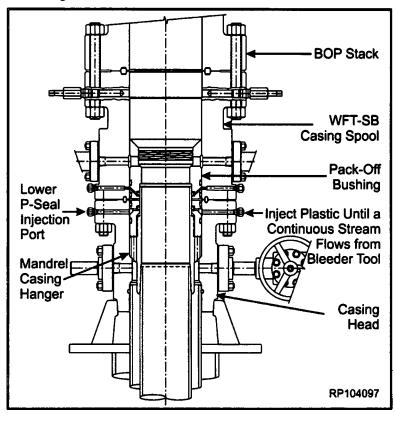
Leak Location	Cause	Action
Into the bore of the casing head	Upper P- seal leaking	Bleed off pressure and re-inject plastic packing into leaking upper P- seal port.
Around the casing	Lower P- Seal leaking	Bleed off pressure and re-inject plastic packing into lower P-seal port.

- Repeat Steps 12 thru 14 until a satisfactory test is achieved.
- 16. Once a satisfactory test is achieved, carefully bleed off pressure and remove Test Pump.
- 17. Attach the bleeder tool to the test port fitting and open the tool to vent any remaining trapped pressure.



Always direct the bleeder tool port away from people and property.

18. Remove the bleeder tool and reinstall dust cap in Test Port Fitting.



*	Field Service Manual	Prepared By:	Reviewed By:	Approved By:	SM-13-1
1 1		March Robertson	Brad Franks	Manual Zaragoza	Rev WIP
		Marion Robertson	Brad Franks	Manual Zaragoza	Page 13 of 24
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	

Running and Retrieving the Short Bowl Protector

NOTE

Always use a bowl protector while drilling to protect the wellhead load shoulders from damage by the drill bit or rotating drill pipe. The bowl protector must be retrieved prior to running the casing string!

Running the Bowl Protector Prior to Drilling

- Examine the short bowl protector.
 Verify the following:
 - Bore drift is correct size, is clean, in good condition, and free of debris.
 - Threads are correct size and type.
 - Threads are clean and in good condition.
- 2. Orient the bowl protector running tool with ACME threads down.

NOTE

The running tool is the same tool used for handling the long bowl protector.



Make sure that the left hand (LH) ACME threads are down prior to engaging the bowl protector running tool into the short bowl protector.

- 3. Make-up a drill pipe joint to the running tool.
- 4. Thread the running tool into the short bowl protector, rotating two turns counterclockwise (to the left).
- Verify that all upper lockscrews in the WFT-SB spool assembly are fully retracted. Slowly lower the running

tool/bowl protector assembly through the BOP stack into the WFT-SB spool assembly until it lands on top of the pack-off bushing.



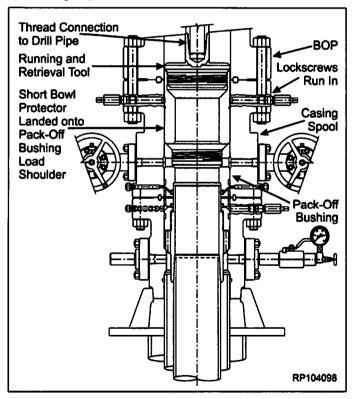
Do NOT retract the lower lockscrews located in the WFT-SB casing head, as this could allow the pack-off bushing to rise out of position.

6. On the upper WFT-SB spool assembly, run in two lockscrews ("snug" tight ONLY), 180 degrees apart, to hold the bowl protector in place.



Do NOT over tighten the lockscrews, as this will cause damage to both the bowl protector and lockscrews.

- 7. Remove the running tool from the bowl protector, by rotating the drill pipe clockwise two turns while lifting straight up.
- 8. Drill out and prepare to the production casing string per the drilling supervisor's instructions.



•	Field 0 in a	Prepared By:	Reviewed By:	Approved By:	SM-13-1
Weatherford Manual	Field Service	Marcon Robotan	Brad Franks	Manual Zaragoza	Rev WIP
	Mariaar	Marion Robertson	Brad Franks	Manual Zaragoza	Page 15 of
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	24

Installation of the Slip-Type Casing Hanger through the BOP Stack

- Drain the WFT-SB casing head/spool assembly and BOP stack through the side outlet valves on the spool assembly.
- 2. Wash out the wellhead assembly until clean returns are seen.
- 3. Examine the slip type casing hanger. Verify the following:
 - slip segments are clean and undamaged
 - all screws are in place
 - Packing Element is clean and undamaged.



The packing element should not protrude past the casing hanger outer diameter. If the packing element does extend past the outer diameter, loosen the cap screws in the bottom of the hanger.

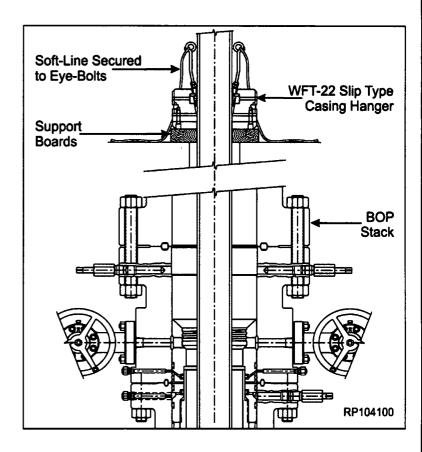
- 4. Place two boards across the rotary table, against the casing, to support the hanger.
- Disengage the spring loaded latch, open the hanger and wrap it around the casing, allowing the support boards to carry the weight.
- 6. Re-engage the casing hanger's spring loaded latch.
- 7. Measure the distance from the top flange of the WFT-SB casing spool to the drilling rig floor (RKB).
- Measure out two lengths of soft-line cord (rope) to the same length as the

RKB measurement, and adding an additional 10 feet to each line.

- 9. Mark the soft line cord at the required length.
- 10. Install two eyebolts into the tapped holes in the top of the casing hanger slip segments, 180 degrees apart.
- 11. Securely tie the soft-line cord to the eyebolts.



Measuring the soft-line cord and installing the eyebolts into the hanger segments should be done offline.



*		Prepared By:	Reviewed By:	Approved By:	SM-13-1
Weatherford Field Service Manual		Marion Robertson	Brad Franks	Manual Zaragoza	Rev WIP
	Manual	Marion Robertson	Brad Franks	Manual Zaragoza	Page 17 of
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	24

Installation of the Double-Studded Adapter (DSA) Flange

- 1. Examine the double studded adapter (DSA) Flange. Verify the following:
 - Ring grooves are clean and undamaged.
 - Stud threads are clean and undamaged.
- 2. Orient the DSA flange with the 10M side down.
- Thoroughly clean the mating grooves of the DSA flange and the WFT-SB spool assembly. Wipe lightly with oil or grease.

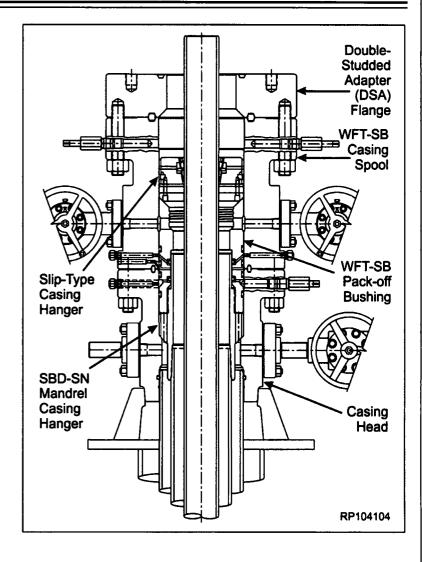


Excessive oil or grease will prevent a positive seal from forming.

- Install a new appropriately sized ring gasket into the WFT-SB spool assembly groove.
- Lift, while holding level, and carefully lower the DSA over the production casing stub until it lands on the ring gasket.
- Make-up the flange connection with appropriate nuts, tightening in alternate cross pattern, as required by API 6A.
- Fill the void area in the DSA around the production casing with a light weight oil.
- 8. Continue filling with a light weight oil to the top of the DSA.



Do NOT allow oil to run into the ring groove. This may prevent a positive seal from forming.



	Prepared By:	Reviewed By:	Approved By:	SM-13-1	
Moothorford	Field Service Manual	Marcon Potation	Brad Franks	Manual Zaragoza	Rev WIP
Weatherford	Mailuai	Marion Robertson	Brad Franks	Manual Zaragoza	Page 19 of
5-3-GL-GL-WES-00XXX]	December 2014	December 2014	December 2014	24

Testing the BOP

NOTE

Immediately after the make-up of the BOP Stack and periodically during drilling of hole for the next string, the BOP stack (flanged connections and rams) must be tested.

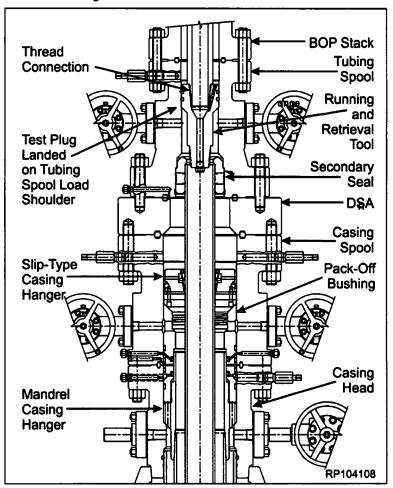
- 1. Examine the test plug. Verify that:
 - O-ring seals and plugs are properly installed, clean and undamaged.
 - All threads are clean and undamaged.
- 2. Orient the test plug with O-ring seals up and drill pipe pin connection down.
- 3. Make up a joint of drill pipe to the top of the test plug.

NOTE

If pressure is to be supplied through the drill pipe, the pipe plug should be removed from the weep port.

- 4. Fully retract all lockscrews on the WFT-TCM tubing spool assembly.
- 5. Open the side outlet valves on the tubing spool.
- 6. Wipe the test plug O-ring seals with a light oil or grease.
- Lower the test plug through the BOP until it lands on the tubing spool load shoulder.
- 8. Close the BOP rams on the drill pipe and test to **10,000 psi maximum**.
- 9. Monitor the open outlets for signs of leakage past the test plug.

- 10. Once a satisfactory test is achieved, release pressure and open the rams.
- 11. Close the side outlet valves.
- 12. Remove as much fluid from the BOP stack as possible.
- 13. Slowly retrieve the test plug, avoiding damage to the seals.
- 14. Repeat this procedure, as required, during drilling or conditioning of the hole.



Weatherford Field Service Manual		Prepared By:	Reviewed By:	Approved By:	SM-13-1
		Macon Robotson	Brad Franks	Manual Zaragoza	Rev WIP
	Wallual	Marion Robertson	Brad Franks	Manual Zaragoza	Page 21 of
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	24

- 11. Install the Type H Back Pressure Valve, carefully lowering the BPV through the BOP stack into the tubing hanger. Rotate the BPV counterclockwise (to the left) until it bottoms out in the tubing hanger BPV prep. Continue rotating counterclockwise, approximately 7 turns, to retrieve the running tool.
- 12. With the well safe and under control, the BOP stack may be removed.

Installation and Testing of the Production Tree

Installation

- Examine the production tree assembly.
 Verify the following;
 - Bore is clean and free of debris.
 - All valves are in the fully open position.
 - All threads and seal areas are clean and undamaged.
 - All fittings, nuts and handwheels are intact and undamaged.
- Thoroughly clean all exposed portions of the tubing hanger, tubing head adapter flange and bottom prep of the tubing head adapter.
- 3. Thoroughly clean mating ring grooves of the tubing head adapter flange and WFT-TCM tubing spool.
- Lightly lubricate the tubing hanger neck outer diameter and tubing head adapter flange bottom prep with oil or grease.

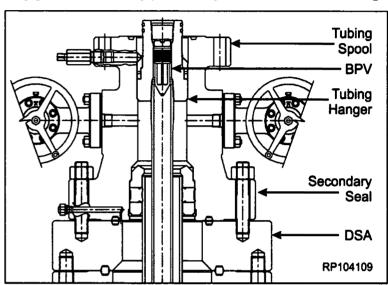


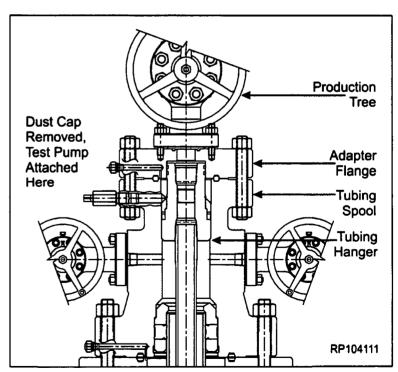
Excessive oil or grease will prevent a positive seal from forming.

Install a new appropriately sized ring gasket into the WFT-TCM tubing spool groove. 6. Fill the void area around the hanger with hydraulic fluid, to the top of the tubing spool assembly.



Do NOT overfill the void area, allowing oil to run into the ring groove. This may prevent a positive seal from forming.

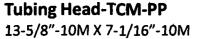




~		Prepared By:	Reviewed By:	Approved By:	SM-13-1
Weatherford Manual	Field Service	Macon Robotson	Brad Franks	Manual Zaragoza	Rev WIP
	Manuai	Marion Robertson	Brad Franks	Manual Zaragoza	Page 23 of 24
5-3-GL-GL-WES-00XXX		December 2014	December 2014	December 2014	



Multi-Bowl System 13-3/8" X 9-5/8" X 5-1/2"



13-5/8"-10M X 7-1/16"-10M w/(2) 1-13/16"-10M Gate Valves

7-1/16-10M

Casing Spool- MBS

13-5/8"-5M X 13-5/8"-10M w/(2) 1-13/16" 10M SSO

13-5/8"-10M 13-5/8" X 5.5" C-22 Casing Hanger 13-5/8" X 9-5/8" MBS Packoff Assembly

Casing Head- MBS

13-5/8"-5M X 13-3/8" SOW w/36" Base Plate

13-5/8" X 9-5/8" Mandrel

Casing Hanger

13-3/8" SOW

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

01/27/2020

APD ID: 10400041856

Submission Date: 05/15/2019

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MAXUS 8026 FED

Well Number: 3H

Show Final Text

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

19110176_REV_4_26_19_Vicinity__Topographical___Access_Rd_20190514164732.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

19110176_REV_4_26_19_Vicinity__Topographical___Access_Rd_20190514164755.pdf

New road type: RESOURCE

Feet

Width (ft.): 25

Max slope (%): 2

Max grade (%): 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 15

New road access erosion control: Road construction requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Uperator Name: BIA OIL PRODUCERS LLC

Well Name: MAXUS 8026 FED

Well Number: 3H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: null

Water source use type:

SURFACE CASING

STIMULATION

DUST CONTROL

INTERMEDIATE/PRODUCTION

CASING

Source latitude: 32.354057

Source longitude: -103.48524

Source datum: NAD83

Water source permit type:

PRIVATE CONTRACT

Water source transport method:

TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: PRIVATE

Water source volume (barrels): 100000

Source volume (acre-feet): 12.88931

Source volume (gal): 4200000

Water source and transportation map:

MAXUS_3_4_9_10_Water_Transportation_Map_20190514164851.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Well casing outside diameter (in.):

Well casing inside diameter (in.):

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MAXUS 8026 FED

Well Number: 3H

Waste type: GARBAGE

Waste content description: Trash

Amount of waste: 500

pounds

Waste disposal frequency: One Time Only

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Dis

Disposal location ownership: COMMERCIAL

FACILITY

Disposal type description:

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? NO

Description of cuttings location

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MAXUS 8026 FED

Well Number: 3H

interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations. Topsoil will be at East side of well pad, 30' (see attachment under SUPO Section 9). **Soil treatment:** To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

Existing Vegetation at the well pad: The historic climax plant community is a grassland dominated by black grama, dropseeds, and blue stems with sand sage and shinnery oak distributed evenly throughout. Current landscape displays mesquite, shinnery oak, yucca, desert sage, fourwing saltbush, snakeweed, and bunch grasses.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Refer to "Existing Vegetation at the well pad"

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed Summary		
Seed Type	Pounds/Acre	

Total pounds/Acre:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MAXUS 8026 FED

Well Number: 3H

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

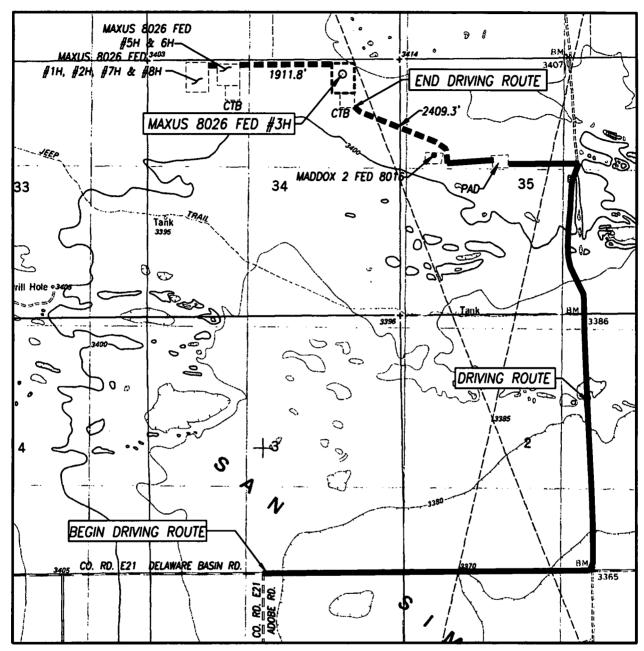
SUPO Additional Information:

Use a previously conducted onsite? YES

Previous Onsite information: Onsite was conducted, April 4th, 2019 by William DeGrush.

Other SUPO Attachment

VICINITY, TOPOGRAPHIC AND ACCESS ROAD MAP



SCALE: 1" = 2000'

SAN SIMON SINK, N.M.

CONTOUR INTERVAL: SAN SIMON SINK, N.M. – 10'

SEC. 34 1	TWP. <u>22-S</u> RGE. <u>34-E</u>
SURVEY	N.M.P.M.
	<u>EA</u> STATE <u>NEW MEXICO</u>
	1 300' FNL & 1230' FEL
	3411'
	BTA OIL PRODUCERS, LLC MAXUS 8026 FED
<u></u>	
U.S.G.S. TOP	POGRAPHIC MAP

DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF CO. RD. E21 (DELAWARE BASIN) AND CO RD. E21 (ADOBE) GO EAST ON DELAWARE BASIN APPROX. 1.3 MILES. TURN LEFT AND GO NORTH ON LEASE ROAD APPROX. 1.6 MILES TO LEASE ROAD. TURN LEFT AND GO WEST APPROX. 0.52 MILES TO ACCESS ROAD. FOLLOW STAKED ROAD NORTHWEST APPROX 0.46 MILES TO THE EAST PAD CORNER OF THE CTB ON THE SOUTH EDGE OF THIS LOCATION.

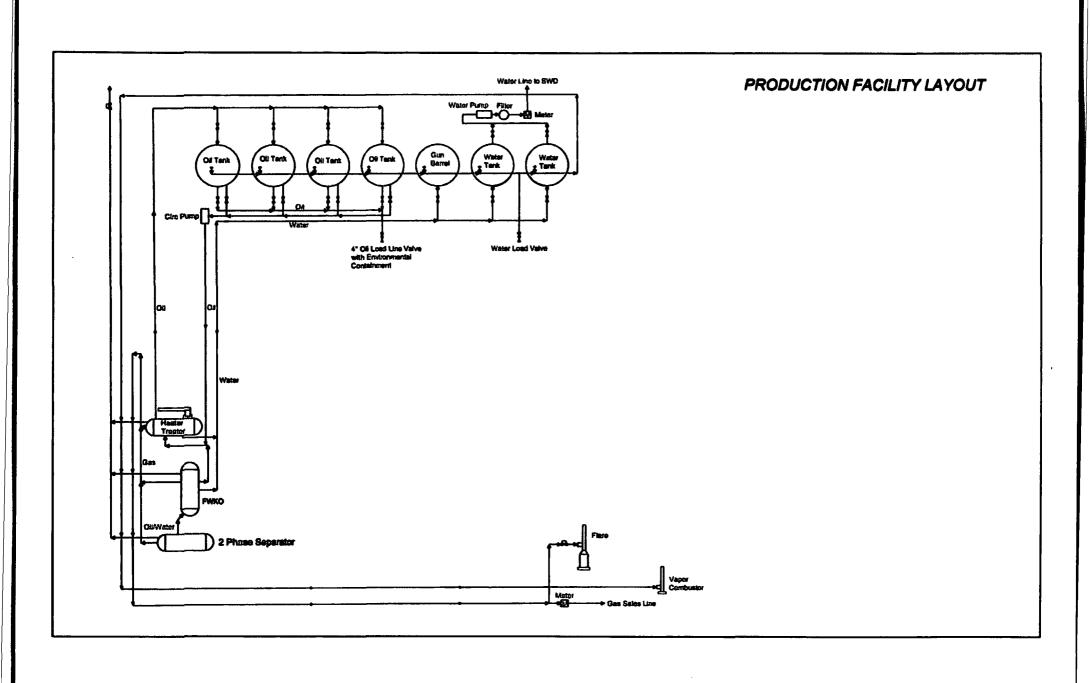


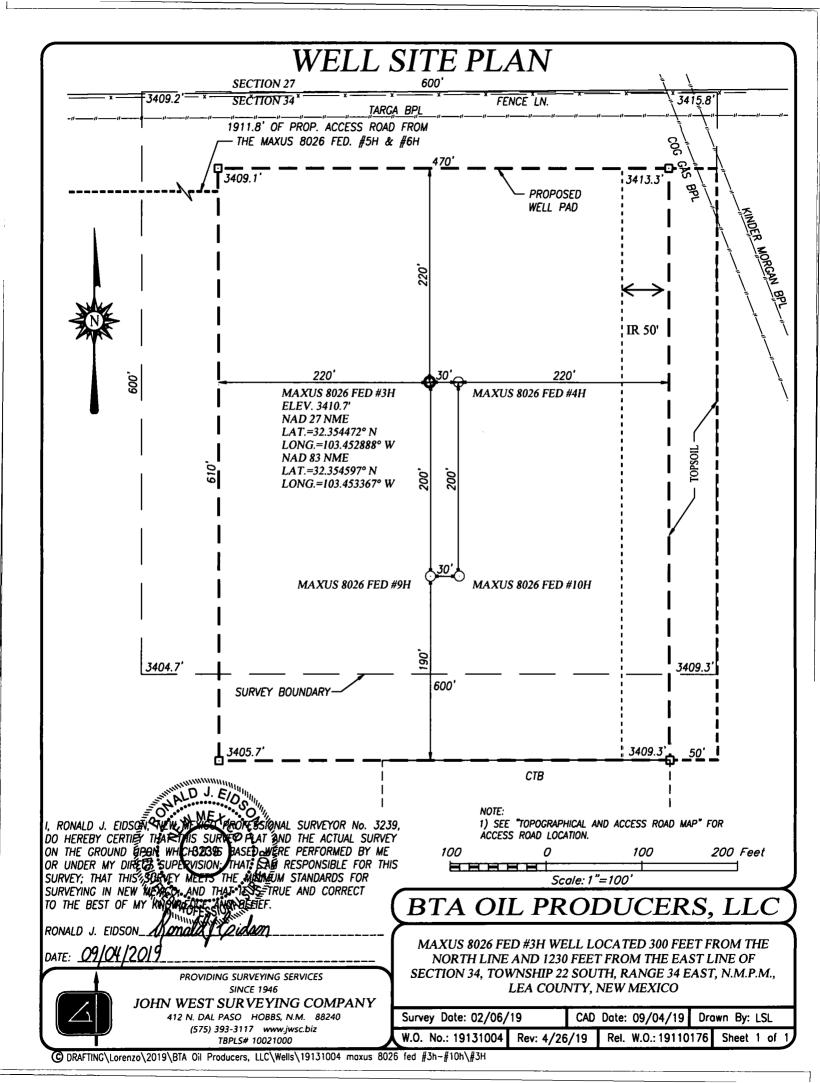
PROVIDING SURVEYING SERVICES

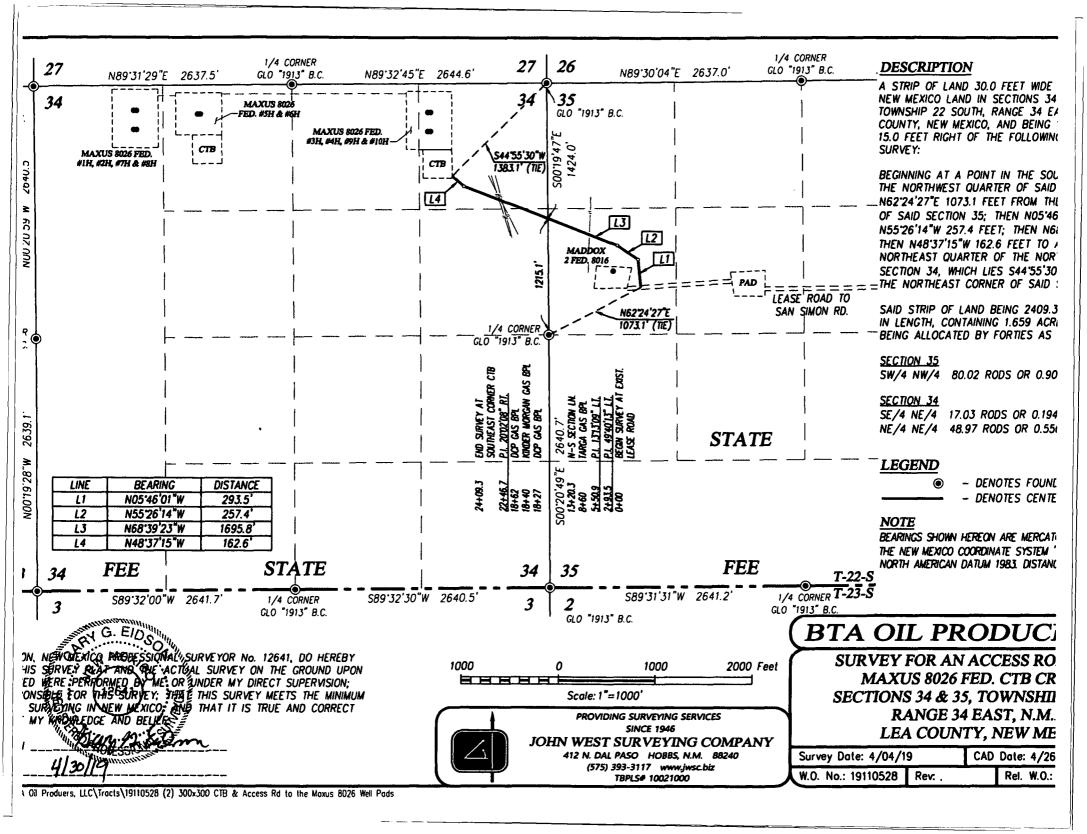
SINCE 1946

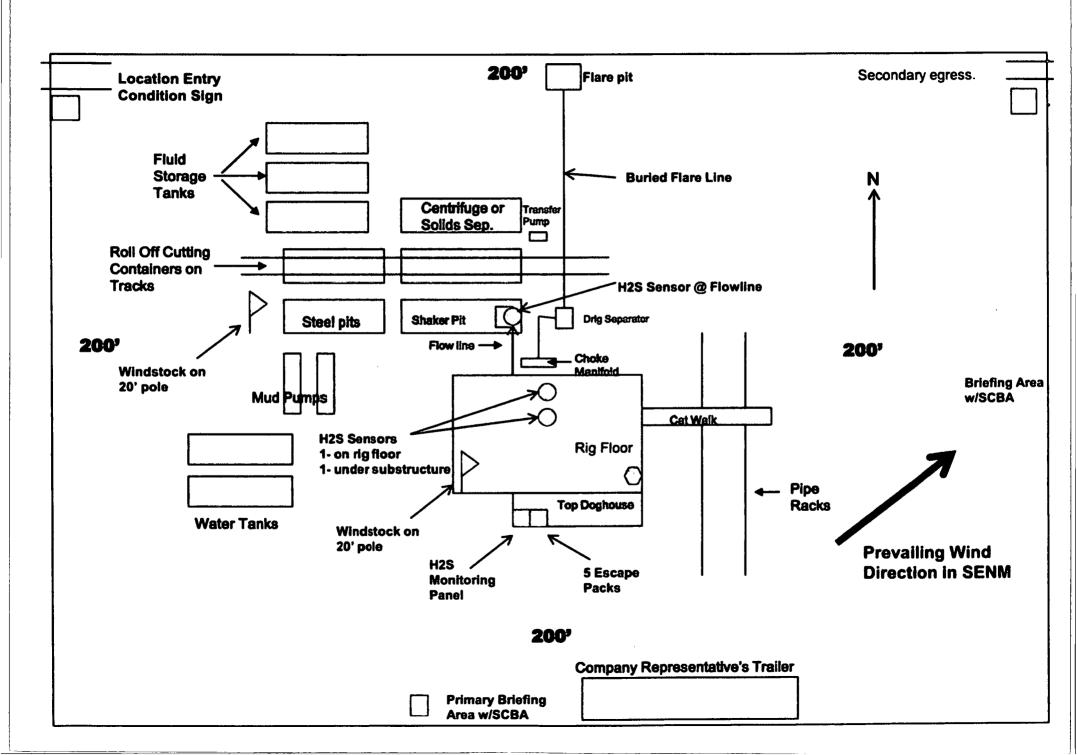
JOHN WEST SURVEYING COMPANY

412 N. DAL PASO HOBBS, N.M. 88240 (575) 393-3117 www.jwsc.biz TBPLS# 10021000









Operator maine, DIA OIL FRODUCERS LLO Well Name: MAXUS 8026 FED Well Number: 3H **Lined pit Monitor description: Lined pit Monitor attachment:** Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment: **Section 3 - Unlined Pits** Would you like to utilize Unlined Pit PWD options? NO **Produced Water Disposal (PWD) Location:** PWD surface owner: PWD disturbance (acres): Unlined pit PWD on or off channel: Unlined pit PWD discharge volume (bbl/day): Unlined pit specifications: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Unlined pit precipitated solids disposal schedule: Unlined pit precipitated solids disposal schedule attachment: Unlined pit reclamation description: Unlined pit reclamation attachment: **Unlined pit Monitor description:** Unlined pit Monitor attachment: Do you propose to put the produced water to beneficial use? Beneficial use user confirmation: Estimated depth of the shallowest aquifer (feet): Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected? TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Operator maine. DIA OIL FRODUCERS LLO

Well Name: MAXUS 8026 FED

Well Number: 3H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment: