Form 3160-3
(June 2015)

OCD – HOBBS
06/25/2020
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FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM134888

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

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

8. Lease Name and Well No.
EL CAMPEON FED COM [328509]
123H

2. Name of Operator
TITUS OIL AND GAS PRODUCTION LLC [373986]

9. API Well No. 30-025-47393

3a. Address
420 Throckmorton St., Suite 1150, Fort Worth, TX 76102

3b. Phone No. *(include area code)*
(817) 852-6358

10. Field and Pool, or Exploratory [96672]
WC-025 G-09 S263619C/WC WOLFCAM

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface SWSE / 355 FSL / 1927 FEL / LAT 32.0224934 / LONG -103.3871271
At proposed prod. zone LOT 2 / 10 FSL / 1650 FEL / LAT 32.0003214 / LONG -103.3862124

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 20/T26S/R35E/NMP

14. Distance in miles and direction from nearest town or post office*
13 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
355 feet

16. No of acres in lease
200

17. Spacing Unit dedicated to this well
240.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
30 feet

19. Proposed Depth
10743 feet / 18816 feet

20. BLM/BIA Bond No. in file
FED: NMB001532

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3173 feet

22. Approximate date work will start*
06/01/2020

23. Estimated duration
45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature
(Electronic Submission)

Name *(Printed/Typed)*
RYAN DELONG / Ph: (817) 852-6358

Date
01/29/2020

Title
Regulatory Manager

Approved by *(Signature)*
(Electronic Submission)

Name *(Printed/Typed)*
Cody Layton / Ph: (575) 234-5959

Date
06/23/2020

Title
Assistant Field Manager Lands & Minerals

Office
Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

GCP Rec 06/24/2020

SL

APPROVED WITH CONDITIONS

KZ
07/07/2020

Approval Date: 06/23/2020

(Continued on page 2)

*(Instructions on page 2)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Titus Oil and Gas Production LLC**
LEASE NO.:	**NMNM134888**
WELL NAME & NO.:	El Campeon Federal Com 123H
SURFACE HOLE FOOTAGE:	355'/S & 1927'/E
BOTTOM HOLE FOOTAGE	10'/S & 1650'/E
LOCATION:	Section 20, T.26 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	◉ Conventional	○ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8 inch** surface casing shall be set at approximately **1,100 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after 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 minimum required fill of cement behind the **9-5/8 inch** intermediate casing and shall be set at approximately **5,300 feet** 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.**

3. The minimum required fill of cement behind the **5-1/2 inch** production casing is:

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi**.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **3000 (3M) psi**.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

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 County
Call 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.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

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 hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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.

YJ (06/05/2020)

AFMSS

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

Operator Certification Data Report

06/25/2020

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: Ryan D DELONG **Signed on:** 01/29/2020

Title: Regulatory Manager

Street Address: 420 Throckmorton St., Suite 1150

City: Fort Worth **State:** TX **Zip:** 76102

Phone: (817)852-6370

Email address: regulatory@titusoil.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

APD ID: 10400053810 **Submission Date:** 01/29/2020

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400053810 **Tie to previous NOS?** **Submission Date:** 01/29/2020

BLM Office: CARLSBAD **User:** Ryan D DELONG **Title:** Regulatory Manager

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

Lease number: NMNM134888 **Lease Acres:** 200

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:** TITUS OIL AND GAS PRODUCTION LLC

Operator letter of designation:

Operator Info

Operator Organization Name: TITUS OIL AND GAS PRODUCTION LLC

Operator Address: 420 Throckmorton St., Suite 1150

Zip: 76102

Operator PO Box:

Operator City: Fort Worth **State:** TX

Operator Phone: (817)852-6358

Operator Internet Address: rdelong@titusoil.com

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: EL CAMPEON FED COM **Well Number:** 123H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** WC-025 G-09 S263619C **Pool Name:** WC WOLFCAMP

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** N **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** EL CAMPEON **Number:** 3

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 13 Miles **Distance to nearest well:** 30 FT **Distance to lease line:** 355 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: El_Campeon_Fed_Com_123H_C_102_20200128143137.pdf

El_Campeon_Fed_Com_123H_Additional_points_20200128143144.pdf

Well work start Date: 06/01/2020 **Duration:** 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: **Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	355	FSL	1927	FEL	26S	35E	20	Aliquot SWSE	32.0224934	-103.3871271	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 134888	3173	0	0	Y
KOP Leg #1	553	FSL	1477	FEL	26S	35E	20	Aliquot SWSE	32.023031	-103.385676	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 134888	-7076	10265	10249	Y

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
PPP Leg #1-1	0	FNL	1492	FEL	26S	35E	29	Aliquot NWNE	32.021513	-103.385721	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 125400	-7548	11105	10721	Y
PPP Leg #1-2	0	FNL	1649	FEL	26S	35E	32	Lot 2	32.006986	-103.386218	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7563	16500	10736	Y
EXIT Leg #1	10	FSL	1650	FEL	26S	35E	32	Lot 2	32.000321 4	-103.3862124	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7570	18816	10743	Y
BHL Leg #1	10	FSL	1650	FEL	26S	35E	32	Lot 2	32.000321 4	-103.3862124	LEA	NEW MEXICO	NEW MEXICO	S	STATE	-7570	18816	10743	Y

APD ID: 10400053810 **Submission Date:** 01/29/2020

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

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

Highlighted data reflects the most recent changes

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Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
647692	QUATERNARY	3171	0	0	ALLUVIUM	NONE	N
647693	RUSTLER	2136	1035	1035	ANHYDRITE	USEABLE WATER	N
647694	SALADO	1653	1518	1518	SALT	NONE	N
647698	BASE OF SALT	-1838	5009	5009	SALT	NONE	N
647699	LAMAR	-2178	5349	5349	LIMESTONE	NONE	N
647700	DELAWARE	-2220	5391	5391	SANDSTONE, SHALE, SILTSTONE	NONE	N
647703	BONE SPRING LIME	-6106	9277	9277	LIMESTONE	NATURAL GAS, OIL	N
647704	BONE SPRING 1ST	-7304	10475	10492	LIMESTONE, SANDSTONE, SHALE, SILTSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M **Rating Depth:** 5375

Equipment: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Testing Procedure: Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.

Choke Diagram Attachment:

2M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200128145630.pdf

BOP Diagram Attachment:

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

2M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200128145630.pdf

2M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200128145639.pdf

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Pressure Rating (PSI): 3M **Rating Depth:** 10743

Equipment: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.
Requesting Variance? YES

Variance request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
Testing Procedure: Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Choke Diagram Attachment:

3M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200128145520.pdf

BOP Diagram Attachment:

3M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200128145530.pdf

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Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1060	0	1060	3173	2113	1060	J-55	54.5	ST&C	2.33	1.18	DRY	8.9	DRY	8.9
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	5375	0	5375	3171	-2202	5375	J-55	40	LT&C	1.13	1	DRY	2.42	DRY	2.42
3	PRODUCTION	8.75	5.5	NEW	API	N	0	18816	0	10743		-7570	18816	P-110	17	LT&C	1.42	2.55	DRY	2.44	DRY	2.44

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions___Shallow_Wells_20200128145852.docx

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions___Shallow_Wells_20200128145955.docx

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions___Shallow_Wells_20200128150103.docx

Section 4 - Cement

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1060	440	1.75	13.5	770	50	Class C	4% Gel 1% CaCl2
SURFACE	Tail		0	1060	250	1.34	14.8	335	50	Class C	2% Cacl2
INTERMEDIATE	Lead		0	5375	1040	2	12.7	2080	50	35:65:6 C Blend	N/A
INTERMEDIATE	Tail		0	5375	250	1.34	14.8	335	50	Class C	2% CaCl
PRODUCTION	Lead		0	18816	750	2.5	11.9	1875	25	50:50:10 H Blend	N/A
PRODUCTION	Tail		0	18816	2180	1.24	14.4	2703.2	25	50:50:2 Class H Blend	N/A

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	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1060	WATER-BASED MUD	8.6	8.8							
1060	5375	SALT SATURATED	10	10.2							
5375	10743	OTHER : CUT BRINE	8.6	9.4							

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

Section 6 - Test, Logging, Coring

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

GR from TD to surface (horizontal well - vertical portion of hole). Logs run will be stated in the completion report and submitted to the BLM.

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

DIRECTIONAL SURVEY,

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5255 **Anticipated Surface Pressure:** 2891

Anticipated Bottom Hole Temperature(F): 165

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:

El_Campeon_Fed_Com_123H_H2S_Plan_20200128144938.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

El_Campeon_Fed_Com_123H_Wall_Plot_20200128144847.pdf
El_Campeon_Fed_Com_123H_AC_20200128144852.pdf
El_Campeon_Fed_Com_123H_Survey_Report_5_7_2020_20200508073645.pdf

Other proposed operations facets description:

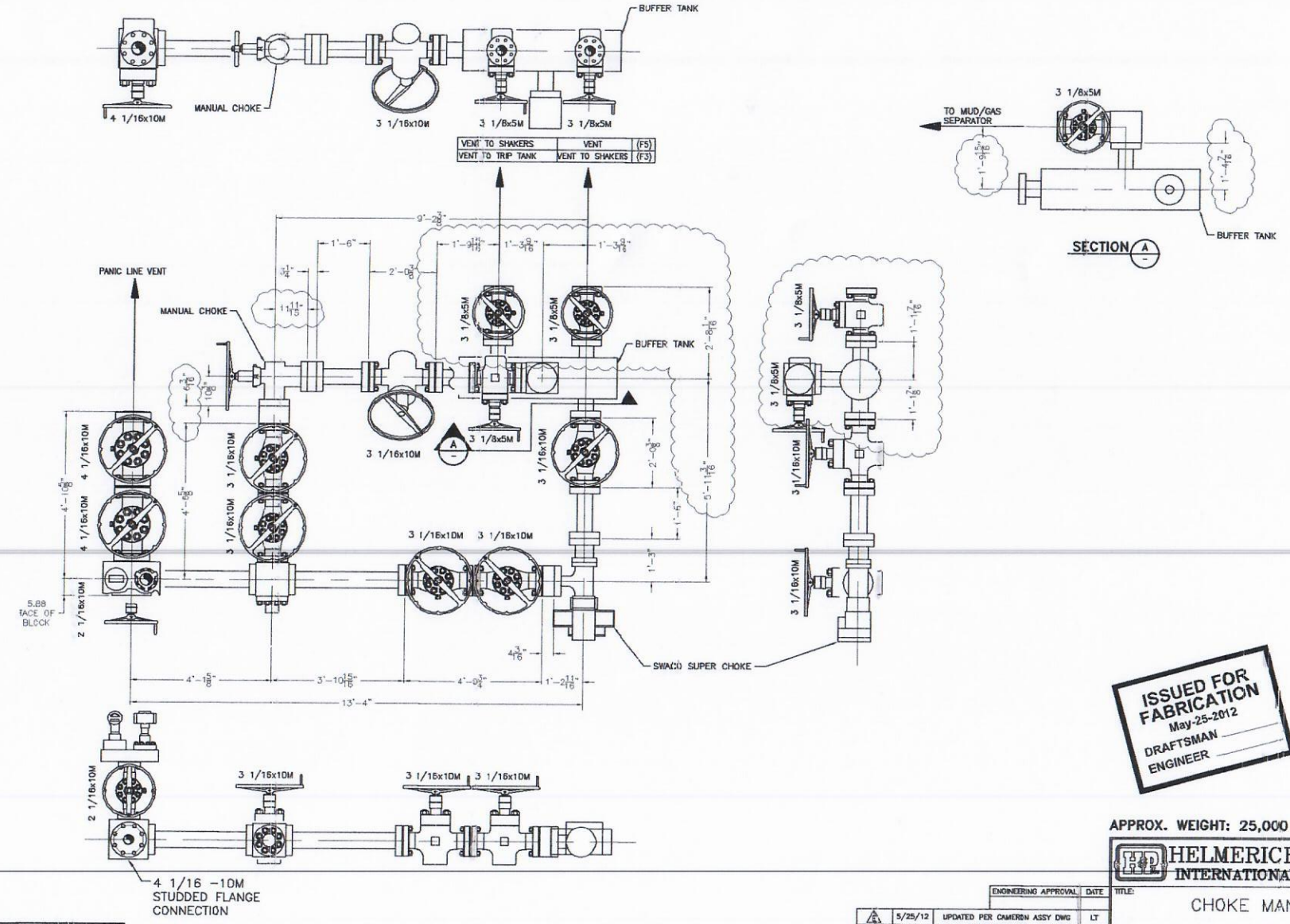
DRILLING PROGRAM
GAS CAPTURE PLAN

Other proposed operations facets attachment:

El_Campeon_CTB_20___Gas_Capture_Plan_20200128091209.docx
El_Campeon_Fed_Com_123H_APD_Drilling_Portion_20200128144901.pdf

Other Variance attachment:

3M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200128091257.pdf



ISSUED FOR FABRICATION
May-25-2012
DRAFTSMAN
ENGINEER

APPROX. WEIGHT: 25,000 LBS

REV	DATE	DESCRIPTION	BY
		ENGINEERING APPROVAL	DATE
7	5/25/12	UPDATED PER CAMERON ASSY DWG	LT
6	5/3/12	REV. DIM. PANIC LINE (WAS 4'-11 5/8") ADD (F3) & (F5) NOTES, ADD FACE DIM.	RDM
5	4/20/12	REV. SIZE OF CHOKE INLET; ADD NOTE	RDM
4	1/10/11	LABELED LINES; CORRECTED CHOKE INLET	CC
3	10/15/02	ADJUST DIM TO FIELD CONFIRMED DIM	RAV

HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

TITLE: CHOKE MANIFOLD

CUSTOMER: H&P

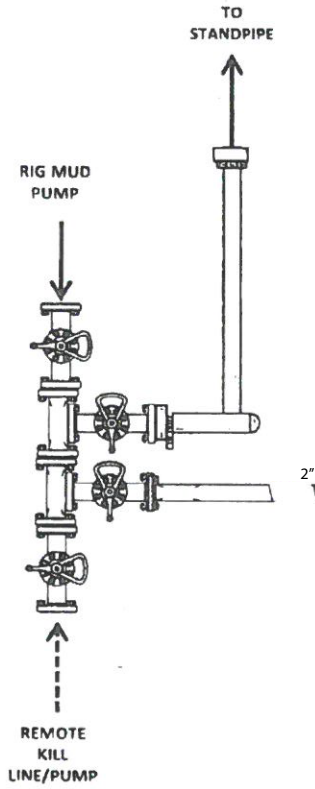
PROJECT: FLEXRIG3

DRAWN: MTS | DATE: 2-28-02 | DWG. NO.: 216-P1-05 | REV: E

SCALE: 3/4"=1" | SHEET 1 OF 1

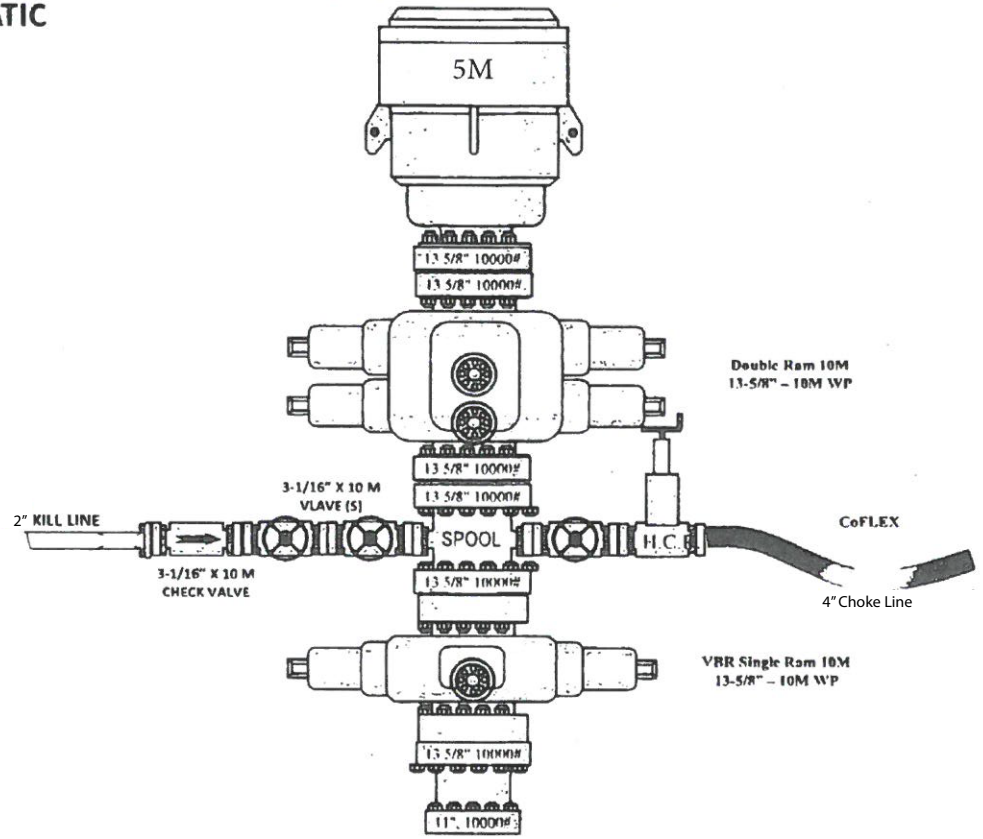
3M BOP Stack

3M REMOTE KILL SCHEMATIC



3M BOP Stack

5M ANNULAR VARIANCE
(SEE ATTACHED WELL CONTROL PLAN)



TITUS

Oil & Gas LLC

TITUS Oil & Gas Production, LLC

100 Throckmorton Street
Suite 1630
Fort Worth, TX 76102

Hydrogen Sulfide (H_2S) Contingency Plan

For

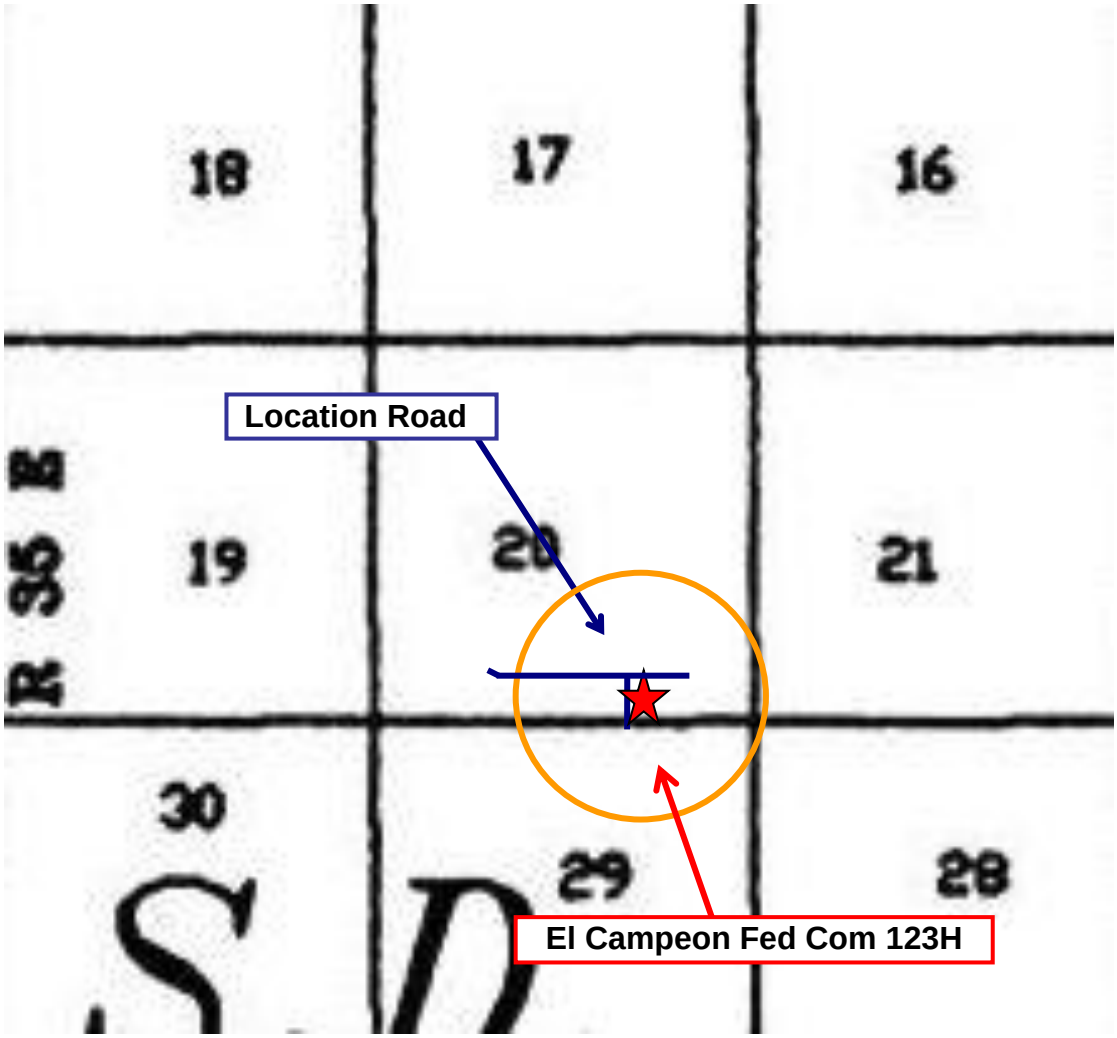
El Campeon Fed Com 123H

Sec-20 T-26S R-35E
355 FSL & 1927’ FEL
LAT. = 32.02249347’ N (NAD83)
LONG = 103.38712712’ W

Lea County NM

El Campeon Fed Com 123H

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H_2S, including warning signs, wind indicators and H_2S monitor.



Assumed 100 ppm ROE = 3000' (Radius of Exposure)
100 ppm H2S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crews should then block the entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H_2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must

- **Isolate the area and prevent entry by other persons into the 100 ppm ROE.**
- **Evacuate any public places encompassed by the 100 ppm ROE.**
- **Be equipped with H_2S monitors and air packs in order to control the release.**
- **Use the "buddy system" to ensure no injuries occur during the response**
- **Take precautions to avoid personal injury during this operation.**
- **Contact operator and/or local officials to aid in operation. See list of phone numbers attached.**
- **Have received training in the**
  - **Detection of H_2S, and**
  - **Measures for protection against the gas,**
  - **Equipment used for protection and emergency response.**

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Titus Oil & Gas personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Titus Oil & Gas Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H_2S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S)

2. The proper use and maintenance of personal protective equipment and life support systems.

3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.

2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

3. The contents and requirements of the H_2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H_2S.

1. **Well Control Equipment**

   A. Flare line

   B. Choke manifold – Remotely Operated

   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit

   D. Auxiliary equipment may include if applicable: annular preventer and rotating head.

   E. Mud/Gas Separator

2. **Protective equipment for essential personnel:**

   30-minute SCBA units located at briefing areas, as indicated on well site diagram, with escape units available in the top doghouse. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. **H_2S detection and monitoring equipment:**

   Portable H_2S monitors positioned on location for best coverage and response. These units have warning lights which activate when H_2S levels reach 10 ppm and audible sirens which activate at 15 ppm. Sensor locations:

   - **Bell nipple**
   - **Rig floor**
   - **Cellar**
   - **Possum Belly/Shale shaker**
   - **Choke manifold**

   Visual warning systems:

   A. Wind direction indicators as shown on well site diagram

   B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

4. **Mud program:**

   The mud program has been designed to minimize the volume of H_2S circulated to surface. Proper mud weight, safe drilling practices and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.

5. **Metallurgy:**

   A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H_2S trim.

   B. All elastomers used for packing and seals shall be H_2S trim.

6. **Communication:**

   A. Company personnel have/use cellular telephones in the field.

   B. Land line (telephone) communications at Office

7. **Well testing:**

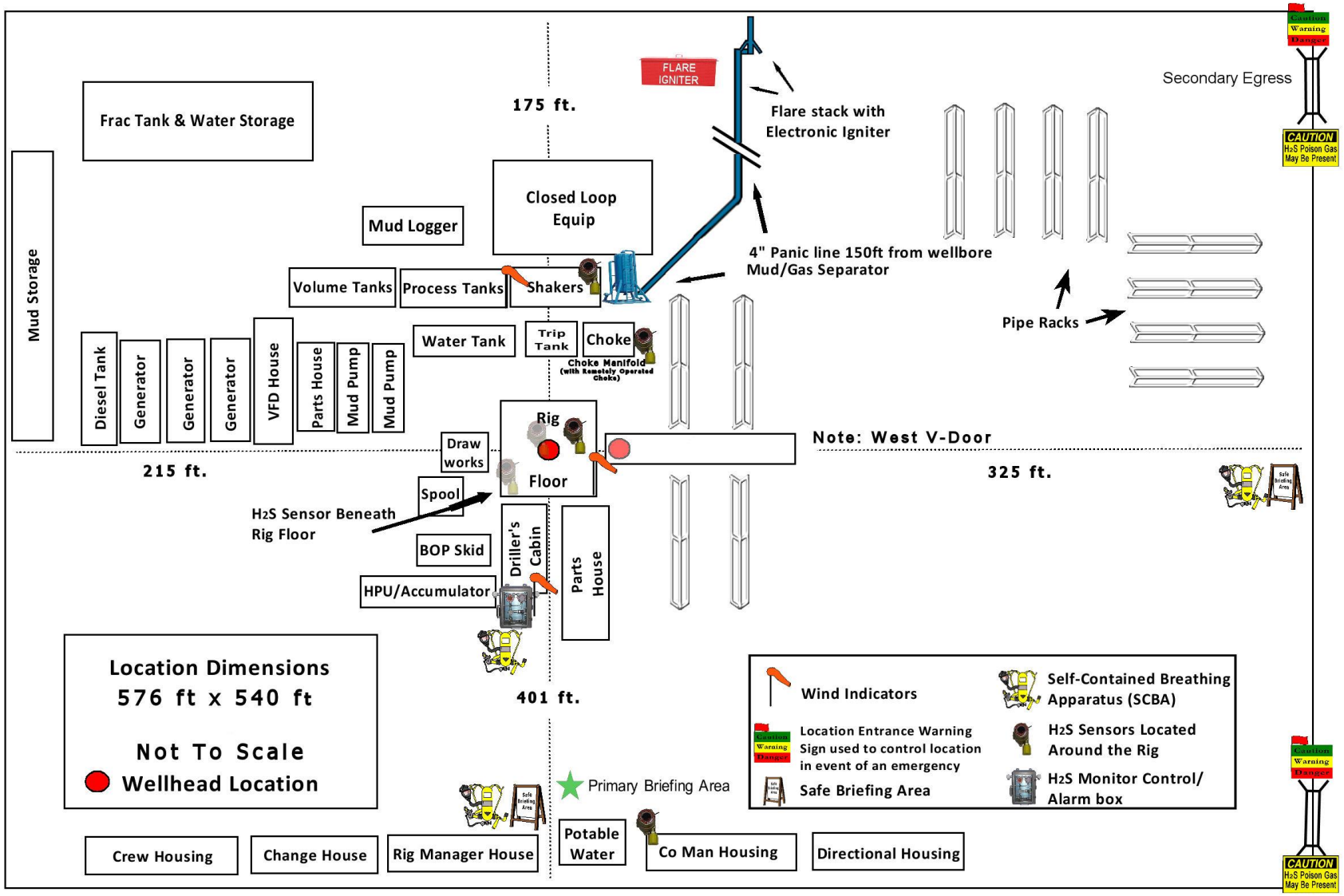
   A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H_2S environment will use the closed chamber method of testing.

   B. There will be no drill stem testing.

Titus Oil & Gas Company Call List		
Drilling Supervisor –		
Ryan DeLong - **Office** (817) 852-6370 **Mobile** (405) 664-5188		
Agency Call List		
Lea County (575)	**Hobbs**	
	Lea County Communication Authority	393-3981
	State Police	392-5588
	City Police	397-9265
	Sheriff's Office	393-2515
	Ambulance	**911**
	Fire Department	397-9308
	LEPC (Local Emergency Planning Committee)	393-2870
	NMOCD	393-6161
	US Bureau of Land Management	393-3612
Eddy County (575)	**Carlsbad**	
	State Police	885-3137
	City Police	885-2111
	Sheriff's Office	887-7551
	Ambulance	**911**
	Fire Department	885-3125
	LEPC (Local Emergency Planning Committee)	887-3798
	US Bureau of Land Management	887-6544
	NM Emergency Response Commission (Santa Fe)	(505) 476-9600
	24 HR	(505) 827-9126
	National Emergency Response Center	(800) 424-8802
	National Pollution Control Center: Direct	(703) 872-6000
	For Oil Spills	(800) 280-7118
	Emergency Services	
	Wild Well Control	(281) 784-4700
	Cudd Pressure Control 915-699-0139	(915) 563-3356
	Halliburton	(575) 746-2757
	B. J. Services	(575) 746-3569
Give GPS position:	Native Air – Emergency Helicopter – Hobbs	(575) 392-6429
	Flight For Life - Lubbock, TX	(806) 743-9911
	Aerocare - Lubbock, TX	(806) 747-8923
	Med Flight Air Amb - Albuquerque, NM	(575) 842-4433
	Lifeguard Air Med Svc. Albuquerque, NM	(800) 222-1222
	Poison Control (24/7)	(575) 272-3115
	Oil & Gas Pipeline 24 Hour Service	(800) 364-4366
	NOAA – Website - www.nhc.noaa.gov	

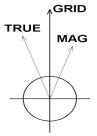
Prepared in conjunction with
Dave Small SHARP communications and consulting

TITUS Oil & Gas Production - Well Pad
Rig Location Layout
Safety Equipment Location



TITUS OIL GAS LLC

Well Name	**El Campeon Fed Com 123H**
Latitude	32° 1' 20.976" N
Longitude	103° 23' 13.658" W
CRS	NAD83 / New Mexico East (ftUS)

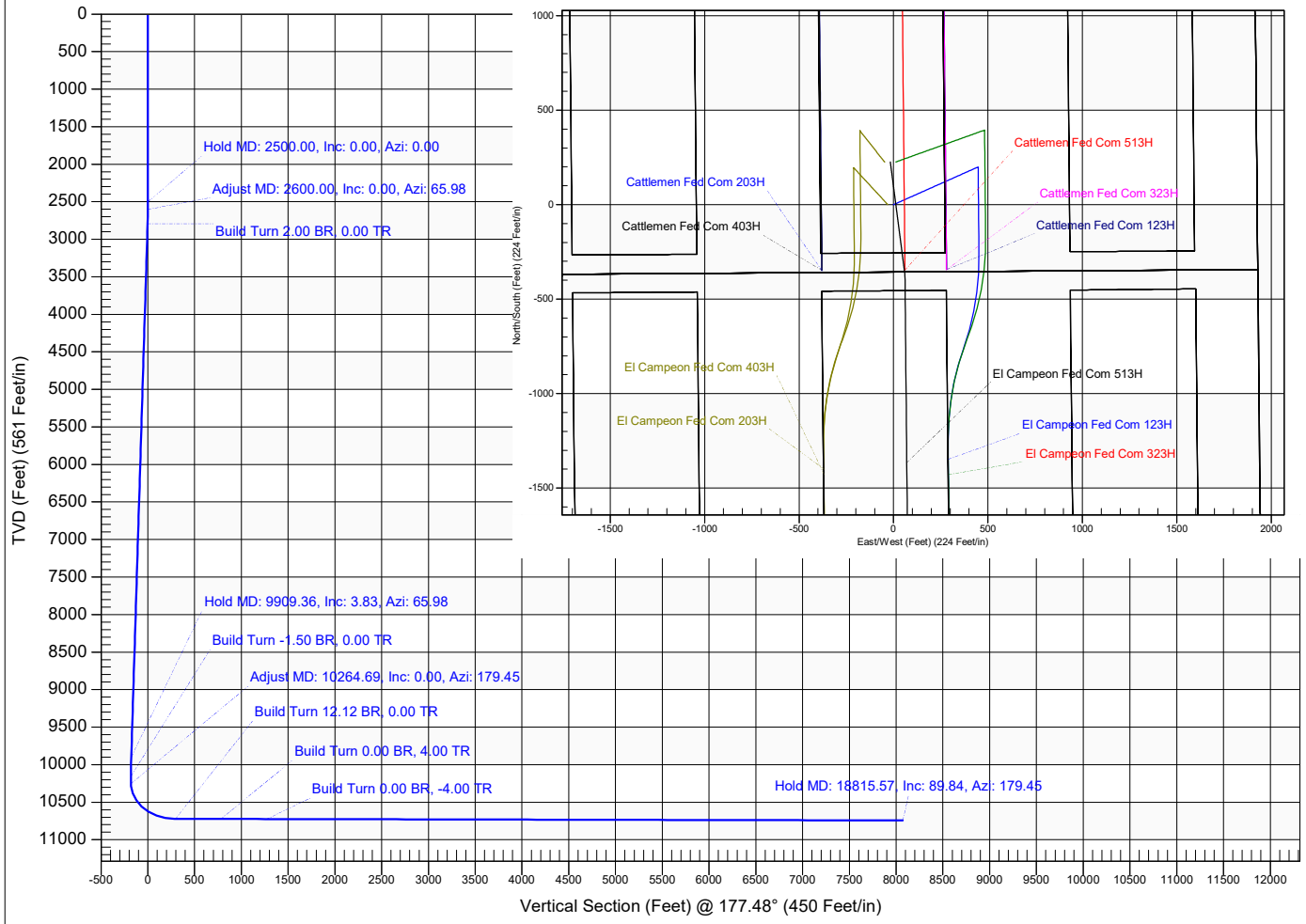


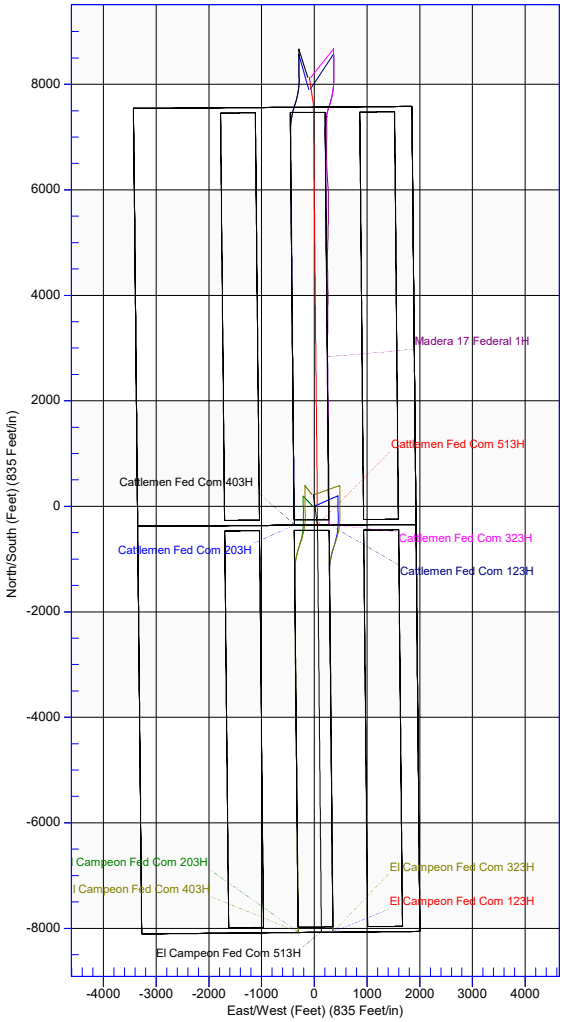
North Reference	GRID
Magnetic Declination	6.569
Grid Convergence	0.50
Dip angle	59.871
Magnetic Model	IGRF12.COF
Total Field (nT)	47571.899
Date	24/1/2020
TRUE to GRID:	Add -0.50
MAG to GRID:	Add 6.07

Well Name	**El Campeon Fed Com 123H**
RTE Elevation	0.00 Ft above Ground Level
GL Elevation	0.00 Ft above Ground Level
Calculation Method	Minimum Curvature
Local Co-Ordinate Ref	Well Centered
Grid East	834584.38 US survey foot
Grid North	373205.98 US survey foot
Local North	-15469.53 Ft
Local East	3509.97 Ft
Latitude	32° 1' 20.976" N
Longitude	103° 23' 13.658" W
CRS	NAD83 / New Mexico East (ftUS)
VS Origin	Well
North Ref	GRID
Depth Datum	Default
Grid Convergence	0.502

Plan Sections

MD(ft)	INC(°)	AZI(°)	TVD(ft)	NS(ft)	EW(ft)	VS(ft)	DLS(°/100ft)	Tool face	Method
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	HOLD_CL
2600.00	0.00	65.98	2600.00	0.00	0.00	0.00	0.00	65.98	ADJ_CL
2791.50	3.83	65.98	2791.36	2.60	5.84	-2.34	2.00	65.98	BT_INC
9909.36	3.83	65.98	9893.32	196.14	440.12	-176.60	0.00	0.00	HOLD_CL
10164.69	0.00	65.98	10148.46	199.61	447.91	-179.72	1.50	180.00	BT_INC
10264.69	0.00	179.45	10248.46	199.61	447.91	-179.72	0.00	179.45	ADJ_CL
11005.95	89.84	179.45	10721.20	-271.79	452.44	291.42	12.12	179.45	BT_INC
11505.95	89.84	199.45	10722.61	-762.50	370.76	778.06	4.00	90.03	BT_AZI
12005.95	89.84	179.45	10724.02	-1253.21	289.08	1264.71	4.00	-90.03	BT_AZI
18816.57	89.84	179.45	10743.04	-8063.49	354.46	8071.28	0.00	0.00	HOLD_CL





Titus Oil & Gas, LLC
LEA County, NM (NAD83-NME)
EL CAMP PROJECT
El Campeon Fed Com 123H
El Campeon Fed Com 123H

Geographic Survey Report

7 May 2020

TITUS OIL GAS LLC

Geographic Survey Report

Operator	Titus Oil & Gas, LLC	**Local co-ord ref**	Well Centered
Field	LEA County, NM (NAD83-NME)	**TVD Reference**	Default
Facility	EL CAMP PROJECT	**North Reference**	GRID
Well	El Campeon Fed Com 123H	**Survey Calc Method**	Minimum Curvature
Wellbore	El Campeon Fed Com 123H		

Field	LEA County, NM (NAD83-NME)		
CRS	NAD83 / New Mexico East (ftUS)		
Apply Scale Factor	NO	**Scale Factor**	0.99991
System Datum	Ground Level	**Depth Datum->MSL**	0.00 UsFt

Facility	EL CAMP PROJECT		
Map Northing	388675.48 US survey foot	**Map Easting**	831074.42 US survey foot
Latitude	32° 3' 54.350" N	**Longitude**	103° 23' 52.868" W
Vertical Uncertainty	0.00 UsFt	**Horizontal Uncertainty**	0.00 UsFt
Grid Convergence	0.497		

Well	El Campeon Fed Com 123H		
Local North	-15469.56 UsFt	**Local East**	3509.98 UsFt
Map Northing	373205.98 US survey foot	**Map Easting**	834584.38 US survey foot
Latitude	32° 1' 20.976" N	**Longitude**	103° 23' 13.658" W
Depth Datum	Default	**Datum Elevation**	0.00 UsFt
GL Elevation	0.00 UsFt		
Grid Convergence	0.502		

Well bore	El Campeon Fed Com 123H		
Magnetic Model	IGRF12.COF	**Date**	24/1/2020
Total Field (nT)	47571.899	**Dip Angle (°)**	59.871
Declination (°)	6.569		
VS Origin	Well	**VS Azimuth**	177.48
VS Orgin NS	0.00 UsFt	**VS Origin EW**	0.00 UsFt

Survey Program	El Campeon Fed Com 123H		
Depth From (UsFt)	**Depth To (UsFt)**	**Survey**	**Survey Tool**
0.00	18816.61	El Campeon Fed Com 123H	

Survey Report

MD UsFt	Inc °	Azi °	TVD UsFt	NS UsFt	EW UsFt	VS UsFt	DLS (°/100 UsFt)	BR (°/100 UsFt)	TR (°/100 UsFt)	TF °	CL UsFt	TVD SS UsFt	Map Northing US survey foot	Map Easting US survey foot	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-3254.01	373205.98	834584.38	32° 1' 20.977" N	103° 23' 13.658" W
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-3154.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-3054.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2954.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2854.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2754.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2654.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2554.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2454.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2354.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2254.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2154.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-2054.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1954.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1854.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1754.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1654.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1554.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1454.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1354.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1254.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2100.00	0.00	0.00	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1154.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2200.00	0.00	0.00	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-1054.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-954.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-854.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	-754.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2600.00	0.00	65.98	2600.00	0.00	0.00	0.00	0.00	0.00	65.98	65.98	100.00	-654.01	373205.98	834584.38	32° 1' 20.976" N	103° 23' 13.658" W
2700.00	2.00	65.98	2699.98	0.71	1.59	-0.64	2.00	2.00	0.00	65.98	100.00	-554.03	373206.19	834584.87	32° 1' 20.979" N	103° 23' 13.652" W
2800.00	3.83	65.98	2799.85	2.78	6.24	-2.50	1.83	1.83	0.00	0.00	100.00	-454.16	373206.82	834586.29	32° 1' 20.985" N	103° 23' 13.635" W
2900.00	3.83	65.98	2899.62	5.50	12.34	-4.95	0.00	0.00	0.00	0.00	100.00	-354.39	373207.65	834588.15	32° 1' 20.993" N	103° 23' 13.614" W
3000.00	3.83	65.98	2999.40	8.22	18.44	-7.40	0.00	0.00	0.00	0.00	100.00	-254.61	373208.48	834590.01	32° 1' 21.001" N	103° 23' 13.592" W
3100.00	3.83	65.98	3099.18	10.94	24.54	-9.85	0.00	0.00	0.00	0.00	100.00	-154.83	373209.31	834591.87	32° 1' 21.009" N	103° 23' 13.570" W
3200.00	3.83	65.98	3198.95	13.66	30.64	-12.30	0.00	0.00	0.00	0.00	100.00	-55.06	373210.14	834593.72	32° 1' 21.017" N	103° 23' 13.549" W
3300.00	3.83	65.98	3298.73	16.38	36.74	-14.74	0.00	0.00	0.00	0.00	100.00	44.72	373210.97	834595.58	32° 1' 21.025" N	103° 23' 13.527" W
3400.00	3.83	65.98	3398.51	19.09	42.85	-17.19	0.00	0.00	0.00	0.00	100.00	144.50	373211.80	834597.44	32° 1' 21.033" N	103° 23' 13.505" W
3500.00	3.83	65.98	3498.28	21.81	48.95	-19.64	0.00	0.00	0.00	0.00	100.00	244.27	373212.63	834599.30	32° 1' 21.041" N	103° 23' 13.484" W
3600.00	3.83	65.98	3598.06	24.53	55.05	-22.09	0.00	0.00	0.00	0.00	100.00	344.05	373213.45	834601.16	32° 1' 21.049" N	103° 23' 13.462" W
3700.00	3.83	65.98	3697.84	27.25	61.15	-24.54	0.00	0.00	0.00	0.00	100.00	443.83	373214.28	834603.02	32° 1' 21.057" N	103° 23' 13.440" W

Survey Report

MD	Inc	Azi	TVD	NS	EW	VS	DLS	BR	TR	TF	CL	TVD SS	Map Northing	Map Easting	Latitude	Longitude
UsFt	°	°	UsFt	UsFt	UsFt	UsFt	(°/100 UsFt)	(°/100 UsFt)	(°/100 UsFt)	°	UsFt	UsFt	US survey foot	US survey foot		
3800.00	3.83	65.98	3797.61	29.97	67.25	-26.98	0.00	0.00	0.00	0.00	100.00	543.60	373215.11	834604.88	32° 1' 21.065" N	103° 23' 13.419" W
3900.00	3.83	65.98	3897.39	32.69	73.35	-29.43	0.00	0.00	0.00	0.00	100.00	643.38	373215.94	834606.74	32° 1' 21.073" N	103° 23' 13.397" W
4000.00	3.83	65.98	3997.17	35.41	79.45	-31.88	0.00	0.00	0.00	0.00	100.00	743.16	373216.77	834608.60	32° 1' 21.081" N	103° 23' 13.375" W
4100.00	3.83	65.98	4096.94	38.13	85.55	-34.33	0.00	0.00	0.00	0.00	100.00	842.93	373217.60	834610.46	32° 1' 21.089" N	103° 23' 13.353" W
4200.00	3.83	65.98	4196.72	40.85	91.66	-36.78	0.00	0.00	0.00	0.00	100.00	942.71	373218.43	834612.32	32° 1' 21.097" N	103° 23' 13.332" W
4300.00	3.83	65.98	4296.50	43.56	97.76	-39.22	0.00	0.00	0.00	0.00	100.00	1042.49	373219.26	834614.18	32° 1' 21.105" N	103° 23' 13.310" W
4400.00	3.83	65.98	4396.27	46.28	103.86	-41.67	0.00	0.00	0.00	0.00	100.00	1142.26	373220.08	834616.04	32° 1' 21.113" N	103° 23' 13.288" W
4500.00	3.83	65.98	4496.05	49.00	109.96	-44.12	0.00	0.00	0.00	0.00	100.00	1242.04	373220.91	834617.90	32° 1' 21.121" N	103° 23' 13.267" W
4600.00	3.83	65.98	4595.83	51.72	116.06	-46.57	0.00	0.00	0.00	0.00	100.00	1341.82	373221.74	834619.76	32° 1' 21.129" N	103° 23' 13.245" W
4700.00	3.83	65.98	4695.60	54.44	122.16	-49.02	0.00	0.00	0.00	0.00	100.00	1441.59	373222.57	834621.62	32° 1' 21.137" N	103° 23' 13.223" W
4800.00	3.83	65.98	4795.38	57.16	128.26	-51.47	0.00	0.00	0.00	0.00	100.00	1541.37	373223.40	834623.48	32° 1' 21.145" N	103° 23' 13.202" W
4900.00	3.83	65.98	4895.16	59.88	134.36	-53.91	0.00	0.00	0.00	0.00	100.00	1641.15	373224.23	834625.34	32° 1' 21.154" N	103° 23' 13.180" W
5000.00	3.83	65.98	4994.93	62.60	140.46	-56.36	0.00	0.00	0.00	0.00	100.00	1740.92	373225.06	834627.20	32° 1' 21.162" N	103° 23' 13.158" W
5100.00	3.83	65.98	5094.71	65.32	146.57	-58.81	0.00	0.00	0.00	0.00	100.00	1840.70	373225.89	834629.06	32° 1' 21.170" N	103° 23' 13.137" W
5200.00	3.83	65.98	5194.49	68.04	152.67	-61.26	0.00	0.00	0.00	0.00	100.00	1940.48	373226.71	834630.92	32° 1' 21.178" N	103° 23' 13.115" W
5300.00	3.83	65.98	5294.26	70.75	158.77	-63.71	0.00	0.00	0.00	0.00	100.00	2040.25	373227.54	834632.78	32° 1' 21.186" N	103° 23' 13.093" W
5400.00	3.83	65.98	5394.04	73.47	164.87	-66.15	0.00	0.00	0.00	0.00	100.00	2140.03	373228.37	834634.64	32° 1' 21.194" N	103° 23' 13.072" W
5500.00	3.83	65.98	5493.82	76.19	170.97	-68.60	0.00	0.00	0.00	0.00	100.00	2239.81	373229.20	834636.50	32° 1' 21.202" N	103° 23' 13.050" W
5600.00	3.83	65.98	5593.59	78.91	177.07	-71.05	0.00	0.00	0.00	0.00	100.00	2339.58	373230.03	834638.36	32° 1' 21.210" N	103° 23' 13.028" W
5700.00	3.83	65.98	5693.37	81.63	183.17	-73.50	0.00	0.00	0.00	0.00	100.00	2439.36	373230.86	834640.22	32° 1' 21.218" N	103° 23' 13.007" W
5800.00	3.83	65.98	5793.15	84.35	189.27	-75.95	0.00	0.00	0.00	0.00	100.00	2539.14	373231.69	834642.08	32° 1' 21.226" N	103° 23' 12.985" W
5900.00	3.83	65.98	5892.92	87.07	195.38	-78.39	0.00	0.00	0.00	0.00	100.00	2638.91	373232.51	834643.94	32° 1' 21.234" N	103° 23' 12.963" W
6000.00	3.83	65.98	5992.70	89.79	201.48	-80.84	0.00	0.00	0.00	0.00	100.00	2738.69	373233.34	834645.79	32° 1' 21.242" N	103° 23' 12.941" W
6100.00	3.83	65.98	6092.48	92.51	207.58	-83.29	0.00	0.00	0.00	0.00	100.00	2838.47	373234.17	834647.65	32° 1' 21.250" N	103° 23' 12.920" W
6200.00	3.83	65.98	6192.25	95.23	213.68	-85.74	0.00	0.00	0.00	0.00	100.00	2938.24	373235.00	834649.51	32° 1' 21.258" N	103° 23' 12.898" W
6300.00	3.83	65.98	6292.03	97.94	219.78	-88.19	0.00	0.00	0.00	0.00	100.00	3038.02	373235.83	834651.37	32° 1' 21.266" N	103° 23' 12.876" W
6400.00	3.83	65.98	6391.81	100.66	225.88	-90.63	0.00	0.00	0.00	0.00	100.00	3137.80	373236.66	834653.23	32° 1' 21.274" N	103° 23' 12.855" W
6500.00	3.83	65.98	6491.58	103.38	231.98	-93.08	0.00	0.00	0.00	0.00	100.00	3237.57	373237.49	834655.09	32° 1' 21.282" N	103° 23' 12.833" W
6600.00	3.83	65.98	6591.36	106.10	238.08	-95.53	0.00	0.00	0.00	0.00	100.00	3337.35	373238.32	834656.95	32° 1' 21.290" N	103° 23' 12.811" W
6700.00	3.83	65.98	6691.14	108.82	244.19	-97.98	0.00	0.00	0.00	0.00	100.00	3437.13	373239.14	834658.81	32° 1' 21.298" N	103° 23' 12.790" W
6800.00	3.83	65.98	6790.91	111.54	250.29	-100.43	0.00	0.00	0.00	0.00	100.00	3536.90	373239.97	834660.67	32° 1' 21.306" N	103° 23' 12.768" W
6900.00	3.83	65.98	6890.69	114.26	256.39	-102.88	0.00	0.00	0.00	0.00	100.00	3636.68	373240.80	834662.53	32° 1' 21.314" N	103° 23' 12.746" W
7000.00	3.83	65.98	6990.47	116.98	262.49	-105.32	0.00	0.00	0.00	0.00	100.00	3736.46	373241.63	834664.39	32° 1' 21.322" N	103° 23' 12.725" W
7100.00	3.83	65.98	7090.24	119.70	268.59	-107.77	0.00	0.00	0.00	0.00	100.00	3836.23	373242.46	834666.25	32° 1' 21.330" N	103° 23' 12.703" W
7200.00	3.83	65.98	7190.02	122.42	274.69	-110.22	0.00	0.00	0.00	0.00	100.00	3936.01	373243.29	834668.11	32° 1' 21.338" N	103° 23' 12.681" W
7300.00	3.83	65.98	7289.80	125.13	280.79	-112.67	0.00	0.00	0.00	0.00	100.00	4035.79	373244.12	834669.97	32° 1' 21.346" N	103° 23' 12.660" W
7400.00	3.83	65.98	7389.57	127.85	286.89	-115.12	0.00	0.00	0.00	0.00	100.00	4135.56	373244.95	834671.83	32° 1' 21.355" N	103° 23' 12.638" W
7500.00	3.83	65.98	7489.35	130.57	292.99	-117.56	0.00	0.00	0.00	0.00	100.00	4235.34	373245.77	834673.69	32° 1' 21.363" N	103° 23' 12.616" W
7600.00	3.83	65.98	7589.13	133.29	299.10	-120.01	0.00	0.00	0.00	0.00	100.00	4335.12	373246.60	834675.55	32° 1' 21.371" N	103° 23' 12.595" W
7700.00	3.83	65.98	7688.90	136.01	305.20	-122.46	0.00	0.00	0.00	0.00	100.00	4434.89	373247.43	834677.41	32° 1' 21.379" N	103° 23' 12.573" W
7800.00	3.83	65.98	7788.68	138.73	311.30	-124.91	0.00	0.00	0.00	0.00	100.00	4534.67	373248.26	834679.27	32° 1' 21.387" N	103° 23' 12.551" W
7900.00	3.83	65.98	7888.46	141.45	317.40	-127.36	0.00	0.00	0.00	0.00	100.00	4634.45	373249.09	834681.13	32° 1' 21.395" N	103° 23' 12.529" W
8000.00	3.83	65.98	7988.23	144.17	323.50	-129.80	0.00	0.00	0.00	0.00	100.00	4734.22	373249.92	834682.99	32° 1' 21.403" N	103° 23' 12.508" W
8100.00	3.83	65.98	8088.01	146.89	329.60	-132.25	0.00	0.00	0.00	0.00	100.00	4834.00	373250.75	834684.85	32° 1' 21.411" N	103° 23' 12.486" W
8200.00	3.83	65.98	8187.79	149.61	335.70	-134.70	0.00	0.00	0.00	0.00	100.00	4933.78	373251.58	834686.71	32° 1' 21.419" N	103° 23' 12.464" W
8300.00	3.83	65.98	8287.56	152.32	341.80	-137.15	0.00	0.00	0.00	0.00	100.00	5033.55	373252.40	834688.57	32° 1' 21.427" N	103° 23' 12.443" W
8400.00	3.83	65.98	8387.34	155.04	347.91	-139.60	0.00	0.00	0.00	0.00	100.00	5133.33	373253.23	834690.43	32° 1' 21.435" N	103° 23' 12.421" W
8500.00	3.83	65.98	8487.12	157.76	354.01	-142.04	0.00	0.00	0.00	0.00	100.00	5233.11	373254.06	834692.29	32° 1' 21.443" N	103° 23' 12.399" W
8600.00	3.83	65.98	8586.89	160.48	360.11	-144.49	0.00	0.00	0.00	0.00	100.00	5332.88	373254.89	834694.15	32° 1' 21.451" N	103° 23' 12.378" W
8700.00	3.83	65.98	8686.67	163.20	366.21	-146.94	0.00	0.00	0.00	0.00	100.00	5432.66	373255.72	834696.01	32° 1' 21.459" N	103° 23' 12.356" W
8800.00	3.83	65.98	8786.45	165.92	372.31	-149.39	0.00	0.00	0.00	0.00	100.00	5532.44	373256.55	834697.86	32° 1' 21.467" N	103° 23' 12.334" W
8900.00	3.83	65.98	8886.22	168.64	378.41	-151.84	0.00	0.00	0.00	0.00	100.00	5632.21	373257.38	834699.72	32° 1' 21.475" N	103° 23' 12.313" W
9000.00	3.83	65.98	8986.00	171.36	384.51	-154.29	0.00	0.00	0.00	0.00	100.00	5731.99	373258.21	834701.58	32° 1' 21.483" N	103° 23' 12.291" W
9100.00	3.83	65.98	9085.78	174.08	390.61	-156.73	0.00	0.00	0.00	0.00	100.00	5831.77	373259.03	834703.44	32° 1' 21.491" N	103° 23' 12.269" W
9200.00	3.83	65.98	9185.55	176.80	396.72	-159.18	0.00	0.00	0.00	0.00	100.00	5931.54	373259.86	834705.30	32° 1' 21.499" N	103° 23' 12.248" W
9300.00	3.83	65.98	9285.33	179.51	402.82	-161.63	0.00	0.00	0.00	0.00	100.00	6031.32	373260.69	834707.16	32° 1' 21.507" N	103° 23' 12.226" W
9400.00	3.83	65.98	9385.11	182.23	408.92	-164.08	0.00	0.00	0.00	0.00	100.00	6131.10	373261.52	834709.02	32° 1' 21.515" N	103° 23' 12.204" W
9500.00	3.83	65.98	9484.88	184.95	415.02	-166.53	0.00	0.00	0.00	0.00	100.00	6230.87	373262.35	834710.88	32° 1' 21.523" N	103° 23' 12.183" W
9600.00	3.83	65.98	9584.66	187.67	421.12	-168.97	0.00	0.00	0.00	0.00	100.00	6330.65	373263.18	834712.74	32° 1' 21.531" N	103° 23' 12.161" W
9700.00	3.83	65.98	9684.44	190.39	427.22	-171.42	0.00	0.00	0.00	0.00	100.00	6430.43	373264.01	834714.60	32° 1' 21.539" N	103° 23' 12.139" W
9800.00	3.83	65.98	9784.21	193.11	433.32	-173.87	0.00	0.00	0.00	0.00	100.00	6530.20	373264.84	834716.46	32° 1' 21.547" N	103° 23' 12.118" W
9900.00	3.83	65.98	9883.99	195.83	439.42	-176.32	0.00	0.00	0.00	0.00	100.00	6629.98	373265.66	834718.32	32° 1' 21.555" N	103° 23' 12.096" W
10000.00	2.47	65.98	9983.84	198.06	444.44	-178.33	1.36	-1.36	0.00	180.00	100.00	6729.83	373266.35	834719.85	32° 1' 21.562" N	103° 23' 12.078" W
10100.00	0.97	65.98	10083.79	199.29	447.19	-179.43	1.50	-1.50	0.00	180.00	100.00	6829.78	373266.72	834720.69	32° 1' 21.566" N	103° 23' 12.068" W
10200.00	0.00	179.45	10183.78	199.63	447.96	-179.74	0.97	-0.97	113.47	180.00	100.00	6929.77	373266.82	834720.92	32° 1' 21.567" N	103° 23' 12.065" W
10300.00	4.28	179.45	10283.69	195.90	448.00	-176.01	4.28	4.28	0.00	179.45	100.00	7029.68	373265.69	834720.93	32° 1' 21.555" N	103° 23' 12.065" W
10400.00	16.40	179.45	10381.88	177.99	448.17	-158.11	12.12	12.12	0.00	0.00	100.00	7127.87	373260.23	834720.99	32° 1' 21.501" N	103° 23' 12.065" W
10500.00	28.52	179.45	10474.13	139.87	448.53	-120.01	12.12	12.12	0.00	0.00	100.00	7220.12	373248.61	834721.10	32° 1' 21.386" N	103° 23' 12.065" W
10600.00	40.64	179.45	10556.31	83.22	449.08	-63.40	12.12	12.12	0.00	0.00	100.00	7302.30	373231.34	834721.26	32° 1' 21.216" N	103° 23' 12.065" W
10700.00	52.76	179.45	10624.77	10.59	449.77	9.20	12.12	12.12	0.00	0.00	100.00	7370.76	373209.20	834721.48	32° 1' 20.997" N	103° 23' 12.065" W
10800.00	64.88	179.45	10676.45	-74.80	450.59	94.54	12.12	12.12	0.00	0.00	100.00	7422.44	373183.18	834721.73	32° 1' 20.739" N	103° 23' 12.065" W
10900.00	77.00	179.45	10709.05	-169.14	451.50	188.82	12.12	12.12	0.00	0.00	100.00	7455.04	373154.42	834722.00	32° 1' 20.454" N	103° 23' 12.064" W
11000.00	89.12	179.45	10721.12	-268.21	452.45	287.85	12.12	12.12	0.00	0.00	100.00	7467.11	373124.23	834722.29	32° 1' 20.156" N	103° 23' 12.064" W
11100.00	89.84	183.21	10722.03	-368.16	450.13	387.60	3.83	0.72	3.76	79.15	100.00	7468.02	373093.76	834721.58	32° 1' 19.854" N	103° 23' 12.075" W
11200.00	89.84	187.21	10722.31	-467.73	441.05	486.67	4.00	-0.00	4.00	90.02	100.00	7468.30	373063.41	834718.82	32° 1' 19.554" N	103° 23' 12.111" W
11300.00	89.84	191.21	10722.60	-566.42	425.04	584.56	4.00	-0.00	4.00	90.01	100.00	7468.59	373033.33	834713.94	32° 1' 19.257" N	103° 23' 12.170" W
11400.00	89.84	195.21	10722.88	-663.75	402.19	680.79	4.00	0.00	4.00	90.00	100.00	7468.87	373003.67	834706.97	32° 1' 18.964" N	103° 23' 12.254" W
11500.00	89.84	199.21	10723.16	-759.25	372.61	774.90	4.00	0.00	4.00	89.98	100.00	7469.15	372974.56	834697.96	32° 1' 18.677" N	103° 23' 12.362" W

Survey Report

MD UsFt	Inc °	Azi °	TVD UsFt	NS UsFt	EW UsFt	VS UsFt	DLS (°/100 UsFt)	BR (°/100 UsFt)	TR (°/100 UsFt)	TF °	CL UsFt	TVD SS UsFt	Map Northing US survey foot	Map Easting US survey foot	Latitude	Longitude
11600.00	89.84	195.69	10723.44	-854.64	342.63	868.87	3.52	-0.00	-3.52	-90.03	100.00	7469.43	372945.48	834688.82	32° 1' 18.390" N	103° 23' 12.471" W
11700.00	89.84	191.69	10723.72	-951.78	318.97	964.88	4.00	-0.00	-4.00	-90.02	100.00	7469.71	372915.88	834681.61	32° 1' 18.098" N	103° 23' 12.558" W
11800.00	89.84	187.69	10724.01	-1050.33	302.14	1062.60	4.00	-0.00	-4.00	-90.01	100.00	7470.00	372885.84	834676.48	32° 1' 17.801" N	103° 23' 12.620" W
11900.00	89.84	183.69	10724.29	-1149.82	292.23	1161.55	4.00	0.00	-4.00	-90.00	100.00	7470.28	372855.51	834673.46	32° 1' 17.501" N	103° 23' 12.659" W
12000.00	89.84	179.69	10724.57	-1249.75	289.29	1261.26	4.00	0.00	-4.00	-89.98	100.00	7470.56	372825.05	834672.56	32° 1' 17.200" N	103° 23' 12.672" W
12100.00	89.84	179.45	10724.85	-1349.75	290.04	1361.20	0.24	0.00	-0.24	-89.97	100.00	7470.84	372794.57	834672.79	32° 1' 16.898" N	103° 23' 12.673" W
12200.00	89.84	179.45	10725.13	-1449.74	291.00	1461.14	0.00	0.00	0.00	0.00	100.00	7471.12	372764.10	834673.08	32° 1' 16.596" N	103° 23' 12.672" W
12300.00	89.84	179.45	10725.41	-1549.74	291.96	1561.08	0.00	0.00	0.00	0.00	100.00	7471.40	372733.62	834673.37	32° 1' 16.295" N	103° 23' 12.672" W
12400.00	89.84	179.45	10725.69	-1649.73	292.92	1661.02	0.00	0.00	0.00	0.00	100.00	7471.68	372703.14	834673.67	32° 1' 15.993" N	103° 23' 12.672" W
12500.00	89.84	179.45	10725.97	-1749.73	293.88	1760.96	0.00	0.00	0.00	0.00	100.00	7471.96	372672.66	834673.96	32° 1' 15.692" N	103° 23' 12.671" W
12600.00	89.84	179.45	10726.25	-1849.72	294.84	1860.90	0.00	0.00	0.00	0.00	100.00	7472.24	372642.18	834674.25	32° 1' 15.390" N	103° 23' 12.671" W
12700.00	89.84	179.45	10726.53	-1949.72	295.80	1960.84	0.00	0.00	0.00	0.00	100.00	7472.52	372611.70	834674.54	32° 1' 15.088" N	103° 23' 12.671" W
12800.00	89.84	179.45	10726.81	-2049.71	296.76	2060.78	0.00	0.00	0.00	0.00	100.00	7472.80	372581.23	834674.84	32° 1' 14.787" N	103° 23' 12.671" W
12900.00	89.84	179.45	10727.08	-2149.71	297.72	2160.72	0.00	0.00	0.00	0.00	100.00	7473.07	372550.75	834675.13	32° 1' 14.485" N	103° 23' 12.670" W
13000.00	89.84	179.45	10727.36	-2249.70	298.68	2260.66	0.00	0.00	0.00	0.00	100.00	7473.35	372520.27	834675.42	32° 1' 14.183" N	103° 23' 12.670" W
13100.00	89.84	179.45	10727.64	-2349.70	299.64	2360.60	0.00	0.00	0.00	0.00	100.00	7473.63	372489.79	834675.71	32° 1' 13.882" N	103° 23' 12.670" W
13200.00	89.84	179.45	10727.92	-2449.69	300.60	2460.54	0.00	0.00	0.00	0.00	100.00	7473.91	372459.31	834676.01	32° 1' 13.580" N	103° 23' 12.669" W
13300.00	89.84	179.45	10728.20	-2549.69	301.56	2560.48	0.00	0.00	0.00	0.00	100.00	7474.19	372428.83	834676.30	32° 1' 13.279" N	103° 23' 12.669" W
13400.00	89.84	179.45	10728.48	-2649.68	302.52	2660.42	0.00	0.00	0.00	0.00	100.00	7474.47	372398.35	834676.59	32° 1' 12.977" N	103° 23' 12.669" W
13500.00	89.84	179.45	10728.76	-2749.68	303.48	2760.36	0.00	0.00	0.00	0.00	100.00	7474.75	372367.88	834676.88	32° 1' 12.675" N	103° 23' 12.668" W
13600.00	89.84	179.45	10729.04	-2849.67	304.44	2860.30	0.00	0.00	0.00	0.00	100.00	7475.03	372337.40	834677.18	32° 1' 12.374" N	103° 23' 12.668" W
13700.00	89.84	179.45	10729.32	-2949.67	305.40	2960.24	0.00	0.00	0.00	0.00	100.00	7475.31	372306.92	834677.47	32° 1' 12.072" N	103° 23' 12.668" W
13800.00	89.84	179.45	10729.60	-3049.66	306.36	3060.18	0.00	0.00	0.00	0.00	100.00	7475.59	372276.44	834677.76	32° 1' 11.771" N	103° 23' 12.668" W
13900.00	89.84	179.45	10729.88	-3149.66	307.32	3160.12	0.00	0.00	0.00	0.00	100.00	7475.87	372245.96	834678.05	32° 1' 11.469" N	103° 23' 12.667" W
14000.00	89.84	179.45	10730.16	-3249.65	308.28	3260.07	0.00	0.00	0.00	0.00	100.00	7476.15	372215.48	834678.35	32° 1' 11.167" N	103° 23' 12.667" W
14100.00	89.84	179.45	10730.44	-3349.65	309.24	3360.01	0.00	0.00	0.00	0.00	100.00	7476.43	372185.01	834678.64	32° 1' 10.866" N	103° 23' 12.667" W
14200.00	89.84	179.45	10730.71	-3449.64	310.20	3459.95	0.00	0.00	0.00	0.00	100.00	7476.70	372154.53	834678.93	32° 1' 10.564" N	103° 23' 12.666" W
14300.00	89.84	179.45	10730.99	-3549.64	311.16	3559.89	0.00	0.00	0.00	0.00	100.00	7476.98	372124.05	834679.22	32° 1' 10.263" N	103° 23' 12.666" W
14400.00	89.84	179.45	10731.27	-3649.63	312.12	3659.83	0.00	0.00	0.00	0.00	100.00	7477.26	372093.57	834679.52	32° 1' 9.961" N	103° 23' 12.666" W
14500.00	89.84	179.45	10731.55	-3749.63	313.08	3759.77	0.00	0.00	0.00	0.00	100.00	7477.54	372063.09	834679.81	32° 1' 9.659" N	103° 23' 12.665" W
14600.00	89.84	179.45	10731.83	-3849.62	314.04	3859.71	0.00	0.00	0.00	0.00	100.00	7477.82	372032.61	834680.10	32° 1' 9.358" N	103° 23' 12.665" W
14700.00	89.84	179.45	10732.11	-3949.62	315.00	3959.65	0.00	0.00	0.00	0.00	100.00	7478.10	372002.14	834680.40	32° 1' 9.056" N	103° 23' 12.665" W
14800.00	89.84	179.45	10732.39	-4049.61	315.95	4059.59	0.00	0.00	0.00	0.00	100.00	7478.38	371971.66	834680.69	32° 1' 8.755" N	103° 23' 12.665" W
14900.00	89.84	179.45	10732.67	-4149.61	316.91	4159.53	0.00	0.00	0.00	0.00	100.00	7478.66	371941.18	834680.98	32° 1' 8.453" N	103° 23' 12.664" W
15000.00	89.84	179.45	10732.95	-4249.60	317.87	4259.47	0.00	0.00	0.00	0.00	100.00	7478.94	371910.70	834681.27	32° 1' 8.151" N	103° 23' 12.664" W
15100.00	89.84	179.45	10733.23	-4349.60	318.83	4359.41	0.00	0.00	0.00	0.00	100.00	7479.22	371880.22	834681.57	32° 1' 7.850" N	103° 23' 12.664" W
15200.00	89.84	179.45	10733.51	-4449.59	319.79	4459.35	0.00	0.00	0.00	0.00	100.00	7479.50	371849.74	834681.86	32° 1' 7.548" N	103° 23' 12.663" W
15300.00	89.84	179.45	10733.79	-4549.59	320.75	4559.29	0.00	0.00	0.00	0.00	100.00	7479.78	371819.26	834682.15	32° 1' 7.246" N	103° 23' 12.663" W
15400.00	89.84	179.45	10734.07	-4649.58	321.71	4659.23	0.00	0.00	0.00	0.00	100.00	7480.06	371788.79	834682.44	32° 1' 6.945" N	103° 23' 12.663" W
15500.00	89.84	179.45	10734.34	-4749.58	322.67	4759.17	0.00	0.00	0.00	0.00	100.00	7480.33	371758.31	834682.74	32° 1' 6.643" N	103° 23' 12.662" W
15600.00	89.84	179.45	10734.62	-4849.57	323.63	4859.11	0.00	0.00	0.00	0.00	100.00	7480.61	371727.83	834683.03	32° 1' 6.342" N	103° 23' 12.662" W
15700.00	89.84	179.45	10734.90	-4949.57	324.59	4959.05	0.00	0.00	0.00	0.00	100.00	7480.89	371697.35	834683.32	32° 1' 6.040" N	103° 23' 12.662" W
15800.00	89.84	179.45	10735.18	-5049.56	325.55	5058.99	0.00	0.00	0.00	0.00	100.00	7481.17	371666.87	834683.61	32° 1' 5.738" N	103° 23' 12.662" W
15900.00	89.84	179.45	10735.46	-5149.56	326.51	5158.93	0.00	0.00	0.00	0.00	100.00	7481.45	371636.39	834683.91	32° 1' 5.437" N	103° 23' 12.661" W
16000.00	89.84	179.45	10735.74	-5249.55	327.47	5258.88	0.00	0.00	0.00	0.00	100.00	7481.73	371605.92	834684.20	32° 1' 5.135" N	103° 23' 12.661" W
16100.00	89.84	179.45	10736.02	-5349.55	328.43	5358.82	0.00	0.00	0.00	0.00	100.00	7482.01	371575.44	834684.49	32° 1' 4.834" N	103° 23' 12.661" W
16200.00	89.84	179.45	10736.30	-5449.54	329.39	5458.76	0.00	0.00	0.00	0.00	100.00	7482.29	371544.96	834684.78	32° 1' 4.532" N	103° 23' 12.660" W
16300.00	89.84	179.45	10736.58	-5549.54	330.35	5558.70	0.00	0.00	0.00	0.00	100.00	7482.57	371514.48	834685.08	32° 1' 4.230" N	103° 23' 12.660" W
16400.00	89.84	179.45	10736.86	-5649.53	331.31	5658.64	0.00	0.00	0.00	0.00	100.00	7482.85	371484.00	834685.37	32° 1' 3.929" N	103° 23' 12.660" W
16500.00	89.84	179.45	10737.14	-5749.53	332.27	5758.58	0.00	0.00	0.00	0.00	100.00	7483.13	371453.52	834685.66	32° 1' 3.627" N	103° 23' 12.660" W
16600.00	89.84	179.45	10737.42	-5849.52	333.23	5858.52	0.00	0.00	0.00	0.00	100.00	7483.41	371423.05	834685.95	32° 1' 3.326" N	103° 23' 12.659" W
16700.00	89.84	179.45	10737.70	-5949.52	334.19	5958.46	0.00	0.00	0.00	0.00	100.00	7483.69	371392.57	834686.25	32° 1' 3.024" N	103° 23' 12.659" W
16800.00	89.84	179.45	10737.98	-6049.51	335.15	6058.40	0.00	0.00	0.00	0.00	100.00	7483.97	371362.09	834686.54	32° 1' 2.722" N	103° 23' 12.659" W
16900.00	89.84	179.45	10738.25	-6149.51	336.11	6158.34	0.00	0.00	0.00	0.00	100.00	7484.24	371331.61	834686.83	32° 1' 2.421" N	103° 23' 12.658" W
17000.00	89.84	179.45	10738.53	-6249.50	337.07	6258.28	0.00	0.00	0.00	0.00	100.00	7484.52	371301.13	834687.12	32° 1' 2.119" N	103° 23' 12.658" W
17100.00	89.84	179.45	10738.81	-6349.50	338.03	6358.22	0.00	0.00	0.00	0.00	100.00	7484.80	371270.65	834687.42	32° 1' 1.817" N	103° 23' 12.658" W
17200.00	89.84	179.45	10739.09	-6449.49	338.99	6458.16	0.00	0.00	0.00	0.00	100.00	7485.08	371240.17	834687.71	32° 1' 1.516" N	103° 23' 12.657" W
17300.00	89.84	179.45	10739.37	-6549.49	339.95	6558.10	0.00	0.00	0.00	0.00	100.00	7485.36	371209.70	834688.00	32° 1' 1.214" N	103° 23' 12.657" W
17400.00	89.84	179.45	10739.65	-6649.48	340.91	6658.04	0.00	0.00	0.00	0.00	100.00	7485.64	371179.22	834688.29	32° 1' 0.913" N	103° 23' 12.657" W
17500.00	89.84	179.45	10739.93	-6749.48	341.87	6757.98	0.00	0.00	0.00	0.00	100.00	7485.92	371148.74	834688.59	32° 1' 0.611" N	103° 23' 12.657" W
17600.00	89.84	179.45	10740.21	-6849.47	342.83	6857.92	0.00	0.00	0.00	0.00	100.00	7486.20	371118.26	834688.88	32° 1' 0.309" N	103° 23' 12.656" W
17700.00	89.84	179.45	10740.49	-6949.47	343.79	6957.86	0.00	0.00	0.00	0.00	100.00	7486.48	371087.78	834689.17	32° 1' 0.008" N	103° 23' 12.656" W
17800.00	89.84	179.45	10740.77	-7049.46	344.75	7057.80	0.00	0.00	0.00	0.00	100.00	7486.76	371057.30	834689.47	32° 0' 59.706" N	103° 23' 12.656" W
17900.00	89.84	179.45	10741.05	-7149.46	345.71	7157.75	0.00	0.00	0.00	0.00	100.00	7487.04	371026.83	834689.76	32° 0' 59.405" N	103° 23' 12.655" W
18000.00	89.84	179.45	10741.33	-7249.45	346.67	7257.69	0.00	0.00	0.00	0.00	100.00	7487.32	370996.35	834690.05	32° 0' 59.103" N	103° 23' 12.655" W
18100.00	89.84	179.45	10741.61	-7349.45	347.63	7357.63	0.00	0.00	0.00	0.00	100.00	7487.60	370965.87	834690.34	32° 0' 58.801" N	103° 23' 12.655" W
18200.00	89.84	179.45	10741.88	-7449.44	348.59	7457.57	0.00	0.00	0.00	0.00	100.00	7487.87	370935.39	834690.64	32° 0' 58.500" N	103° 23' 12.654" W
18300.00	89.84	179.45	10742.16	-7549.44	349.55	7557.51	0.00	0.00	0.00	0.00	100.00	7488.15	370904.91	834690.93	32° 0' 58.198" N	103° 23' 12.654" W
18400.00	89.84	179.45	10742.44	-7649.43	350.51	7657.45	0.00	0.00	0.00	0.00	100.00	7488.43	370874.43	834691.22	32° 0' 57.897" N	103° 23' 12.654" W
18500.00	89.84	179.45	10742.72	-7749.43	351.47	7757.39	0.00	0.00	0.00	0.00	100.00	7488.71	370843.96	834691.51	32° 0' 57.595" N	103° 23' 12.654" W
18600.00	89.84	179.45	10743.00	-7849.42	352.43	7857.33	0.00	0.00	0.00	0.00	100.00	7488.99	370813.48	834691.81	32° 0' 57.293" N	103° 23' 12.653" W
18700.00	89.84	179.45	10743.28	-7949.42	353.39	7957.27	0.00	0.00	0.00	0.00	100.00	7489.27	370783.00	834692.10	32° 0' 56.992" N	103° 23' 12.653" W
18800.00	89.84	179.45	10743.56	-8049.41	354.35	8057.21	0.00	0.00	0.00	0.00	100.00	7489.55	370752.52	834692.39	32° 0' 56.690" N	103° 23' 12.653" W

Titus Oil & Gas Production, LLC - El Campeon Fed Com 123H

1. Geologic Formations

TVD of target	10,743' EOL	Pilot hole depth	NA
MD at TD:	18,816'	Deepest expected fresh water:	250'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1035	Water	
Top of Salt	1518	Salt	
Base of Salt	5009	Salt	
Lamar	5349	Salt Water	
Bell Canyon	5391	Oil/Gas	
Cherry Canyon	6426	Oil/Gas	
Brushy Canyon	7768	Oil/Gas	
Bone Spring Lime	9277	Oil/Gas	
Leonard	9336	Oil/Gas	
1st Bone Spring Sand	10475	Target Oil/Gas	
2nd Bone Spring Sand	11024	Not Penetrated	
3rd Bone Spring Sand	12149	Not Penetrated	
Wolfcamp	12533	Not Penetrated	
X	X	Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5”	0	1060	13.375”	54.5	J55	STC	2.33	1.18	8.90
12.25”	0	5375	9.625”	40	J55	LTC	1.13	0.95	2.42
8.75”	0	18,816	5.5”	17	P110	LTC	1.42	2.55	2.44
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface.
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Titus Oil & Gas Production, LLC - El Campeon Fed Com 123H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	440	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Inter.	1040	12.7	2.0	9.6	16	Lead: 35:65:6 C Blend
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl
5.5 Prod	750	11.9	2.5	19	72	Lead: 50:50:10 H Blend
	2180	14.4	1.24	5.7	19	Tail: 50:50:2 Class H Blend

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results
Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0’	50%
1st Intermediate	0’	50%
Production	4,875'	25% OH in Lateral (KOP to EOL) – 40% OH in Vertical

4. Pressure Control Equipment

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

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

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

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

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

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Saturated Brine	10 - 10.2	28-34	N/C
9-5/8" Int shoe	Lateral TD	Cut Brine	8.6 - 9.4	28-34	N/C

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

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

6. Logging and Testing Procedures

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

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
Y	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5255 psi at 10743' TVD
Abnormal Temperature	NO 165 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

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

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

8. Other Facets of Operation

Y	Is it a walking operation?
N	Is casing pre-set?

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

APD ID: 10400053810 **Submission Date:** 01/29/2020

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

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

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

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? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): **PWD surface owner:**

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 Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM **Well Number:** 123H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

06/25/2020

APD ID: 10400053810

Submission Date: 01/29/2020

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON FED COM

Well Number: 123H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001532

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

OCD – HOBBS
06/25/2020
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Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-47393	96672	WC-025 G-08 S263412K; Bone Spring

4 Property Code	5 Property Name	6 Well Number
328509	EL CAMPEON FED COM	123H
7 OGRID No.	**8 Operator Name**	**9 Elevation**
373986	TITUS OIL & GAS PRODUCTION LLC	3173'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	20	26-S	35-E		355'	SOUTH	1927'	EAST	LEA

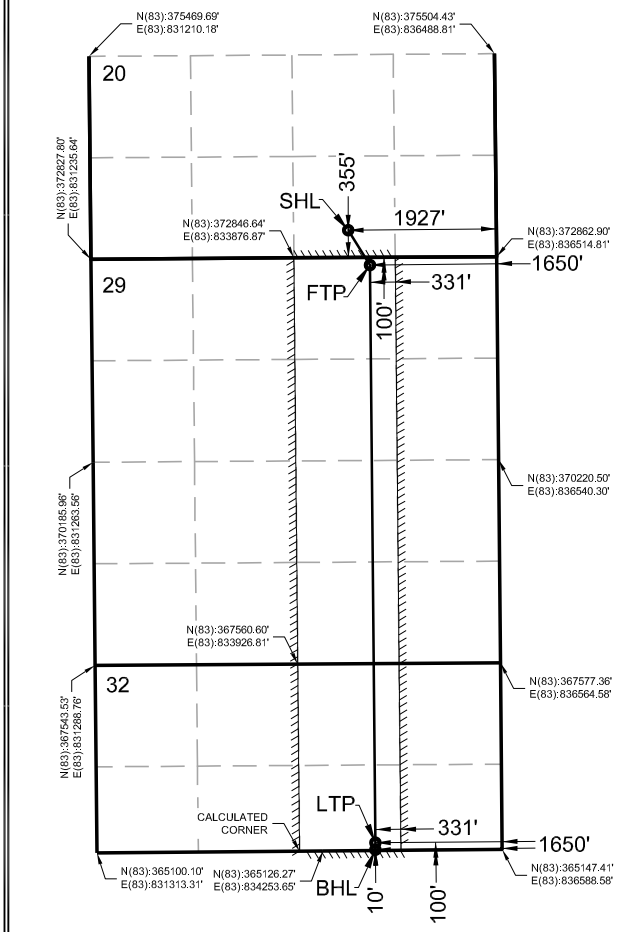
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	32	26-S	35-E		10'	SOUTH	1650'	EAST	LEA

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
240	Y		

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

[16]



SURFACE HOLE LOCATION (SHL)
NEW MEXICO EAST - NAD 83
X= 834584.38 LAT.= 32.02249347° N
Y= 373205.98 LONG.= 103.38712712° W
NEW MEXICO EAST - NAD 27
X= 793396.04 LAT.= 32.02236691° N
Y= 373148.79 LONG.= 103.38666737° W
355' FSL, 1927' FEL - SECTION 20

FIRST TAKE POINT (FTP)
NEW MEXICO EAST - NAD 83
X=834865.80 LAT.= 32.02124091° N
Y=372752.74 LONG.= 103.38623203° W
NEW MEXICO EAST - NAD 27
X=793677.43 LAT.= 32.02111433° N
Y=372695.56 LONG.= 103.38577238° W
100' FNL, 1650' FEL - SECTION 29
100' FNL, 331' FEL - LEASE

LAST TAKE POINT (LTP)
NEW MEXICO EAST - NAD 83
X=834937.66 LAT.= 32.00056879° N
Y=365232.47 LONG.= 103.38621278° W
NEW MEXICO EAST - NAD 27
X=793748.97 LAT.= 32.00044211° N
Y=365175.49 LONG.= 103.38575429° W
100' FSL, 1650' FEL - SECTION 32
100' FSL, 331' FEL - LEASE

BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST - NAD 83
X=834938.55 LAT.= 32.00032140° N
Y=365142.47 LONG.= 103.38621246° W
NEW MEXICO EAST - NAD 27
X=793749.85 LAT.= 32.00019472° N
Y=365085.50 LONG.= 103.38575397° W
10' FSL, 1650' FEL - SECTION 32
10' FSL, 331' FEL - LEASE

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature — Date: 1/22/2020

Ryan DeLong - Regulatory Manager
Printed Name

rdelong@titusoil.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey

Signature and Seal of Professional Surveyor

GARRETT J SMELKER
NEW MEXICO
25036
01/15/2020
PROFESSIONAL SURVEYOR

Certificate Number

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
Titus Oil & Gas Production, LLC	El Campeon Fed Com	123H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	20	26S	35E		553	SOUTH	1477	EAST	LEA

Latitude	Longitude	NAD
32.023031	-103.385676	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	29	26S	35E		100	NORTH	1650	EAST	LEA

Latitude	Longitude	NAD
32.02124091	-103.38623203	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	32	26S	35E	2	100	SOUTH	1650	EAST	LEA

Latitude	Longitude	NAD
32.00044211	-103.38575429	83

Is this well the defining well for the Horizontal Spacing Unit? NO

Is this well an infill well? YES

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number
Titus Oil & Gas Production LLC	El Campeon Fed Com	403H

KZ 06/29/2018

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Original
to Appropriate
District Office

OCD – HOBBS
06/25/2020
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GAS CAPTURE PLAN

Date: 1/17/2020

☒ Original
☐ Amended - Reason for Amendment:

Operator & OGRID No.: 373986

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – El Campeon CTB 20

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
El Campeon South Fed Com 111H		Sec 29, T26S, R35E	1828' FNL & 632' FWL			El Campeon CTB 20 will be utilized
El Campeon South Fed Com 201H		Sec 29, T26S, R35E	1828' FNL & 707' FEL			El Campeon CTB 20 will be utilized
El Campeon South Fed Com 321H		Sec 29, T26S, R35E	1828' FNL & 657' FWL			El Campeon CTB 20 will be utilized
El Campeon South Fed Com 431H		Sec 29, T26S, R35E	1828' FNL & 682' FWL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 032H		Sec 20, T26S, R35E	353' FSL & 2077' FWL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 112H		Sec 20, T26S, R35E	353' FSL & 2107' FWL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 122H		Sec 20, T26S, R35E	353' FSL & 2137' FWL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 322H		Sec 20, T26S, R35E	579' FSL & 2077' FWL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 432H		Sec 20, T26S, R35E	579' FSL & 2137' FWL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 512H		Sec 20, T26S, R35E	579' FSL & 2107' FWL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 123H	30-025-47393	Sec 20, T26S, R35E	355' FSL & 1927' FEL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 203H		Sec 20, T26S, R35E	355' FSL & 1957' FEL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 323H		Sec 20, T26S, R35E	581' FSL & 1912' FEL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 403H		Sec 20, T26S, R35E	581' FSL & 1972' FEL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 513H		Sec 20, T26S, R35E	581' FSL & 1942' FEL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 034H		Sec 20, T26S, R35E	332' FSL & 590' FEL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 114H		Sec 20, T26S, R35E	332' FSL & 650' FEL			El Campeon CTB 20 will be utilized
El Campeon Fed Com 204H		Sec 20, T26S, R35E	332' FSL & 620' FEL			El Campeon CTB 20 will be utilized

El Campeon South 404H		Sec 20, T26S, R35E	558' FSL & 590' FEL			El Campeon CTB 20 will be utilized
El Campeon South 514H		Sec 20, T26S, R35E	558' FSL & 620' FEL			El Campeon CTB 20 will be utilized

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, where a gas transporter system is in place. The gas produced from production facility is dedicated to Lucid and is connected to a Lucid low pressure gathering system located in Lea County, New Mexico. Titus provides (periodically) to Lucid a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Titus and Lucid have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at a Lucid's Red Hills Plant located in Sec 13, T24S, R33E near Jal, NM. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the well(s) start flowing through the production facilities, unless there are operational issues on Lucid's system at that time. Based on current information, it is Titus's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines