Form 3160-3 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BURGALL OF LAND MANAGEMENT

OCD – HOBBS 09/29/2020 RECEIVED

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

	1	,
5. Lease	Serial No.	

BUREAU OF LA	AND MANAGEMEN	T			
APPLICATION FOR PER	RMIT TO DRILL OR	REENTER	6. I	f Indian, Allotee or Tri	be Name
1a. Type of work: DRILL	REENTER		7. I	f Unit or CA Agreemer	nt, Name and No.
1b. Type of Well: Oil Well Gas	Well Other		0.1	Lease Name and Well N	Va.
1c. Type of Completion: Hydraulic Fracturin	g Single Zone	Multiple Zone		[329	
2. Name of Operator	[373986]		9. A	API Well No. 30-02	25-47828
3a. Address	3b. Phone N	No. (include area c	rode) 10.	Field and Pool, or Exp	oloratory [96776]
4. Location of Well (Report location clearly and in	accordance with any State	e requirements.*)	11.	Sec., T. R. M. or Blk. a	and Survey or Area
At surface					
At proposed prod. zone					
14. Distance in miles and direction from nearest to	wn or post office*		12.	County or Parish	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of a	icres in lease	17. Spacing Un	nit dedicated to this we	511
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Propose	ed Depth	20. BLM/BIA	Bond No. in file	
21. Elevations (Show whether DF, KDB, RT, GL, e	etc.) 22. Approx	imate date work w	ill start* 23.	Estimated duration	
	24. Attac	chments	'		
The following, completed in accordance with the re (as applicable)	equirements of Onshore Oil	l and Gas Order No	o. 1, and the Hydra	ulic Fracturing rule per	r 43 CFR 3162.3-3
Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on Nationa SUPO must be filed with the appropriate Forest).		Item 20 above 5. Operator cert	e). ification.	ess covered by an existion and/or plans as may be	
		BLM.			
25. Signature	Name	e (Printed/Typed)		Date	
Title					
Approved by (Signature)	Name	e (Printed/Typed)		Date	
Title	Office	e			
Application approval does not warrant or certify the applicant to conduct operations thereon. Conditions of approval, if any, are attached.	at the applicant holds legal	or equitable title to	o those rights in the	e subject lease which w	vould entitle the
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. So of the United States any false, fictitious or fraudule					partment or agency
GCP Rec 09/29/2020			MONG	Kz	

 $\frac{\mathbf{SL}}{\text{(Continued on page 2)}}$

APPROVED WITH CONDITIONS
Approval Date: 09/15/2020

KZ 10/18/2020

*(Instructions on page 2)



Well Type: OIL WELL

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

Application Data Report

09/29/2020

APD ID: 10400043125 **Submission Date:** 07/10/2019

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400043125 **Tie to previous NOS?** N **Submission Date:** 07/10/2019

Well Work Type: Drill

BLM Office: CARLSBAD User: Ryan DeLong Title: Regulatory Manager

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

Lease number: NMNM139373 Lease Acres: 80

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 SOUTH FED COM Well Number: 431H Well API Number:

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

S263619C

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

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

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? NO New surface disturbance?

Type of Well Pad: MULTIPLE WELL Multiple Well Pad Name: EL Number: 1

Well Class: HORIZONTAL

CAMPEON SOUTH PAD

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: 25 FT Distance to lease line: 682 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: EL_CAMPEON_SOUTH_FED_COM_431H_C_102_20200125102106.pdf

El_Campeon_South_Fed_Com_431H___Additional_Points_20200125102112.pdf

Well work start Date: 04/01/2020 Duration: 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number: Reference Datum:

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	182 8	FNL	682	FW L	26S	35E	29	Tract E	32.01650 65	- 103.3957 308	LEA	NEW MEXI CO	1	F	FEE	317 0	0	0	
KOP Leg #1	216 7	FNL	991	FW L	26S	35E	29	Tract E	32.01557 1	- 103.3947 33	LEA	NEW MEXI CO	–	F	FEE	- 900 7	121 97	121 77	

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

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	DVT	Will this well produce from this lease?
PPP Leg #1-1	264 2	FSL	991	FW L	26S	35E	29	Tract L	32.01426 5	- 103.3947 32	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 139373	- 957 2	130 00	127 42	
PPP Leg #1-2	0	FNL	991	FW L	26S	35E	32	Tract D	32.00700 2	- 103.3947 22	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 957 2	156 00	127 42	
EXIT Leg #1	10	FSL	989	FW L	26S	35E	32	Lot 4	32.00031 98	- 103.3947 172	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 956 5	180 72	127 35	
BHL Leg #1	10	FSL	989	FW L	26S	35E	32	Lot 4	32.00031 98	- 103.3947 172	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 956 5	180 72	127 35	



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

Drilling Plan Data Report

09/29/2020

APD ID: 10400043125 **Submission Date:** 07/10/2019

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

Well Type: OIL WELL Well Work Type: Drill

Highlighted data reflects the most recent changes

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Section 1 - Geologic Formations

Formation	Farmatian Nama	Flavotian	True Vertical		Lithelesiae	Misses December	Producing
ID 407040	Formation Name QUATERNARY	Elevation	Depth 0	Depth	Lithologies	Mineral Resources	
487642	QUATERNARY	3171	0	0		NONE	N
487643	RUSTLER	2145	1035	1035		USEABLE WATER	N
487841	SALADO	1638	1542	1542		NONE	N
487846	BASE OF SALT	-1854	5034	5034		NONE	N
487847	LAMAR	-2169	5340	5340		NONE	N
487848	DELAWARE	-2204	5375	5375		NONE	N
487851	BONE SPRING LIME	-6070	9241	9241		NATURAL GAS, OIL	N
487871	BONE SPRING 1ST	-7303	10474	10474		NATURAL GAS, OIL	N
487890	BONE SPRING 2ND	-7857	11028	11028		NATURAL GAS, OIL	N
487891	BONE SPRING 3RD	-8947	12118	12138		NATURAL GAS, OIL	N
487892	WOLFCAMP	-9326	12497	12550		NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M Rating Depth: 12735

Equipment: See attached 5M Annular Variance Well Control plan for Titus Oil & Dil & Dil

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. A variance is requested for the use of a 5M annular with the 10M BOPE. See attached

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

5M Annular Variance Well Control plan.

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:

10M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200624151421.pdf

BOP Diagram Attachment:

10M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200624151432.pdf

Pressure Rating (PSI): 3M Rating Depth: 11800

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? NO

Variance request:

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_20200124104526.pdf

BOP Diagram Attachment:

3M___H_P_614__BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200124104536.pdf

Section 3 - Casing

1 Casing ID	String Type	Hole Size	Csg Size	S Condition	전 Standard	Z Tapered String	O Top Set MD	Bottom Set MD	O Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight Weight	G Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	S S S S S S S S S S S S S S S S S S S
2	PRODUCTI ON	6.75	5.5	NEW	API	Y	0	11300	0	11300			11300	P- 110	23	BUTT	1.62	1.65	DRY	3.18	DRY	3.18
3	INTERMED IATE	9.87 5	7.625	NEW	API	N	0	11800	0	11800	3171	-8729	11800	OTH ER	29.7	BUTT	1.13	1.15	DRY	2.07	DRY	2.07

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

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
4	PRODUCTI ON	6.75	5.0	NEW	API	Υ	11300	18072	11300	12735				P- 110	18	BUTT	1.62	1.65	DRY	3.18	DRY	3.18

Casing Attachments

Casing ID: 1 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions___Deep_Wells_20200124104610.docx

Casing ID: 2 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Tapered_String_Spec_EI_Campeon_South_Fed_Com_431H_20200624152000.JPG

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions___Deep_Wells_20200124105217.docx

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

Casing Attachments

Casing ID: 3 String Type: INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions___Deep_Wells_20200124104623.docx

Casing ID: 4 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Tapered_String_Spec_EI_Campeon_South_Fed_Com_431H_20200624152013.JPG

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions___Deep_Wells_20200124105208.docx

Section 4 - Cement

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	1180 0	1450	3.6	10.3	5292	50	TXI Lightweight Blend	N/A
INTERMEDIATE	Tail		0	1180 0	250	1.27	15	270	50	Class H	N/A
PRODUCTION	Lead		0	1807 2	420	2.5	11.9	1050	35	50:50:10 H Blend	N/A

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		0	1807 2	710	1.24	14.4	880.4	35	50:50:2	N/A
PRODUCTION	Lead		0	1807 2	420	2.5	11.9	1050	35	50:50:10 H Blend	N/A
PRODUCTION	Tail		0	1807 2	710	1.24	14.4	880.4	35	50:50:2	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)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1060	WATER-BASED MUD	8.6	8.8							
1060	1180 0	OTHER : Nova N-Gauge	8.4	9							
1180 0	1807 2	OIL-BASED MUD	10	13.5							

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

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:

DS

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7620 Anticipated Surface Pressure: 4816.76

Anticipated Bottom Hole Temperature(F): 180

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_South_Fed_Com_431H___H2S_Plan_20200120113823.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

El_Campeon_South_Fed_Com_431H_Anticollision_20200116122026.pdf

El_Campeon_South_Fed_Com_431H_Dir_Plan_20200116154947.pdf

Other proposed operations facets description:

DRILLING PLAN
GAS CAPTURE PLAN

Other proposed operations facets attachment:

El_Campeon_CTB_20_Gas_Capture_Plan_20200120091515.pdf

El_Campeon_South_Fed_Com_431H___APD_Drilling_Portion_20200624152044.pdf

Other Variance attachment:

Slim_Hole___5M_Variance_Well_Plan_7.8.2019_20200120082127.pdf 10M___H_P_614___BOP__CHOKE__FLEX_HOSE_APD_INFORMATION_20200624152100.pdf

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse.

Variance requested to waive minimum SF for surface casing burst. Surface SF Burst > 0.7 frac gradient at the shoe. Casing burst is stronger than the next intervals formation FG.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse.

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All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h



TITUS Oil & Gas Production, LLC

100 Throckmorton Street Suite 1630 Fort Worth, TX 76102

Hydrogen Sulfide (H₂S) Contingency Plan

For

El Campeon South Fed Com 431H

Sec-29 T-26S R-35E 1828 FNL & 682' FWL LAT. = 32.01650648' N (NAD83) LONG = 103.39573081' W

Lea County NM

El Campeon South Fed Com 431H This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, ·E including warning signs, wind indicators and H₂S monitor. El Campeon South Fed Com 431H **Location Road**

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 H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, 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 H₂S 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 H₂S, 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 (SO₂). 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 H₂S and SO₂

a. a					
Common	Chemical	Specific	Threshold	Hazardous	Lethal
Name	Formula	Gravity	Limit	Limit	Concentration
Hydrogen Sulfide	H ₂ S	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 (H₂S) 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 (H₂S)
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H₂S 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:

- The effects of H₂S 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 H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

Note: All H₂S 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 H₂S.

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. H₂S detection and monitoring equipment:

Portable H₂S monitors positioned on location for best coverage and response. These units have warning lights which activate when H₂S levels reach 10 ppm and audible sirens which activate at 15 ppm. Sensor locations:

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

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 H₂S circulated to surface. Proper mud weight, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

5. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H₂S trim.
- B. All elastomers used for packing and seals shall be H₂S trim.

6. Communication:

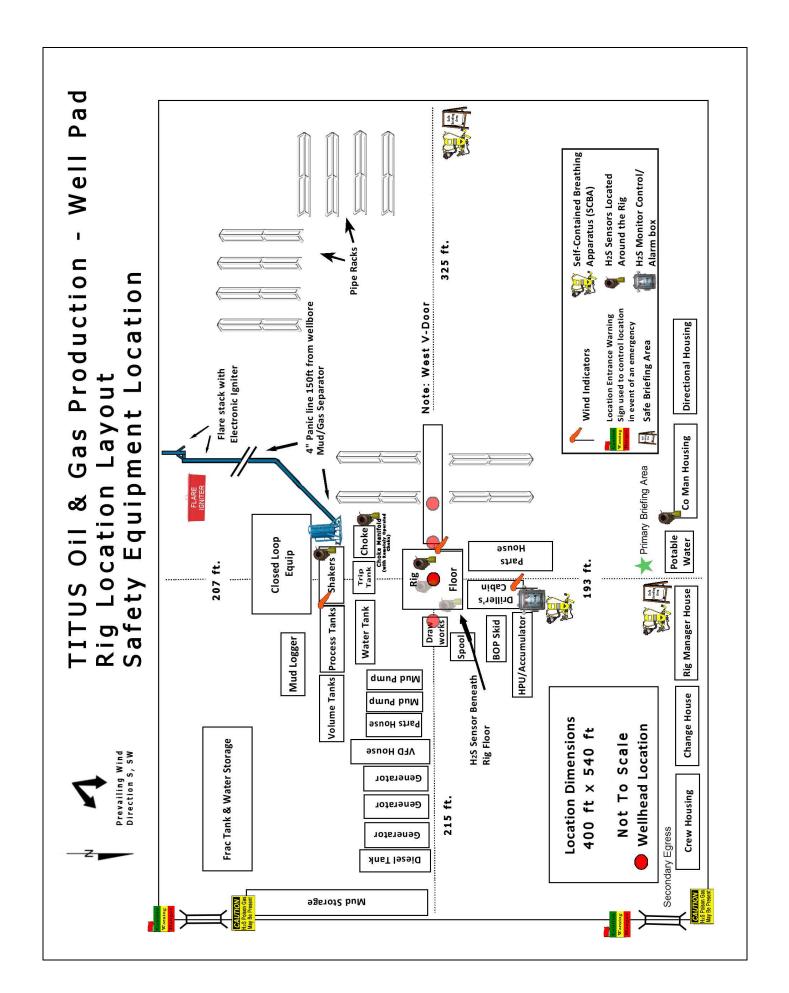
- A. Company personnel have/use cellular telephones in the field.
- B. Land line (telephone) communications at Office

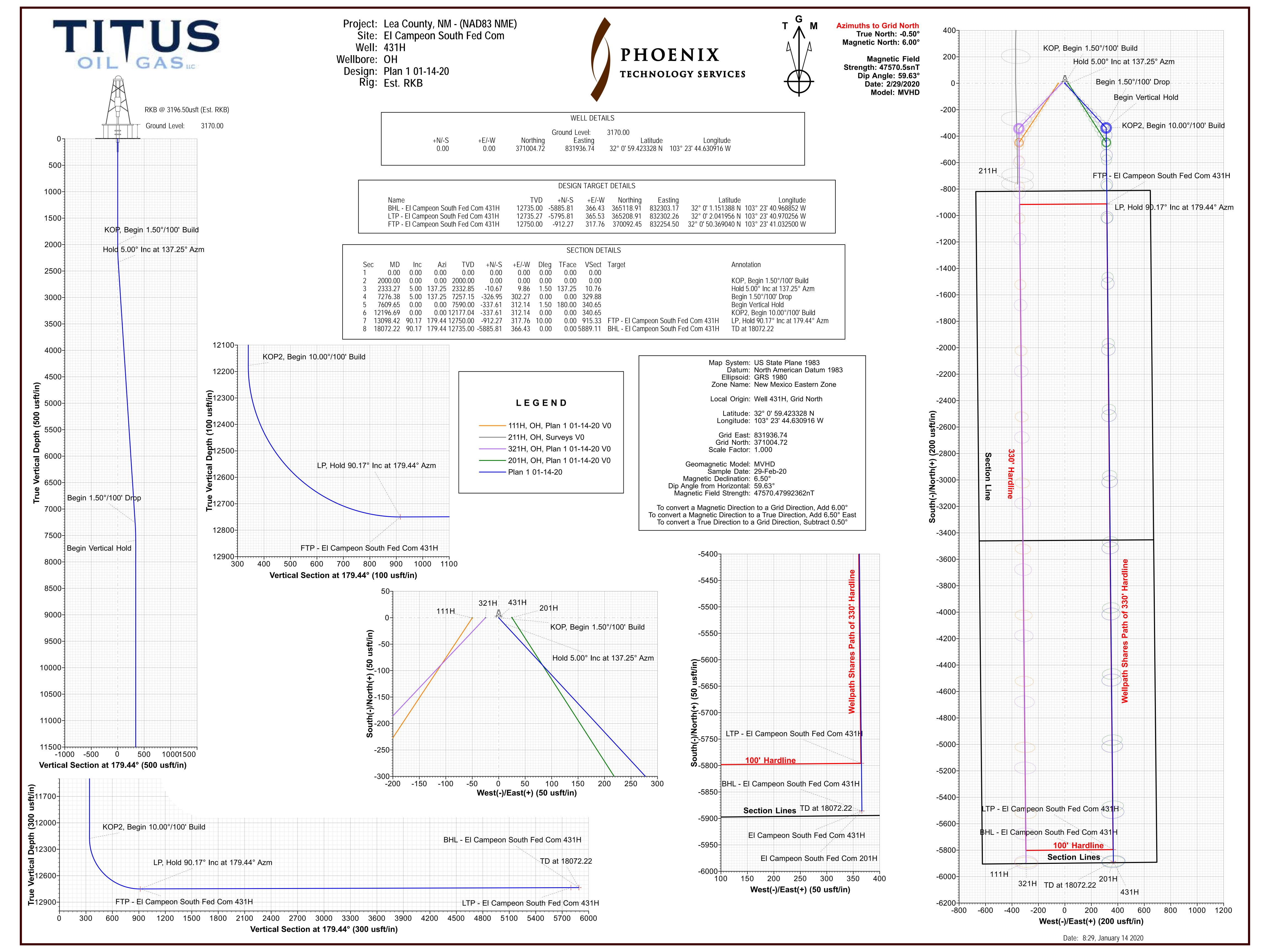
7. Well testing:

- 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 H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

Drillina Su	pervisor –	
Ryan DeL		
	J	
Agency	Call List	
<u>Lea</u>	Hobbs	
<u>County</u>	Lea County Communication Authority	393-3981
<u>(575)</u>	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	Carlsbad	
County	State Police	885-3137
<u>(575)</u>	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	(004) 704 4700
	Wild Well Control	(281) 784-4700
	Cudd Pressure Control 915-699-0139	(915) 563-3356
	Halliburton	(575) 746-2757
Oher	B. J. Services	(575) 746-3569
Give GPS	Native Air – Emergency Helicopter – Hobbs	(575) 392-6429
position:	Flight For Life - Lubbock, TX	(806) 743-9911
ρυσιμυπ.	Aerocare - Lubbock, TX Med Flight Air Amb - Albuquerque, NM	(806) 747-8923 (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	(000) 00+-+000









Titus Oil & Gas Production, LLC

Lea County, NM - (NAD83 NME) El Campeon South Fed Com 431H

OH

Plan: Plan 1 01-14-20

Standard Planning Report

14 January, 2020







USA Compass Database:

Company: Titus Oil & Gas Production, LLC Project: Lea County, NM - (NAD83 NME) Site: El Campeon South Fed Com

Well: 431H Wellbore: OH

Plan 1 01-14-20 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 431H

RKB @ 3196.50usft (Est. RKB) RKB @ 3196.50usft (Est. RKB)

Minimum Curvature

Project	Lea County, NM -	(NIVIDAS NIME)
Project	Lea Courity, Mivi -	· (INADOS INIVIE)

US State Plane 1983 Map System: System Datum: Mean Sea Level

North American Datum 1983 Geo Datum: New Mexico Eastern Zone Map Zone:

El Campeon South Fed Com Site

Northing: 371,004.35 usft Site Position: Latitude: 32° 0' 59.423940 N From: Мар Easting: 831,886.77 usft Longitude: 103° 23' 45.211236 W

Position Uncertainty: Slot Radius: 13-3/16 " **Grid Convergence:** 0.00 usft 0.50

Well 431H

Well Position +N/-S 0.37 usft Northing: 371,004.72 usft Latitude: 32° 0' 59.423328 N +E/-W 49.96 usft Easting: 831,936.73 usft Longitude: 103° 23' 44.630916 W **Position Uncertainty** 1.00 usft Wellhead Elevation: Ground Level: 3,170.00 usft

Wellbore ОН **Model Name** Dip Angle Magnetics Sample Date Declination Field Strength (nT) (°) (°) 47.570.47992362 **MVHD** 2/29/2020 6.50 59.63

Plan 1 01-14-20 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 179.44 0.00 0.00 0.00

1/13/2020 Plan Survey Tool Program Date

Depth From Depth To

(usft) (usft) Survey (Wellbore) **Tool Name** Remarks

MWD+HDGM+MS 0.00 18,072.22 Plan 1 01-14-20 (OH)

OWSG Rev.2 MWD + HDGM +

Plan Sections Vertical Dogleg Build Measured Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (°) (°) (usft) (usft) (°) **Target** 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2,000.00 0.00 0.00 2,000.00 0.00 0.00 0.00 0.00 0.00 0.00 2,333.27 5.00 137.25 2,332.85 -10.67 9.86 1.50 1.50 0.00 137.25 7.276.38 5.00 137.25 7.257.15 -326.95 302.27 0.00 0.00 0.00 0.00 312.14 0.00 180.00 7,609.65 0.00 0.00 7,590.00 -337611.50 -1 50 12,196.69 0.00 0.00 12,177.05 -337.61 312.14 0.00 0.00 0.00 13,098.42 90.17 179.44 12,750.00 -912.27 317.76 10.00 10.00 0.00 0.00 FTP - El Campeon Sc 18,072.22 90.17 179.44 12,735.00 -5,885.81 366.43 0.00 0.00 0.00 0.00 BHL - El Campeon Sc





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Lea County, NM - (NAD83 NME)

Site: El Campeon South Fed Com

Well: 431H Wellbore: OH

Design: Plan 1 01-14-20

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 431H

RKB @ 3196.50usft (Est. RKB) RKB @ 3196.50usft (Est. RKB)

Grid

Minimum Curvature

Measured Dopth Inclination Azimuth Cyritical Dopth (usft) (Survey									
2,000.00 0.00 0.00 2,000.00 0.00 0.00 0.00 0.00 KOP, Begin 1.50*100*Bulls 2,100.00 1.50 137.25 2,099.99 -0.96 0.89 0.97 1.50 1.50 2,200.00 3.00 137.25 2,199.91 -3.84 3.55 3.88 1.50 1.50 2,303.00 4.50 137.25 2,299.93 -1.067 9.86 10.76 1.50 1.50 2,333.27 5.00 137.25 2,399.32 -1.494 13.81 1.50 0.00 0.00 2,500.00 5.00 137.25 2,498.94 -24.44 1.97.3 21.83 0.00 0.00 2,600.00 5.00 137.25 2,598.56 -27.73 25.64 27.98 0.00 0.00 2,800.00 5.00 137.25 2,598.56 -27.73 25.64 27.98 0.00 0.00 2,800.00 5.00 137.25 2,598.66 -27.73 25.64 27.98 <th< th=""><th>Depth</th><th></th><th></th><th>Depth</th><th></th><th></th><th>Section</th><th>Rate</th><th>Rate</th><th>Turn Rate (°/100usft)</th></th<>	Depth			Depth			Section	Rate	Rate	Turn Rate (°/100usft)
2,100.00										0.00 0.00
2,200.00	KOP, Begin 1.5	50°/100' Build								
2,300.00 4.50 137.25 2,299.69 -8.65 7.99 8.72 1.50 1.50 2,333.27 5.00 137.25 2,393.25 -10.67 9.86 10.76 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	2,100.00	1.50				0.89				0.00
Color	2,200.00	3.00			-3.84					0.00
Hold 5.00° Inc at 137.25° Azm	2,300.00	4.50	137.25	2,299.69	-8.65	7.99	8.72	1.50	1.50	0.00
2,400.00 5.00 137.25 2,498.94 -21.34 19.73 21.53 0.00 0.00 2,500.00 5.00 137.25 2,498.94 -21.34 19.73 21.53 0.00 0.00 2,500.00 5.00 137.25 2,598.56 -27.73 25.64 27.98 0.00 0.00 2,700.00 5.00 137.25 2,598.56 -27.73 25.64 27.98 0.00 0.00 2,700.00 5.00 137.25 2,598.18 -34.13 31.56 34.44 0.00 0.00 0.00 2,900.00 5.00 137.25 2,897.42 -46.93 43.39 47.35 0.00 0.00 3,000.00 5.00 137.25 2,897.42 -46.93 43.39 47.35 0.00 0.00 3,000.00 5.00 137.25 3,997.04 -53.33 49.30 53.81 0.00 0.00 3,000.00 5.00 137.25 3,196.28 -66.13 61.14 66.72 0.00 0.00 3,200.00 5.00 137.25 3,196.28 -66.13 61.14 66.72 0.00 0.00 3,200.00 5.00 137.25 3,395.52 -72.52 67.05 73.18 0.00 0.00 3,400.00 5.00 137.25 3,395.52 78.92 72.97 79.63 0.00 0.00 3,500.00 5.00 137.25 3,395.52 78.92 72.97 79.63 0.00 0.00 3,500.00 5.00 137.25 3,395.476 91.72 84.80 92.54 0.00 0.00 3,500.00 5.00 137.25 3,395.476 91.72 84.80 92.54 0.00 0.00 3,500.00 5.00 137.25 3,395.476 91.72 84.80 92.54 0.00 0.00 3,500.00 5.00 137.25 3,394.48 -85.32 78.88 86.09 0.00 0.00 0.00 3,500.00 5.00 137.25 3,894.48 98.12 90.71 99.00 0.00 0.00 3,500.00 5.00 137.25 3,894.48 98.12 90.71 99.00 0.00 0.00 3,500.00 5.00 137.25 3,894.48 98.12 90.71 99.00 0.00 0.00 4,000.00 5.00 137.25 3,893.44 -117.31 108.46 118.37 0.00 0.00 4,000.00 5.00 137.25 3,893.44 -117.31 108.46 118.37 0.00 0.00 4,000.00 5.00 137.25 3,893.44 -117.31 108.46 118.37 0.00 0.00 4,000.00 5.00 137.25 4,992.48 -130.11 120.29 131.28 0.00 0.00 4,000.00 5.00 137.25 4,992.48 -130.11 120.29 131.28 0.00 0.00 4,000.00 5.00 137.25 4,992.66 123.71 114.37 124.82 0.00 0.00 4,000.00 5.00 137.25 4,898.43 181.30 186.61 183.7 0.00 0.00 4,000.00 5.00 137.25 4,898.43 181.30 186.61 183.7 0.00 0.00 4,000.00 5.00 137.25 4,898.43 181.30 186.61 189.22 0.00 0.00 5.00 137.25 4,898.43 181.30 186.61 189.22 0.00 0.00 5,00 137.25 4,898.43 181.30 186.61 182.92 0.00 0.00 5,00 137.25 5,888.81 174.90 181.70 176.47 0.00 0.00 5,00 137.25 5,888.81 174.90 181.70 176.47 0.00 0.00 5,00 137.25 5,888.81 174.90 181.70 179.45 195.84 0.00 0.00 5,00 137.25 5,888.81 174.90 181.70 179.45	2,333.27	5.00	137.25	2,332.85	-10.67	9.86	10.76	1.50	1.50	0.00
2,500.00	Hold 5.00° Inc	at 137.25° Azm	ı							
2,500.00	2,400.00	5.00	137.25	2,399.32	-14.94	13.81	15.07	0.00	0.00	0.00
2,700.00 5.00 137.25 2,698.18 -34.13 31.56 34.44 0.00 0.00 2,800.00 5.00 137.25 2,997.42 -46.93 43.39 47.35 0.00 0.00 3,000.00 5.00 137.25 2,997.04 -53.33 49.30 53.81 0.00 0.00 3,100.00 5.00 137.25 3,996.66 -59.73 55.22 60.26 0.00 0.00 3,200.00 5.00 137.25 3,996.86 -59.73 55.22 60.26 0.00 0.00 3,400.00 5.00 137.25 3,295.90 -72.52 67.05 73.18 0.00 0.00 3,500.00 5.00 137.25 3,295.90 -72.52 67.05 73.18 0.00 0.00 3,600.00 5.00 137.25 3,594.76 -91.72 84.80 92.54 0.00 0.00 3,800.00 5.00 137.25 3,893.62 -117.21 84.80 92.54 0.00 </td <td>2,500.00</td> <td>5.00</td> <td>137.25</td> <td>2,498.94</td> <td></td> <td>19.73</td> <td>21.53</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	2,500.00	5.00	137.25	2,498.94		19.73	21.53	0.00	0.00	0.00
2,800.00 5.00 137.25 2,797.80 -40.53 37.47 40.90 0.00 0.00 2,900.00 5.00 137.25 2,897.42 -46.93 43.39 47.35 0.00 0.00 3,000.00 5.00 137.25 3,996.66 -59.73 55.22 60.26 0.00 0.00 3,200.00 5.00 137.25 3,996.66 -59.73 55.22 60.26 0.00 0.00 3,200.00 5.00 137.25 3,995.50 -72.52 67.05 73.18 0.00 0.00 3,400.00 5.00 137.25 3,395.52 -78.92 72.97 79.63 0.00 0.00 3,500.00 5.00 137.25 3,495.14 -85.32 78.88 86.09 0.00 0.00 3,700.00 5.00 137.25 3,694.38 -98.12 90.71 99.00 0.00 0.00 3,900.00 5.00 137.25 3,993.80 2 110.91 102.54 111.91 <td>2,600.00</td> <td>5.00</td> <td>137.25</td> <td>2,598.56</td> <td>-27.73</td> <td>25.64</td> <td>27.98</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	2,600.00	5.00	137.25	2,598.56	-27.73	25.64	27.98	0.00	0.00	0.00
2,900.00 5.00 137.25 2,897.42 -46.93 43.99 47.35 0.00 0.00 3,000.00 5.00 137.25 2,997.04 -53.33 49.30 53.81 0.00 0.00 3,100.00 5.00 137.25 3,096.66 -59.73 55.22 60.26 0.00 0.00 3,200.00 5.00 137.25 3,196.28 -66.13 61.14 66.72 0.00 0.00 3,300.00 5.00 137.25 3,196.28 -66.13 61.14 66.72 0.00 0.00 3,300.00 5.00 137.25 3,295.90 -72.52 67.05 73.18 0.00 0.00 3,400.00 5.00 137.25 3,395.52 -76.92 72.97 79.63 0.00 0.00 3,500.00 5.00 137.25 3,495.14 -85.32 78.88 86.09 0.00 0.00 3,500.00 5.00 137.25 3,495.14 -85.32 78.88 86.09 0.00 0.00 3,700.00 5.00 137.25 3,894.76 -91.72 84.80 92.54 0.00 0.00 3,700.00 5.00 137.25 3,894.38 -98.12 90.71 99.00 0.00 0.00 3,500.00 5.00 137.25 3,893.62 -110.91 10.254 111.91 0.00 0.00 4,000.00 5.00 137.25 3,893.62 -110.91 10.254 111.91 0.00 0.00 4,000.00 5.00 137.25 3,993.24 -117.31 108.46 118.37 0.00 0.00 4,200.00 5.00 137.25 4,092.86 -123.71 114.37 124.82 0.00 0.00 4,200.00 5.00 137.25 4,092.86 -123.71 114.37 124.82 0.00 0.00 4,400.00 5.00 137.25 4,992.86 -123.71 114.37 124.82 0.00 0.00 4,400.00 5.00 137.25 4,492.81 -130.11 120.29 131.28 0.00 0.00 4,400.00 5.00 137.25 4,491.34 -149.93 136.04 150.65 0.00 0.00 4,400.00 5.00 137.25 4,491.34 -149.93 136.04 150.65 0.00 0.00 4,400.00 5.00 137.25 4,891.72 -142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.72 -142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.72 -142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.72 -142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.72 -142.91 132.12 144.19 0.00 0.00 5.00 137.25 4,899.81 -174.90 161.70 176.47 0.00 0.00 5,00 137.25 5,886.01 -136.51 126.21 137.73 0.00 0.00 5,00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5,00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5,00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5,00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5,00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5,00 137.25 5,886.01 -23.88 226.57 194.99 128 208.75 0.00 0.00 5,00 137.25 5,886.01 -23.88 226.57 247.48 0.00 0.00 5,00 137.25 5,886.01 -23.88 226.57 247.48 0.00 0	2,700.00	5.00	137.25	2,698.18	-34.13	31.56	34.44	0.00	0.00	0.00
2,900.00 5.00 137.25 2,997.04 -53.33 49.30 53.81 0.00 0.00 3,000.00 5.00 137.25 3,096.66 -59.73 55.22 60.26 0.00 0.00 3,200.00 5.00 137.25 3,196.28 -66.13 61.14 66.72 0.00 0.00 3,200.00 5.00 137.25 3,196.28 -66.13 61.14 66.72 0.00 0.00 3,200.00 5.00 137.25 3,295.90 -72.52 67.05 73.18 0.00 0.00 3,400.00 5.00 137.25 3,395.52 -78.92 72.97 79.63 0.00 0.00 3,500.00 5.00 137.25 3,495.14 -85.32 78.88 86.09 0.00 0.00 3,500.00 5.00 137.25 3,495.14 -85.32 78.88 86.09 0.00 0.00 3,700.00 5.00 137.25 3,694.38 -98.12 90.71 99.00 0.00 0.00 3,700.00 5.00 137.25 3,893.62 -110.91 10.254 111.91 0.00 0.00 3,000 5.00 137.25 3,893.62 -110.91 10.254 111.91 0.00 0.00 4,000 5.00 137.25 3,893.62 -110.91 10.254 111.91 0.00 0.00 4,000 5.00 137.25 4,092.86 -123.71 114.37 124.82 0.00 0.00 4,200.00 5.00 137.25 4,092.86 -123.71 114.37 124.82 0.00 0.00 4,200.00 5.00 137.25 4,391.72 -142.91 120.29 131.28 0.00 0.00 4,400.00 5.00 137.25 4,491.24 -117.31 108.46 118.37 0.00 0.00 4,400.00 5.00 137.25 4,491.24 -117.31 108.46 118.37 0.00 0.00 4,400.00 5.00 137.25 4,491.24 -117.31 10.00 1.00 0.00 4,400.00 5.00 137.25 4,491.24 -117.31 10.00 0.00 4,400.00 5.00 137.25 4,491.34 -149.91 130.12 12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,491.34 -149.30 138.04 150.65 0.00 0.00 4,400.00 5.00 137.25 4,891.75 142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.75 142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.75 142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.75 142.91 132.12 144.19 0.00 0.00 4,400.00 5.00 137.25 4,891.75 142.91 132.12 144.19 0.00 0.00 5.00 137.25 4,891.75 142.91 132.12 144.19 0.00 0.00 5.00 137.25 4,891.75 142.91 132.12 144.19 0.00 0.00 5.00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5.00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5.00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5.00 137.25 5,886.01 149.93 161.70 176.47 0.00 0.00 5.00 137.25 5,886.01 149.93 161.70 178.45 0.00 0.00 5.00 137.25 5,886.01 149.93 197.19 121.52 0.00 0.00 5.00 5.00 137.25 5,886.01 149.88 226.05 140.00 0.00 5.00 5.00 137.25 5,886.01	2 800 00	5.00	137 25	2 707 80	-40 53	27 <i>1</i> 7	40 Q0	0.00	0.00	0.00
3,000.00 5.00 137.25 3,096.66 -59.73 55.22 60.26 0.00 0.00 3,100.00 5.00 137.25 3,096.66 -59.73 55.22 60.26 0.00 0.00 0.00 3,200.00 5.00 137.25 3,196.28 -66.13 61.14 66.72 0.00 0.00 3,400.00 5.00 137.25 3,395.52 -78.92 72.97 78.63 0.00 0.00 3,500.00 5.00 137.25 3,395.52 -78.92 72.97 78.63 0.00 0.00 3,500.00 5.00 137.25 3,495.14 -85.32 78.88 86.09 0.00 0.00 3,500.00 5.00 137.25 3,594.76 -91.72 84.80 92.54 0.00 0.00 3,700.00 5.00 137.25 3,894.38 -98.12 90.71 99.00 0.00 0.00 3,500.00 5.00 137.25 3,894.38 -98.12 90.71 99.00 0.00 0.00 3,900.00 5.00 137.25 3,894.38 -98.12 90.71 99.00 0.00 0.00 3,900.00 5.00 137.25 3,893.62 -110.91 102.54 111.91 0.00 0.00 4,000.00 5.00 137.25 3,893.82 -110.91 102.54 111.91 0.00 0.00 4,000.00 5.00 137.25 3,893.82 -117.31 108.46 118.37 0.00 0.00 4,000.00 5.00 137.25 4,292.10 -136.51 126.21 137.73 0.00 0.00 4,200.00 5.00 137.25 4,292.10 -136.51 126.21 137.73 0.00 0.00 4,400.00 5.00 137.25 4,492.48 -130.11 120.29 131.28 0.00 0.00 4,500.00 5.00 137.25 4,491.74 149.91 132.12 144.19 0.00 0.00 4,500.00 5.00 137.25 4,590.96 -155.70 149.95 157.10 0.00 0.00 4,500.00 5.00 137.25 4,899.96 -155.70 149.95 157.10 0.00 0.00 4,500.00 5.00 137.25 4,899.91 -174.91 132.12 144.19 0.00 0.00 4,500.00 5.00 137.25 4,899.91 -174.90 161.70 176.47 0.00 0.00 4,500.00 5.00 137.25 4,899.81 -174.90 161.70 176.47 0.00 0.00 5.00 137.25 5,886.07 -194.09 179.45 195.84 0.00 0.00 5,00 137.25 5,886.77 -26.08 191.28 20.87 0.00 0.00 5,500 137.25 5,886.77 -26.08 191.28 20.87 5 0.00 0.00 5,500 0.00 137.25 5,886.07 -26.08 191.28 20.87 5 0.00 0.00 5,500 0.00 137.25 5,886.07 -26.08 20.90 22.812 0.00 0.00 5,500 0.00 137.25 5,886.07 -26.08 20.90 22.812 0.00 0.00 5,500 0.00 137.25 5,886.07 -26.08 20.90 22.812 0.00 0.00 5,500 0.00 137.25 5,886.07 -26.08 20.90 22.812 0.00 0.00 5,500 0.00 137.25 5,886.07 -22.08 20.90 22.812 0.00 0.00 5,500 0.00 5,00 137.25 5,886.07 -22.08 20.90 22.812 0.00 0.00 5,500 0.00 5,00 137.25 5,886.07 -22.08 20.90 22.812 0.00 0.00 5,500 0.00 5,00 137.25 5,886.07 -22.08 20.90 22.812 0.00 0.00 5,500 0.00 5,00 137.				,						0.00
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5,000.00 5.00 137.25 4,989.43 -181.30 167.61 182.92 0.00 0.00 5,100.00 5.00 137.25 5,089.05 -187.69 173.53 189.38 0.00 0.00 5,200.00 5.00 137.25 5,188.67 -194.09 179.45 195.84 0.00 0.00 5,300.00 5.00 137.25 5,288.29 -200.49 185.36 202.29 0.00 0.00 5,400.00 5.00 137.25 5,387.91 -206.89 191.28 208.75 0.00 0.00 5,500.00 5.00 137.25 5,487.53 -213.29 197.19 215.20 0.00 0.00 5,600.00 5.00 137.25 5,587.15 -219.69 203.11 221.66 0.00 0.00 5,700.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,800.00 5.00 137.25 5,886.01 -238.88 20.85 241.0										0.00
5,100.00 5.00 137.25 5,089.05 -187.69 173.53 189.38 0.00 0.00 5,200.00 5.00 137.25 5,188.67 -194.09 179.45 195.84 0.00 0.00 5,300.00 5.00 137.25 5,288.29 -200.49 185.36 202.29 0.00 0.00 5,400.00 5.00 137.25 5,387.91 -206.89 191.28 208.75 0.00 0.00 5,500.00 5.00 137.25 5,487.53 -213.29 197.19 215.20 0.00 0.00 5,600.00 5.00 137.25 5,587.15 -219.69 203.11 221.66 0.00 0.00 5,700.00 5.00 137.25 5,886.77 -226.08 209.02 228.12 0.00 0.00 5,800.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.										0.00
5,200.00 5.00 137.25 5,188.67 -194.09 179.45 195.84 0.00 0.00 5,300.00 5.00 137.25 5,288.29 -200.49 185.36 202.29 0.00 0.00 5,400.00 5.00 137.25 5,387.91 -206.89 191.28 208.75 0.00 0.00 5,500.00 5.00 137.25 5,487.53 -213.29 197.19 215.20 0.00 0.00 5,600.00 5.00 137.25 5,587.15 -219.69 203.11 221.66 0.00 0.00 5,700.00 5.00 137.25 5,686.77 -226.08 209.02 228.12 0.00 0.00 5,800.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.										0.00
5,400.00 5.00 137.25 5,387.91 -206.89 191.28 208.75 0.00 0.00 5,500.00 5.00 137.25 5,487.53 -213.29 197.19 215.20 0.00 0.00 5,600.00 5.00 137.25 5,587.15 -219.69 203.11 221.66 0.00 0.00 5,700.00 5.00 137.25 5,686.77 -226.08 209.02 228.12 0.00 0.00 5,800.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284										0.00
5,400.00 5.00 137.25 5,387.91 -206.89 191.28 208.75 0.00 0.00 5,500.00 5.00 137.25 5,487.53 -213.29 197.19 215.20 0.00 0.00 5,600.00 5.00 137.25 5,587.15 -219.69 203.11 221.66 0.00 0.00 5,700.00 5.00 137.25 5,686.77 -226.08 209.02 228.12 0.00 0.00 5,800.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284	5,300.00	5.00	137.25	5,288.29	-200.49	185.36	202.29	0.00	0.00	0.00
5,500.00 5.00 137.25 5,487.53 -213.29 197.19 215.20 0.00 0.00 5,600.00 5.00 137.25 5,587.15 -219.69 203.11 221.66 0.00 0.00 5,700.00 5.00 137.25 5,686.77 -226.08 209.02 228.12 0.00 0.00 5,800.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00	,			,						0.00
5,600.00 5.00 137.25 5,587.15 -219.69 203.11 221.66 0.00 0.00 5,700.00 5.00 137.25 5,686.77 -226.08 209.02 228.12 0.00 0.00 5,800.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00										0.00
5,700.00 5.00 137.25 5,686.77 -226.08 209.02 228.12 0.00 0.00 5,800.00 5.00 137.25 5,786.39 -232.48 214.94 234.57 0.00 0.00 5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00										0.00
5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00										0.00
5,900.00 5.00 137.25 5,886.01 -238.88 220.85 241.03 0.00 0.00 6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00	5.800.00	5.00	137.25	5.786.39	-232.48	214.94	234.57	0.00	0.00	0.00
6,000.00 5.00 137.25 5,985.63 -245.28 226.77 247.48 0.00 0.00 6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00				,						0.00
6,100.00 5.00 137.25 6,085.25 -251.68 232.69 253.94 0.00 0.00 6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00										0.00
6,200.00 5.00 137.25 6,184.87 -258.08 238.60 260.40 0.00 0.00 6,300.00 5.00 137.25 6,284.49 -264.47 244.52 266.85 0.00 0.00										0.00
										0.00
	6.300 00	5 00	137 25	6.284 49	-264 47	244 52	266 85	0.00	0.00	0.00
	6,400.00	5.00	137.25	6,384.11	-270.87	250.43	273.31	0.00	0.00	0.00
6,500.00 5.00 137.25 6,483.73 -277.27 256.35 279.76 0.00 0.00										0.00
6,600.00 5.00 137.25 6,583.35 -283.67 262.26 286.22 0.00 0.00										0.00
6,700.00 5.00 137.25 6,682.97 -290.07 268.18 292.67 0.00 0.00				,						0.00
6,800.00 5.00 137.25 6,782.59 -296.47 274.09 299.13 0.00 0.00										0.00





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Lea County, NM - (NAD83 NME)
Site: El Campeon South Fed Com

Well: 431H Wellbore: OH

Design: Plan 1 01-14-20

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 431H

RKB @ 3196.50usft (Est. RKB) RKB @ 3196.50usft (Est. RKB)

Grid

Minimum Curvature

ned Survey									
Measured Depth (usft)	Inclination	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,900.00	5.00	137.25	6,882.21	-302.86	280.01	305.59	0.00	0.00	0.00
7,000.00	5.00	137.25	6,981.83	-309.26	285.93	312.04	0.00	0.00	0.00
7,100.00	5.00	137.25	7,081.45	-315.66	291.84	318.50	0.00	0.00	0.00
7,200.00	5.00	137.25	7,181.07	-322.06	297.76	324.95	0.00	0.00	0.00
7,276.38	5.00	137.25	7,257.15	-326.95	302.27	329.88	0.00	0.00	0.00
Begin 1.50°/1	00' Drop								
7,300.00	4.64	137.25	7,280.69	-328.40	303.62	331.36	1.50	-1.50	0.00
7,400.00	3.14	137.25	7,380.46	-333.39	308.23	336.39	1.50	-1.50	0.00
7,500.00	1.64	137.25	7,480.37	-336.46	311.07	339.48	1.50	-1.50	0.00
7,600.00	0.14	137.25	7,580.35	-337.61	312.13	340.64	1.50	-1.50	0.00
7,609.65	0.00	0.00	7,590.00	-337.61	312.14	340.65	1.50	-1.50	0.00
Begin Vertica	al Hold		,						
12,196.69	0.00	0.00	12,177.05	-337.61	312.14	340.65	0.00	0.00	0.00
	10.00°/100' Buil								
12,200.00	0.33	179.44	12,180.35	-337.62	312.14	340.66	10.00	10.00	0.00
12,300.00	10.33	179.44	12,279.79	-346.90	312.23	349.94	10.00	10.00	0.00
12,400.00	20.33	179.44	12,376.11	-373.31	312.49	376.34	10.00	10.00	0.00
12,500.00	30.33	179.44	12,466.38	-416.03	312.91	419.07	10.00	10.00	0.00
12,600.00	40.33	179.44	12.547.86	-473.79	313.47	476.83	10.00	10.00	0.00
12,700.00	50.33	179.44	12,618.07	-544.81	314.17	547.86	10.00	10.00	0.00
12,800.00	60.33	179.44	12,674.89	-626.95	314.97	630.00	10.00	10.00	0.00
12,900.00	70.33	179.44	12,716.57	-717.70	315.86	720.75	10.00	10.00	0.00
13,000.00	80.33	179.44	12.741.86	-814.31	316.80	817.37	10.00	10.00	0.00
13,098.42	90.17	179.44	12,750.00	-912.27	317.76	915.33	10.00	10.00	0.00
	17° Inc at 179.44		12,700.00	012.27	017.70	010.00	10.00	10.00	0.00
13,100.00	90.17	179.44	12,750.00	-913.85	317.78	916.91	0.00	0.00	0.00
13,200.00	90.17	179.44	12,749.69	-1,013.85	318.76	1,016.91	0.00	0.00	0.00
13,300.00	90.17	179.44	12,749.39	-1,113.84	319.73	1,116.91	0.00	0.00	0.00
13,400.00	90.17	179.44	12,749.09	-1,213.84	320.71	1,216.91	0.00	0.00	0.00
13,500.00	90.17	179.44	12,748.79	-1,313.83	321.69	1,316.91	0.00	0.00	0.00
13,600.00	90.17	179.44	12,748.49	-1,413.83	322.67	1,416.91	0.00	0.00	0.00
13,700.00	90.17	179.44	12,748.19	-1,513.82	323.65	1,516.91	0.00	0.00	0.00
13,800.00	90.17	179.44	12,747.88	-1,613.81	324.63	1,616.91	0.00	0.00	0.00
13,900.00	90.17	179.44	12,747.58	-1,713.81	325.60	1,716.91	0.00	0.00	0.00
14,000.00	90.17	179.44	12,747.38	-1,713.81	326.58	1,816.91	0.00	0.00	0.00
14,100.00	90.17	179.44	12,746.98	-1,913.80	327.56	1,916.91	0.00	0.00	0.00
14,200.00	90.17	179.44	12,746.68	-2,013.79	328.54	2,016.91	0.00	0.00	0.00
14,300.00	90.17	179.44	12,746.38	-2,113.79	329.52	2,116.91	0.00	0.00	0.00
14,400.00	90.17	179.44	12,746.07	-2,213.78	330.50	2,216.91	0.00	0.00	0.00
14,500.00	90.17	179.44	12,745.77	-2,213.78	331.48	2,216.91	0.00	0.00	0.00
14,600.00	90.17	179.44	12,745.47	-2,413.77	332.45	2,416.91	0.00	0.00	0.00
14,700.00	90.17	179.44	12,745.17	-2,513.77	333.43	2,516.91	0.00	0.00	0.00
14,800.00	90.17	179.44	12,744.87	-2,613.76	334.41	2,616.91	0.00	0.00	0.00
14,900.00	90.17	179.44	12,744.57	-2,713.76	335.39	2,716.91	0.00	0.00	0.00
15,000.00	90.17	179.44	12,744.37	-2,713.76 -2,813.75	336.37	2,816.91	0.00	0.00	0.00
15,100.00	90.17	179.44	12,743.96	-2,913.75	337.35	2,916.90	0.00	0.00	0.00
15,200.00	90.17	179.44	12,743.66	-3,013.74	338.33	3,016.90	0.00	0.00	0.00
15,300.00	90.17	179.44	12,743.36	-3,113.74	339.30	3,116.90	0.00	0.00	0.00
15,400.00	90.17	179.44	12,743.06	-3,213.73	340.28	3,216.90	0.00	0.00	0.00
15,400.00	90.17	179.44	12,743.06	-3,213.73 -3,313.73	340.28 341.26	3,216.90	0.00	0.00	0.00
	90.17	179.44	12,742.76	-3,413.72	342.24	3,416.90	0.00	0.00	0.00
15 600 00	30.17	113.77	12,172.70	-0,-10.72	UTZ.24	0,710.00	0.00	0.00	0.00
15,600.00 15,700.00	90.17	179.44	12,742.15	-3,513.72	343.22	3,516.90	0.00	0.00	0.00





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Lea County, NM - (NAD83 NME)

Site: El Campeon South Fed Com

Well: 431H Wellbore: OH

Design: Plan 1 01-14-20

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 431H

RKB @ 3196.50usft (Est. RKB) RKB @ 3196.50usft (Est. RKB)

Grid

Minimum Curvature

			v					B 111	_
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,900.00	90.17	179.44	12,741.55	-3,713.70	345.18	3,716.90	0.00	0.00	0.00
16,000.00	90.17	179.44	12,741.25	-3,813.70	346.15	3,816.90	0.00	0.00	0.00
16,100.00	90.17	179.44	12,740.95	-3,913.69	347.13	3,916.90	0.00	0.00	0.00
16,200.00	90.17	179.44	12,740.65	-4,013.69	348.11	4,016.90	0.00	0.00	0.00
16,300.00	90.17	179.44	12,740.34	-4,113.68	349.09	4,116.90	0.00	0.00	0.00
16,400.00	90.17	179.44	12,740.04	-4,213.68	350.07	4,216.90	0.00	0.00	0.00
16,500.00	90.17	179.44	12,739.74	-4,313.67	351.05	4,316.90	0.00	0.00	0.00
16,600.00	90.17	179.44	12,739.44	-4,413.67	352.02	4,416.90	0.00	0.00	0.00
16,700.00	90.17	179.44	12,739.14	-4,513.66	353.00	4,516.90	0.00	0.00	0.00
16,800.00	90.17	179.44	12,738.84	-4,613.66	353.98	4,616.90	0.00	0.00	0.00
16,900.00	90.17	179.44	12,738.54	-4,713.65	354.96	4,716.90	0.00	0.00	0.00
17,000.00	90.17	179.44	12,738.23	-4,813.65	355.94	4,816.90	0.00	0.00	0.00
17,100.00	90.17	179.44	12,737.93	-4,913.64	356.92	4,916.90	0.00	0.00	0.00
17,200.00	90.17	179.44	12,737.63	-5,013.64	357.90	5,016.90	0.00	0.00	0.00
17,300.00	90.17	179.44	12,737.33	-5,113.63	358.87	5,116.89	0.00	0.00	0.00
17,400.00	90.17	179.44	12,737.03	-5,213.63	359.85	5,216.89	0.00	0.00	0.00
17,500.00	90.17	179.44	12,736.73	-5,313.62	360.83	5,316.89	0.00	0.00	0.00
17,600.00	90.17	179.44	12,736.42	-5,413.62	361.81	5,416.89	0.00	0.00	0.00
17,700.00	90.17	179.44	12,736.12	-5,513.61	362.79	5,516.89	0.00	0.00	0.00
17,800.00	90.17	179.44	12,735.82	-5,613.61	363.77	5,616.89	0.00	0.00	0.00
17,900.00	90.17	179.44	12,735.52	-5,713.60	364.75	5,716.89	0.00	0.00	0.00
18,000.00	90.17	179.44	12,735.22	-5,813.59	365.72	5,816.89	0.00	0.00	0.00
18,072.22	90.17	179.44	12,735.00	-5,885.81	366.43	5,889.11	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL - El Campeon Sout - plan hits target ce - Point		0.00	12,735.00	-5,885.81	366.43	365,118.91	832,303.16	32° 0' 1.151388 N	103° 23' 40.968852 W
LTP - El Campeon Sout - plan misses target - Point		0.00 2usft at 1798	12,735.27 32.22usft MD	-5,795.81) (12735.27 TV	365.53 D, -5795.81 N	365,208.90 N, 365.55 E)	832,302.26	32° 0' 2.041956 N	103° 23' 40.970256 W
FTP - El Campeon Sout - plan hits target ce - Point		0.00	12,750.00	-912.27	317.76	370,092.44	832,254.50	32° 0' 50.369040 N	103° 23' 41.032500 W

Plan Annotations					
Measured	Vertical	Local Coor	dinates		
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
2,000.0	2,000.00	0.00	0.00	KOP, Begin 1.50°/100' Build	
2,333.2	7 2,332.85	-10.67	9.86	Hold 5.00° Inc at 137.25° Azm	
7,276.3	3 7,257.15	-326.95	302.27	Begin 1.50°/100' Drop	
7,609.6	7,590.00	-337.61	312.14	Begin Vertical Hold	
12,196.6	9 12,177.05	-337.61	312.14	KOP2, Begin 10.00°/100' Build	
13,098.4	2 12,750.00	-912.27	317.76	LP, Hold 90.17° Inc at 179.44° Azm	
18,072.2	2 12,735.00	-5,885.81	366.43	TD at 18072.22	

1. Geologic Formations

TVD of target	12,735' EOL	Pilot hole depth	NA
MD at TD:	18,072'	Deepest expected fresh water:	250'

Formation	Depth (TVD) from	Water/Mineral Bearing/ Target	Hazards*
Formation	KB Zone?		nazarus ·
Quaternary Fill	Surface	Water	
Rustler	1035	Water	
Top of Salt	1542	Salt	
Base of Salt	5034	Salt	
Lamar	5340	Salt Water	
Delaware	elaware 5375		
Bone Spring Lime	one Spring Lime 9241		
1st Bone Spring	10474	Oil/Gas	
2nd Bone Spring	11028	Oil/Gas	
3rd Bone spring	12118	Oil/Gas	
Wolfcamp	12497	Oil/Gas	
Wolfcamp X Sand	12525	Oil/Gas	
Wolfcamp Y Sand	12589	Oil/Gas	
Wolfcamp A	12621	Target Oil/Gas	
Х	Х	Not Penetrated	

2. Casing Program

Hole Size	Ca From	asing To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
13.5"	0	1060	10.75"	45.5	J55	ВТС	4.31	0.82	14.82
9.875"	0	11800	7.625"	29.7	L80HP	BTC	1.13	1.15	2.07
6.75"	0	11300	5.5"	23	P110	BTC	1.62	1.65	3.18
6.75"	11300	18,072	5"	18	P110	втс	1.62	1.65	3.18
,				BLM Minimum Safety Factor			1.125	1	1.6 Dry
				DLIVI I	viiiiiiiuiii 3	arety ractor	1.123	1	1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse.

Variance requested to waive minimum SF for surface casing burst. Surface SF Burst > 0.7 frac gradient at the shoe. Casing burst is stronger than the next intervals formation FG.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Υ
Does casing meet API specifications? If no, attach casing specification sheet.	Υ
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	Υ
(loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Υ
the collapse pressure rating of the casing?	<u> </u>
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 3 rd string cement tied back	
500' into previous casing?	7
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd 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/	Yld ft3/ sack	H₂0 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	440	13.5	1.75	9	8	Lead: Class C + 4% Gel + 1% CaCl2
Suri.	250	14.8	1.34	6.34	4	Tail: Class C + 2% CaCl2
Inter.	1450	10.3	3.6	21.48	16	TXI Lightwieght Blend
iiitei.	250	15	1.27	5.7	4	Tail: 85:15 Class H
Prod	420	11.9	2.5	19	72	Lead: 50:50:10 H Blend
FIOU	710	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%
1 st Intermediate	0'	50%
Production	11,300'	35% OH in Lateral (KOP to EOL)

4. Pressure Control Equipment

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	Ту	pe	х	Tested to:		
			Ann	ular	Х	3000 psi		
			Blind Ram			3M		
9-7/8"	13-5/8"	3M	Pipe Ram					
			Double Ram					
			Other*					
	13-5/8"	10M	Annular		50%			
				ular	х	testing		
6-3/4"						pressure		
			Blind Ram VBR Ram		Х	5M		
					Х			
						VBR	Ram	Х
			Other*					

See attached 5M Annular Variance Well Control plan for Tltus Oil & Gas Production, LLC.

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.

	Formation integrity test will be performed per Onshore Order #2.			
Y	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		Tuno	Woight (png)	Viscosity	Water Loss
From	То	Туре	Weight (ppg)	Viscosity	water Loss
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Nova N-Gauge	8.4 - 9	28-34	N/C
7-5/8" Int shoe	Lateral TD	ОВМ	10 - 13.5	35-45	<20

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

The highest mud weight needed to balance formation is expected to be 11.5 ppg. In order to maintain hole stability, mud weights up to 13.5 ppg may be utilized.

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.				
Υ	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report			
Y	and submitted to the BLM. 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
, ,	V CDI	Production casing
ľ	CBL	(If cement not circulated to surface)
Υ	Mud log	Intermediate shoe to TD
Ν	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7620 psi at 12735' TVD
Abnormal Temperature	NO 180 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.

Ν	H2S is present
Υ	H2S Plan attached

8. Other Facets of Operation

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

Х	H2S Plan.
х	BOP & Choke Schematics.
х	Directional Plan



1. Component and Preventer Compatibility Table

The table below covers drilling and casing of the 10M MASP portion of the well and outlines the tubulars and the compatible preventers in use. Combined with the mud program, the below documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Component	OD	Preventer	RWP
Drill pipe	4.5"		
HWDP	4.5"		
Jars	4.5"	Upper 4.5-7" VBR	10M
Drill collars and MWD tools	4.75-5.75"	Lower 4.5-7" VBR	TUIVI
Mud Motor	4.75-5.75"		
Production casing	5.5" x 5"		
ALL	0 - 13-5/8"	Annular	5M
Open-hole	-	Blind Rams	10M

VBR = Variable Bore Ram with compatible range listed in chart.

2. Well Control and Shut-In Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are minimum tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. The maximum pressure at which well control is transferred from the annular to another compatible ram is 2500 psi.

Drilling:

- 1. Sound the alarm (alert rig crew)
- 2. Space out the drill string
- 3. Shut down pumps and stop the rotary
- 4. Shut-in the well with the annular with HCR and choke in closed position
- 5. Confirm the well is shut-in
- 6. Notify contractor and company representatives
- 7. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
- 8. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
- 9. Prepare for well kill operation.

Tripping:

- 1. Sound alarm (alert rig crew)
- 2. Stab full opening safety valve and close the valve
- 3. Space out the drill string
- 4. Shut-in the well with the annular with HCR and choke in closed position
- 5. Confirm shut-in
- 6. Notify contractor and company representatives
- 7. Read and record the following data:

TITUS

Well Control Plan For 10M MASP Section of Wellbore

- Time of shut-in
- SIDPP and SICP
- Pit gain
- 8. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
- 9. Prepare for well kill operation.

Running Casing

- 1. Sound alarm (alert rig crew)
- 2. Stab crossover and valve and close the valve
- 3. Shut-in the well with annular with HCR and choke in closed position
- 4. Confirm shut-in
- 5. Notify contractor and company representatives
- 6. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
- 7. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
- 8. Prepare for well kill operation

No Pipe in Hole (Open Hole)

- 1. Well will be shut in with blind rams and choke in closed position, while HCR is open at any point when pipe or BHA are not in BOP stack. If pressure increase is observed:
- 2. Sound alarm (alert crew)
- 3. Confirm shut-in
- 4. Notify contractor and company representatives
- 5. Read and record the following data
 - Time of shut-in
 - Time of pressure increase
 - SICP
- 6. Prepare for well kill operation

Pulling BHA through BOP Stack

- 1. Prior to pulling last joint/stand of drillpipe through the stack, perform a flow check. If well is flowing:
 - a. Sound alarm (alert crew)
 - b. Stab full opening safety valve and close the valve
 - c. Space out the drill string
 - d. Shut-in the well with the annular with HCR and choke in closed position
 - e. Confirm shut-in
 - f. Notify contractor and company representatives
 - g. Read and record the following data
 - Time of shut-in
 - SIDPP and SICP
 - Pit gair
 - h. If pressure has increased to or is anticipated to increase to 2500 psi, confirm spacing and close the upper pipe rams.
 - i. Prepare for well kill operation.

TITUS

Well Control Plan For 10M MASP Section of Wellbore

2. With BHA in the stack:

- a. If possible to pick up high enough, pull BHA clear of the stack
 - i. Follow "Open Hole" procedure above
- b. If impossible to pick up high enough to pull BHA clear of the stack:
 - i. Stab crossover, make up one joint/stand of drillpipe, and full opening safety valve and close
 - ii. Space out drill string with tooljoint just beneath the upper pipe ram.
 - iii. Shut-in the well with upper pipe ram with HCR and choke in closed position
 - iv. Confirm shut-in
 - v. Notify contractor and company representatives
 - vi. Read and record the following:
 - Time of shut-in
 - SIDPP and SICP
 - Pit gain
 - vii. Prepare for well kill operation.

3. Well Control Drills

Well control drills are specific to the rig equipment, personnel and operation at the time a kick occurs. Each crew will execute one drill weekly relevant to ongoing operations, but will make a reasonable attempt to vary the type of drills. The drills will be recorded in the daily drilling log. Below are minimum tasks for respective well control drills.

Drilling/Pit:

Action	Responsible Party		
Initiate Drill			
Lift Flow Sensor or Pit Float to indicate a kick	Company Representative / Rig Manager		
Immediately record start time			
Recognition			
Driller and/or Crew recognizes indicator			
Driller stop drilling, pick up off bottom and spaces out drill	Driller		
string, stop pumps and rotary			
Conduct flow check			
Initiate Action	Company Representative / Rig Manager		
Sound alarm, notify rig crew that the well is flowing	Company Representative / Rig Manager		
Reaction			
Driller moves BOP remote and stands by			
Crew is at their assigned stations	Driller / Crew		
Time is stopped			
Record time and drill type in the Drilling Report			



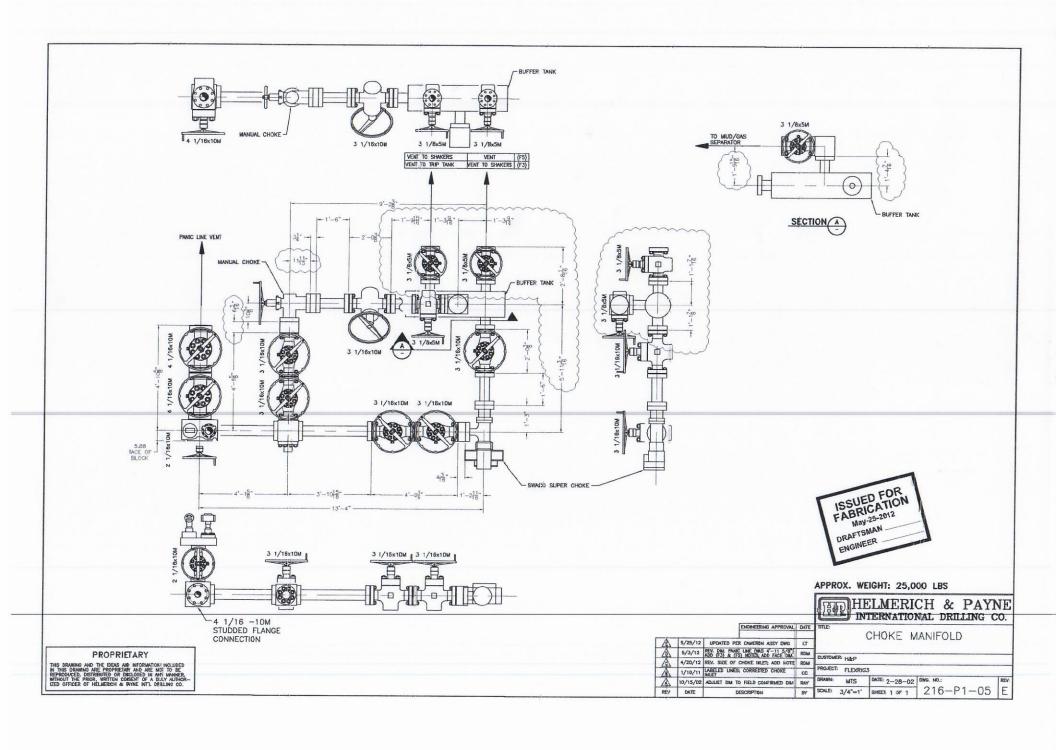
Well Control Plan For 10M MASP Section of Wellbore

Tripping Pit Drills (either in the hole or out of the hole)

Action	Responsible Party		
Initiate Drill Lift Flow Sensor or Pit Float to indicate a kick Immediately record start time	Company Representative / Rig Manager		
Recognition Driller recognizes indicator Suspends tripping operations Conduct Flow Check	Driller		
Initiate Action • Sound alarm, notify rig crew that the well is flowing	Company Representative / Rig Manager		
Reaction Position tool joint above rotary and set slips Stab FOSV and close valve Driller moves to BOP remote and stands by Crew is at their assigned stations Time is stopped Record time and drill type in the Drilling Report	Driller / Crew		

Choke

Action	Responsible Party
 Have designated choke operator on station at the choke panel Close annular preventer Pressure annulus up 200-300 psi Pump slowly to bump the float and obtain SIDPP At choke operator instruction, slowly bring pumps online to slow pump rate while holding casing pressure constant at the SICP. Allow time for the well to stabilize. Mark and record circulating drillpipe pressure. Measure time lag on drillpipe gauge after choke adjustments. Hold casing pressure constant as pumps are slowed down while choke is closed. Record time and drill type in the Drilling Report 	Company Man / Rig Manager & Rig Crew



10M BOP Stack

LINE/PUMP

10M BOP Stack 5M ANNULAR VARIANCE (SEE ATTACHED WELL CONTROL PLAN) **10M REMOTE KILL SCHEMATIC** 5M STANDPIPE RIG MUD PUMP 13 5/8" 10000# 13 5/8" 10000# wwwww Double Ram 10M 13-5/8" - 18M WP 13 5/8" 10000# 3-1/16" X 10 M VLAVE (S) 13 5/8" 10000# 2" KILL LINE CoFLEX 13.5/8° 10000# 3-1/16" X 10 M CHECK VALVE VRR Single Ram 10M 13-5/8" – 10M WP 13 5/8" 10000# REMOTE

11", 10000#



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

PWD Data Report

PWD disturbance (acres):

APD ID: 10400043125 **Submission Date:** 07/10/2019

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON SOUTH FED COM
Well Number: 431H

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? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

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 SOUTH FED COM Well Number: 431H

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD 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 SOUTH FED COM Well Number: 431H

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? NO

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? NO

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? NO

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 SOUTH FED COM Well Number: 431H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



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

Bond Info Data Report

09/29/2020

APD ID: 10400043125 **Submission Date:** 07/10/2019

Operator Name: TITUS OIL AND GAS PRODUCTION LLC

Well Name: EL CAMPEON SOUTH FED COM Well Number: 431H

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

09|29|2020 RECEIVED

Form C-102 Submit one copy to appropriate

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-025-47828		2 Pool Code						
		96676	JABALINA;WOLFCAMP, SOU	THWEST				
4 Property Code		5 Pi	6 Well Number					
329744		EL CAMPEO	431H					
7 OGRID No.		8 O	9 Elevation					
373986		TITUS OIL & C	TITUS OIL & GAS PRODUCTION LLC					

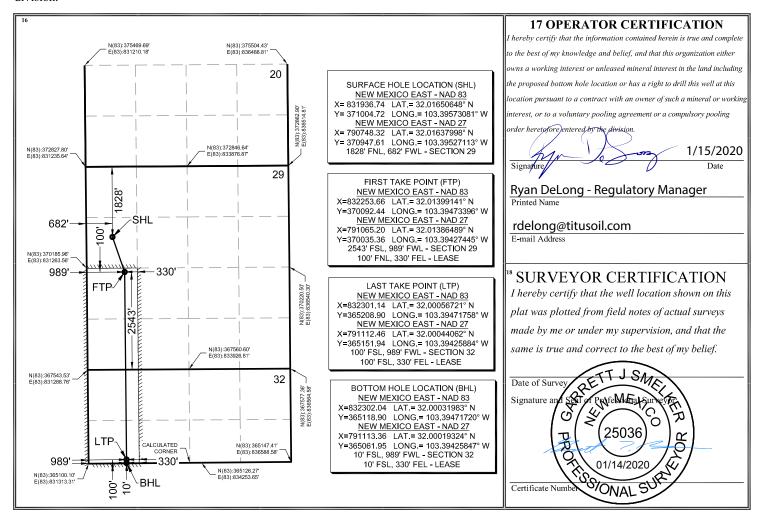
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Е	29	26-S	35-E		1828'	NORTH	682'	WEST	LEA

11 Bottom Hole Location If Different From Surface

	Bottom Hole Education if Birrelent Holm Sainace									
- 1	UL or lot no.	Section	Township	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	4	32	26-S	35-E		10'	SOUTH	989'	WEST	LEA
ſ	12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code			n Code 15 O	rder No.					
	160	Y	7							

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.



Inten	t	As Dril	led										
API #	30-025-4	7828											
Ope	rator Nar	me:	<u>I</u>			Pro	perty N	lame:	:				Well Number
													.1
	Off Point			.			<u>, </u>		,				
UL	Section	Township	Range	Lot	Feet		From N	1/S	Feet	F	rom E/W	County	
Latitu	ude				Longitu	ide	•			•		NAD	
First ⁻	Take Poin	nt (FTP)											
UL	Section	Township	Range	Lot	Feet		From N	1/S	Feet	F	rom E/W	County	
Latit	nde	<u>I</u>			Longitu	abu			1	1		NAD	
Last 1	Гаке Poin	t (LTP)											
UL	Section	Township	Range	Lot	Feet	Fro	om N/S	Feet		From E/\	N Coun	ity	
Latitu	<u>l</u> ude				Longitu	ıde		<u> </u>			NAD		
Is this	s well the	e defining v	vell for th	ne Hori:	zontal Sr	pacin	ng Unit?	, [
Is this	s well an i	infill well?]								
	ll is yes p ng Unit.	lease provi	de API if	availab	le, Oper	rator	Name	and v	vell nu	umber fo	or Defini	ng well fo	or Horizontal
API #	ŧ]										
Ope	rator Nar	me:	<u> </u>			Pro	perty N	lame	<u> </u>				Well Number
					ļ								

District I
1625 N. French Dr., Hobbs, NM 88240
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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

Submit Original to Appropriate District Office

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



GAS	CA	PT	TIR	\mathbf{E}	PI.	AN

Date: 1/17/2020		
□ Original	Operator & OGRID No.:	373986
☐ Amended - Reason for Amendment:		

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	Expecte d	Flared or Vented	Comments
El Campeon South Fed Com 111H		Sec 29, T26S, R35E	1828' FNL & 632' FWL	MCF/D		El Campeon CTB 20 will be utilized
El Campeon South Fed		Sec 29, T26S,	1828' FNL &			El Campeon CTB 20
Com 201H El Campeon South Fed		R35E Sec 29, T26S,	707' FEL 1828' FNL &			will be utilized El Campeon CTB 20
Com 321H El Campeon South Fed		R35E Sec 29, T26S,	657' FWL 1828' FNL &			will be utilized El Campeon CTB 20
Com 431H * 30-0 2	25-47828	R35E	682' FWL			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		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,	558' FSL &			El Campeon CTB 20

	R35E	590' FEL	will be utilized
El Campeon South 514H	Sec 20, T26S,	558' FSL &	El Campeon CTB 20
	R35E	620' FEL	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
 - o Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines