Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED)
OMB No. 1004-0137	1
Expires: October 31, 20)2

5. Lease Seria	l No
----------------	------

BURI	EAU OF LAND MANAGEMENT	J. Lease Serial IVO.	5. Dease Seriai 176.		
Do not use this f	OTICES AND REPORTS ON Worm for proposals to drill or to Use Form 3160-3 (APD) for suc	6. If Indian, Allottee or	Tribe Name		
		7 If Unit of CA/Agree	ement, Name and/or No.		
	TRIPLICATE - Other instructions on page	e 2	/. If Ollit of CA/Agree	sment, Name and/or No.	
1. Type of Well	/all Other		8. Well Name and No.		
Oil Well Gas W	Vell Other		9. API Well No.		
-					
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or E	Exploratory Area	
4. Location of Well (Footage, Sec., T.,R	.,M., or Survey Description)		11. Country or Parish,	State	
12. CHE	CK THE APPROPRIATE BOX(ES) TO INI	DICATE NATURE OF NOT	TICE, REPORT OR OTH	IER DATA	
TYPE OF SUBMISSION		TYPE OF AC	CTION		
Notice of Intent	Acidize Deep		duction (Start/Resume)	Water Shut-Off	
		~ =	clamation	Well Integrity Other	
Subsequent Report		=	complete nporarily Abandon	Oulei	
Final Abandonment Notice	Convert to Injection Plug		ter Disposal		
completion of the involved operatio	be perfonned or provide the Bond No. on fins. If the operation results in a multiple comices must be filed only after all requirements	pletion or recompletion in a	a new interval, a Form 31	60-4 must be filed once testing has been	
14. I hereby certify that the foregoing is	true and correct. Name (Printed/Typed)	Title			
Signature Signature	oth .	Date			
U Ü	THE SPACE FOR FEDI	ERAL OR STATE O	FICE USE		
Approved by					
		Title	r	Date	
Conditions of approval, if any, are attackerify that the applicant holds legal or ewhich would entitle the applicant to con-	ned. Approval of this notice does not warran quitable title to those rights in the subject le duct operations thereon.	t or	1		
	B U.S.C Section 1212, make it a crime for an		illfully to make to any de	partment or agency of the United States	

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

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

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

(Form 3160-5, page 2)

Additional Information

Location of Well

0. SHL: SWSE / 581 FSL / 1942 FEL / TWSP: 26S / RANGE: 35E / SECTION: 20 / LAT: 32.0231147 / LONG: -103.3871762 (TVD: 0 feet, MD: 0 feet) PPP: NWNE / 0 FNL / 1872 FEL / TWSP: 26S / RANGE: 35E / SECTION: 29 / LAT: 32.021515 / LONG: -103.386948 (TVD: 11900 feet, MD: 11920 feet) PPP: LOT 2 / 0 FNL / 1869 FEL / TWSP: 26S / RANGE: 35E / SECTION: 32 / LAT: 32.006987 / LONG: -103.386928 (TVD: 13088 feet, MD: 18146 feet) BHL: LOT 2 / 10 FSL / 1870 FEL / TWSP: 26S / RANGE: 35E / SECTION: 32 / LAT: 32.0003212 / LONG: -103.386922 (TVD: 13086 feet, MD: 20601 feet)



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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

			3 Pool Name JABALINA; WOLFCAMP, S	OUTHWEST		
4 Property Code		5 Property Name EL CAMPEON FED COM				
7 OGRID No. 331165		8 Operator Name EARTHSTONE OPERATING LLC				

¹⁰ Surface Location

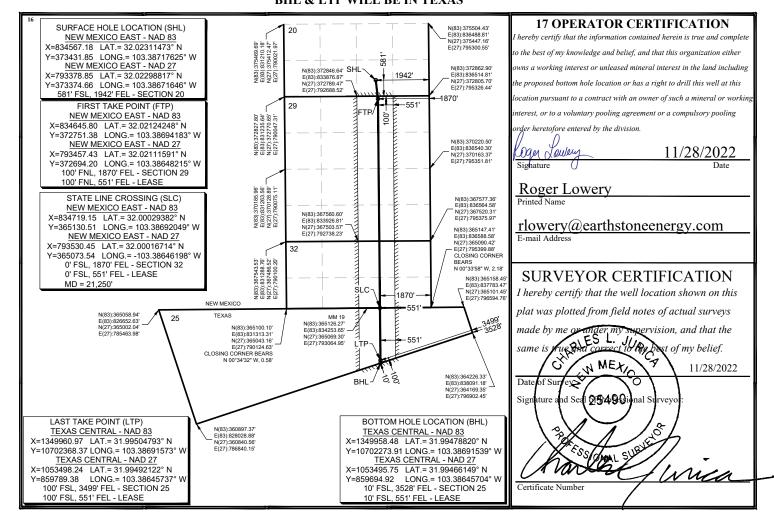
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
О	20	26-S	35-E		581'	SOUTH	1942'	EAST	LEA

"State Line Crossing If Different From Surface

1	State Line Clossing it 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 (TX)
1	32	26S	35E	2	0'	SOUTH	1870'	EAST	LEA
12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No.									
240	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.

*BHL & LTP WILL BE IN TEXAS



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Earthstone
LEASE NO.: NMNM134888
LOCATION: Section 20, T.26 S., R.35 E., NMPM

COUNTY: Lea County, New Mexico

WELL NAME & NO.: El CampeonFed Com 513H SURFACE HOLE FOOTAGE: 581'/S & 1942'/E BOTTOM HOLE FOOTAGE 0'/S & 1870'/E

COA

H2S	C Yes	• No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	• Low	© Medium	C High
Cave/Karst Potential	Critical		
Variance	O 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 10-3/4 inch surface casing shall be set at approximately 1100 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 $\underline{8}$

- **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.
- 2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the tail cement slurry due to cave/karst.

Operator has proposed to pump down 7-5/8" X 10-3/4" annulus. Operator must run a CBL from TD of the 7-5/8" casing to surface. Submit results to BLM.

Operator shall use the Minimum Max MW of 12.5ppg in this location due to Abnormal Pressure in this area.

- 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. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.
 - 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. 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.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

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)

 - Lea County
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
 689-5981
- 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.

ZS011323

1. Geologic Formations

TVD of target	13,092' EOL	Pilot hole depth	NA
MD at TD:	22,278'	Deepest expected fresh water:	400'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1050	Water	
Top of Salt	1482	Salt	
Base of Salt	5052	Salt	
Lamar	5350	Salt Water	
Delaware	5372	Salt Water	
Bone Spring Lime	9238	Oil/Gas	
1st Bone Spring	10605	Oil/Gas	
2nd Bone Spring	11092	Oil/Gas	
3rd Bone Spring	12164	Oil/Gas	
Wolfcamp	12460	Oil/Gas	
Wolfcamp X Sand	12495	Oil/Gas	
Wolfcamp Y Sand	12556	Oil/Gas	
Wolfcamp A	12585	Oil/Gas	
Wolfcamp B	12914	Target Oil/Gas	

2. Casing Program

	Casing Interval		001	Weight			Weight Grade Conn		SF	0F.D(SF
Hole Size	From	То	Csg. Size	(lbs)	Collapse	SF Burst			Body		
13.5"	0	1075	10.75"	45.5	J55	BTC	4.25	0.80	14.62		
9.875"	0	12200	7.625"	29.7	HCL80	BTC	1.16	1.02	2.00		
6.75"	0	12000	5.5"	20	P110	BTC	1.81	1.88	3.09		
6.75"	12000	22,278	5"	18	P110	BTC	1.81	1.88	3.09		
				BLM Mi	nimum Sa	fety 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. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

The 5" casing will be run back 200' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

	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 (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 3 rd 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?	17
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/	H₂0 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	250	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
Sull.	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Int	900	10.3	3.6	22.95	16	TXI Lightwieght Blend
Int	250	13.5	1.5	7.8	8	Tail: Class H
Prod	1250	14.2	1.25	6.2	19	Tail: 50:50:2 Class H Blend

Contigency remediation cement plan for intermediate casing if cmt is not circulated to surface:

<u>1st Stage - Bradenhead Stage Notes</u>

Operator will pump 1000+ sx of Class C and allow cement to fall into place. Operator will not put any fluid on top of the cement after the fall. This will leave annuls filled with air to TOC. We will WOC +/- 2 hrs (or when surface samples are firm enough) to ensure cement is set up. TOC will be above the Lamar allowing for the fill up stage.

2nd Stage - Fill Up Stage Notes

After WOC to allow the Bradenhead Stage to set up, operator will proceed with the Fill Up Stage. Since there is only air in the annulus (no fluid will be placed in annulus after bradenhead stage), we will pump cement with opposite valve set to allow air to displace out. Fill up cement will be mixed and pumped until returns are taken to surface to complete the fill up. This will confirm a solid column of cement in the annulus all the way to surface completing the top out job. Operator will WOC after cement returns have been taken to surface.

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
Production	12,000'	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	x	Tested to:					
			Ann	ular	Х	3000 psi					
			Blind	Ram							
9-7/8"	13-5/8"	3M	Pipe	Ram		3M					
			Double	e Ram		SIVI					
			Other*								
								Annular		x	50% testing pressure
6-3/4"	13-5/8"	10M	Blind	Ram	Х						
			VBR	Ram	Х	5M					
			VBR	Ram	Χ	OIVI					
			Other*								

See attached 5M Annular Variance Well Control plan for TItus 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.

	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?
Υ	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	Tymo	Weight	Vicesity	Water Loss
From	То	Туре	(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	OBM	10.8 - 11.8	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.

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 and submitted to the BLM.
N	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
Υ	CBL	Production casing (If cement not circulated to surface)
Υ	Mud log	Intermediate shoe to TD
N	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8035 psi at 13092' TVD
Abnormal Temperature	NO 185 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?

х	H2S Plan.	
х	BOP & Choke Schematics.	
х	Directional Plan	
х	Multibowl Schematic	

District I

District IV

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

<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Numbe	er 2 Pool Code 3 Pool Name			
30-025-4813	9	98234 WC-025 G-09 S263619C, Wolfcar		amp
4 Property Code		5 Property Name EL CAMPEON FED COM		
7 OGRID No. 331165		8 Operator Name EARTHSTONE OPERATING LLC		

¹⁰ Surface Location

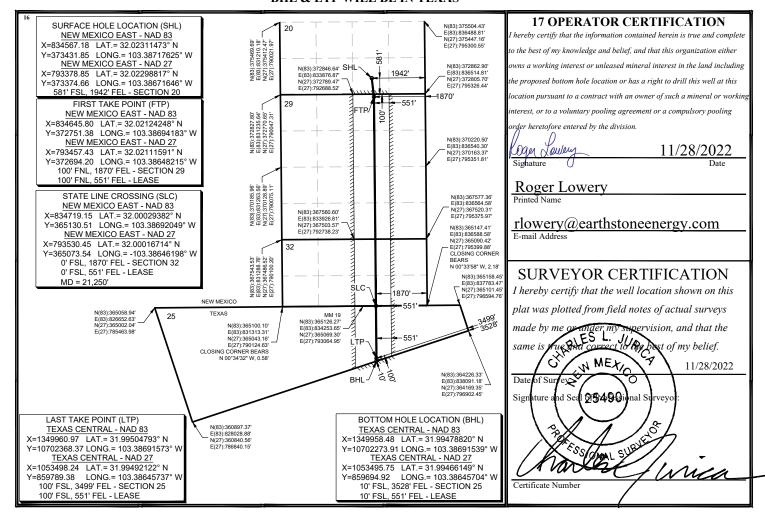
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
О	20	26-S	35-E		581'	SOUTH	1942'	EAST	LEA

¹¹ State Line Crossing If Different From Surface

			510	tte Line (erossing ir b	TITICI CITE I TOITI	Sarrace		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County (TX)
1	32	26S	35E	2	0'	SOUTH	1870'	EAST	LEA
12 Dedicated Acre	12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code				rder No.				
240	\ \ \	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.

*BHL & LTP WILL BE IN TEXAS





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	101/
Drill collars and MWD tools	4.75-5.75"	Lower 4.5-7" VBR	10M
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:



- 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 gain
 - 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.

Page 2 of 4



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	



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
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



Titus Oil & Gas Production, LLC

Lea County, NM - (NAD83 NME) El Campeon Fed Com (NAD83) El Campeon Fed Com 513H

OH Plan 1 08-31-22

Anticollision Report

31 August, 2022









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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

Well El Campeon Fed Com 513H **TVD Reference:** RKB @ 3200.50usft (TBD) MD Reference: RKB @ 3200.50usft (TBD)

North Reference: Grid

Minimum Curvature Survey Calculation Method: Output errors are at 2.00 sigma Database: **USA Compass**

Offset TVD Reference: Reference Datum

Reference Plan 1 08-31-22

Filter type: NO GLOBAL FILTER: Using user defined selection & filtering criteria

Interpolation Method: MD + Stations Interval 100.00usft Error Model: **ISCWSA**

Depth Range: Unlimited Scan Method: Closest Approach 3D Maximum centre distance of 50,000.00usft Results Limited by: Error Surface: Pedal Curve

Casing Method: Warning Levels Evaluated at: 2.00 Sigma Not applied

8/31/2022 **Survey Tool Program** Date

> From То

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

22,728.24 Plan 1 08-31-22 (OH) MWD+HRGM OWSG MWD + HRGM 0.00

ımmary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Dista Between Centres (usft)	nce Between Ellipses (usft)	Separation Factor	Warning
Cattleman Fed Com 3						
Cattleman Fed Com 123H - OH / 69915 - Surveys (H&P 6 Cattleman Fed Com 123H - OH / 69915 - Surveys (H&P 6 Cattleman Fed Com 213H - OH / 69914 - Surveys (H&P 6	10,686.36 10,700.00 11,058.00	18,729.39 18,729.33 19,104.98	397.74 397.98 199.74	263.61 263.66 63.54	2.965 C 2.963 S 1.467 L	- /
Cattleman Fed Com 4						
Cattleman Fed Com 114H - OH / 69918 - Surveys (H&P 6 Cattleman Fed Com 114H - OH / 69918 - Surveys (H&P 6 Cattleman Fed Com 204H - OH / 69917 - Surveys H&P 6 Cattleman Fed Com 204H - OH / 69917 - Surveys H&P 6	10,558.05 10,600.00 10,959.23 11,100.00	18,517.70 18,520.67 19,046.55 19,043.68	891.17 892.15 1,541.91 1,548.32	754.83 755.60 1,400.05 1,405.33	6.536 C 6.533 S 10.869 C 10.828 S	F C, ES
Cattlemen Fed Com						
403H - OH / 68704 - Surveys (H&P 656) 422H - OH / 68635 - Surveys (H&P 625) 422H - OH / 68635 - Surveys (H&P 625) 432H - OH / 68636 - Surveys (H&P 625) 432H - OH / 68636 - Surveys (H&P 625) 432H - OH / 68636 - Surveys (H&P 625) 433H - OH / 68696 - Surveys (H&P 656) 512H - OH / 68637 - Surveys (H&P 625) 512H - OH / 68637 - Surveys (H&P 625) 513H - OH / 68705 - Surveys (H&P 656)	12,561.96 12,687.26 12,750.00 12,773.14 12,800.00 12,950.00 12,722.75 13,009.11 13,100.00 13,026.24	20,855.83 20,848.13 20,867.85 21,076.79 21,087.14 21,094.00 21,140.87 21,477.00 21,477.00 21,474.00	208.40 1,128.31 1,129.97 1,734.52 1,734.67 1,741.56 386.08 1,456.56 1,459.92 114.22	62.52 982.24 983.59 1,587.75 1,587.68 1,593.52 239.50 1,306.66 1,309.10 4.62	7.724 C 7.720 S 11.818 C 11.802 E 11.764 S 2.634 C 9.716 C 9.680 S	F C S F C, ES, SF C, ES
Cattlemen Fed Com - Deep						
Cattleman Fed Com 404H - OH / 67732 - Surveys (H&P 4 Cattleman Fed Com 404H - OH / 67732 - Surveys (H&P 4 Cattleman Fed Com 404H - OH / 67732 - Surveys (H&P 4 Cattleman Fed Com 434H - OH / 67733 - Surveys (H&P 4 Cattleman Fed Com 434H - OH / 67733 - Surveys (H&P 4 Cattleman Fed Com 434H - OH / 67733 - Surveys (H&P 4 Cattleman Fed Com 514H - OH / 67734 - Surveys (H&P 4 Cattleman Fed Com 514H - OH / 67	12,526.24 12,550.00 12,750.00 12,696.46 12,700.00 12,750.00 13,004.90	20,900.08 20,901.58 20,952.41 21,022.77 21,023.74 21,039.50 21,341.00 21,341.00	1,508.70 1,508.88 1,522.99 885.51 885.52 887.01 1,368.63 1,369.54	1,364.32 1,364.26 1,376.09 744.25 744.22 745.31 1,228.96 1,229.67	10.449 C 10.433 E 10.368 S 6.269 C 6.267 E 6.260 S 9.799 C 9.791 S	S F C S F C, ES







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:
Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD)

RKB @ 3200.50usft (TBD)

Grid Minimum Curvature

2.00 sigma
USA Compass
Reference Datum

	Reference	Offset	Dista	nce		
ite Name Offset Well - Wellbore - Design	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
I Campeon Fed Com						
214H - OH / 68221 - Surveys (H&P 474) 214H - OH / 68221 - Surveys (H&P 474) 404H - OH / 68222 - Surveys (H&P 474) 404H - OH / 68222 - Surveys (H&P 474) 404H - OH / 68222 - Surveys (H&P 474) 434H - OH / 68223 - Surveys (H&P 474) 434H - OH / 68223 - Surveys (H&P 474) 434H - OH / 68223 - Surveys (H&P 474) 514H - OH / 68224 - Suveys (H&P 474) 514H - OH / 68224 - Suveys (H&P 474)	10,817.40 10,900.00 12,189.76 12,200.00 20,800.00 8,400.03 12,654.81 20,702.33 12,648.20 20,711.06	10,882.65 10,929.81 12,183.57 12,192.71 20,525.00 8,437.80 12,946.34 20,912.00 12,707.00 20,918.00	665.39 668.71 1,255.95 1,255.96 1,568.91 703.68 714.43 988.60 1,150.64 1,201.02	611.19 613.90 1,196.71 1,196.68 1,325.26 658.89 653.10 757.62 1,089.63 953.39	12.277 C 12.202 S 21.199 C 21.188 E 6.439 S 15.710 C 11.650 E 4.280 S 18.859 C 4.850 E	F C S F C S F C
I Campeon Fed Com (NAD83)						
El Campeon Fed Com 412H - OH - Plan 1 08-31-22 El Campeon Fed Com 412H - OH - Plan 1 08-31-22 El Campeon Fed Com 413H - OH - Plan 1 08-31-22 El Campeon Fed Com 413H - OH - Plan 1 08-31-22 El Campeon Fed Com 413H - OH - Plan 1 08-31-22 El Campeon Fed Com 432H - OH - Plan 1 08-31-22 El Campeon Fed Com 432H - OH - Plan 1 08-31-22 El Campeon Fed Com 433H - OH - Plan 1 08-31-22 El Campeon Fed Com 433H - OH - Plan 1 08-31-22 El Campeon Fed Com 433H - OH - Plan 1 08-31-22	1,500.00 22,728.24 1,416.33 1,500.00 22,728.24 11,616.30 22,728.24 1,416.33 1,500.00 22,656.30	1,500.00 22,562.94 1,417.33 1,501.00 22,059.36 11,625.22 22,401.61 1,417.33 1,501.00 22,123.74	1,260.24 1,813.15 30.09 30.09 627.02 1,097.03 1,152.41 29.98 29.98 399.93	1,250.68 1,515.36 20.82 20.52 382.94 1,059.47 865.39 20.71 20.41 179.46	131.757 C 6.089 S 3.245 C 3.145 E 2.569 S 29.207 C 4.015 E 3.233 C 3.134 E 1.814 S	F C S F C S, SF C

Offset Des	sign: Ca	ttleman Fe	d Com 3 -	Cattleman	Fed Com	123H - OH	/ 69915 - Surve	eys (H&P 6	16)				Offset Site Error:	0.00 usft
	rence	6-MWD+HRGI	set		Major Axis		Offset Wellbo	re Centre		Rule Assi	_		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	54.41	4.41	1.00	1.06	-0.672	7,680.41	-90.05	7,680.94					
100.00	100.00	163.22	113.22	1.08	1.47	-0.674	7,680.28	-90.35	7,680.82	7,678.27	2.55	3,011.687		
200.00	200.00	266.61	216.61	1.60	2.04	-0.678	7,680.06	-90.82	7,680.61	7,676.99	3.62	2,119.662		
300.00	300.00	364.36	314.36	2.01	2.60	-0.680	7,679.85	-91.17	7,680.40	7,675.83	4.58	1,678.379		
400.00	400.00	458.75	408.75	2.35	3.08	-0.683	7,679.70	-91.52	7,680.25	7,674.87	5.38	1,427.623		
500.00	500.00	552.83	502.82	2.65	3.38	-0.686	7,679.63	-91.93	7,680.18	7,674.22	5.95	1,289.825		
600.00	600.00	655.21	605.21	2.93	3.62	-0.690	7,679.58	-92.44	7,680.13	7,673.70	6.43	1,193.532		
633.43	633.43	683.44	633.43	3.01	3.69	-0.691	7,679.56	-92.60	7,680.12	7,673.55	6.57	1,168.920		
700.00	700.00	737.55	687.54	3.18	3.81	-0.693	7,679.60	-92.92	7,680.17	7,673.34	6.84	1,123.540		
800.00	800.00	841.79	791.78	3.41	4.04	-0.698	7,679.76	-93.53	7,680.33	7,673.08	7.25	1,059.060		
900.00	900.00	938.24	888.23	3.64	4.26	-0.702	7,679.88	-94.15	7,680.47	7,672.83	7.64	1,005.752		
1,000.00	1,000.00	1,048.45	998.43	3.85	4.50	-0.707	7,679.98	-94.83	7,680.56	7,672.53	8.03	956.458		
1,100.00	1,100.00	1,151.63	1,101.62	4.05	4.70	-0.712	7,679.93	-95.38	7,680.52	7,672.16	8.37	917.998		
1,200.00	1,200.00	1,271.69	1,221.67	4.24	5.04	-0.715	7,679.75	-95.85	7,680.38	7,671.54	8.84	868.438		
1,300.00	1,300.00	1,407.70	1,357.68	4.43	5.37	-0.720	7,679.06	-96.55	7,679.89	7,670.59	9.29	826.292		
1,400.00	1,400.00	1,474.97	1,424.95	4.61	5.50	-0.722	7,678.74	-96.82	7,679.40	7,669.81	9.58	801.454		
1,500.00	1,500.00	1,567.47	1,517.45	4.78	5.63	-0.723	7,678.51	-96.94	7,679.14	7,669.25	9.89	776.477		
1,506.51	1,506.51	1,573.75	1,523.73	4.79	5.64	-170.710	7,678.50	-96.94	7,679.13	7,669.22	9.91	774.822		
1,600.00	1,599.98	1,677.00	1,626.98	4.98	5.76	-170.707	7,678.14	-96.83	7,680.52	7,670.28	10.24	750.003		
1,620.70	1,620.67	1,702.54	1,652.52	4.99	5.80	-170.705	7,678.02	-96.83	7,681.20	7,670.91	10.29	746.296		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

USA Compass Reference Datum

Offset Des	sign: ^{Ca}	ttieman Fe	d Com 3 -	Cattleman	Fed Com	123H - OH /	/ 69915 - Surv	eys (H&P 6	516)				Offset Site Error:	0.00 usft
Survey Progr	ram: 20 rence	6-MWD+HRG	M set	Sami I	laior Axis		Offset Wellbe	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
1,700.00	1,699.89	1,772.00	1,721.98	5.07	5.91	-170.709	7,677.81	-96.89	7,684.26	7,673.78	10.49	732.855		
1,800.00	1,799.81	1,864.78	1,814.76	5.23	6.05	-170.714	7,677.64	-96.93	7,688.23	7,677.46	10.77	713.544		
1,900.00	1,899.72	1,963.80	1,913.77	5.41	6.19	-170.720	7,677.45	-97.04	7,692.20	7,681.11	11.09	693.591		
2,000.00	1,999.63	2,057.69	2,007.66	5.60	6.37	-170.726	7,677.32	-97.23	7,696.22	7,684.80	11.42	673.837		
2,100.00	2,099.54	2,173.15	2,123.12	5.80	6.48	-170.730	7,677.02	-96.96	7,700.10	7,688.33	11.77	654.341		
2,200.00	2,199.45	2,253.99	2,203.96	6.02	6.51	-170.730	7,676.89	-96.42	7,704.09	7,692.01	12.07	638.197		
2,300.00	2,299.36	2,338.00	2,287.97	6.24	6.53	-170.730	7,676.84	-95.78	7,708.19	7,695.81	12.38	622.697		
2,400.00	2,399.27	2,409.32	2,359.29	6.47	6.61	-170.733	7,677.00	-95.72	7,712.60	7,699.92	12.68	608.289		
2,500.00	2,499.18	2,432.00	2,381.97	6.72	6.63	-170.736	7,677.14	-95.91	7,717.69	7,704.75	12.94	596.529		
2,600.00	2,599.10	2,471.35	2,421.30	6.96	6.74	-170.743	7,677.72	-96.68	7,723.59	7,710.30	13.29	581.014		
2,700.00	2,699.01	2,526.00	2,475.88	7.22	6.91	-170.763	7,679.55	-98.96	7,730.79	7,717.09	13.70	564.334		
2,800.00	2,798.92	2,526.00	2,475.88	7.48	6.91	-170.763	7,679.55	-98.96	7,738.47	7,724.52	13.95	554.769		
2,900.00	2,898.83	2,526.00	2,475.88	7.74	6.91	-170.763	7,679.55	-98.96	7,747.43	7,733.23	14.20	545.522		
3,000.00	2,998.74	18,759.50	10,679.89	8.01	118.66	95.913	-407.08	-331.02	7,696.58	7,621.37	75.22	102.327		
3,100.00	3,098.65	18,759.11	10,679.91	8.28	118.65	95.970	-406.69	-331.01	7,596.72	7,521.39	75.33	100.848		
3,200.00	3,198.56	18,758.72	10,679.93	8.56	118.65	96.026	-406.30	-331.01	7,496.86	7,421.42	75.44	99.370		
3,300.00	3,298.47	18,758.33	10,679.94	8.84	118.64	96.082	-405.91	-331.01	7,397.00	7,321.44	75.56	97.893		
3,400.00	3,398.39	18,757.93	10,679.96	9.13	118.63	96.138	-405.52	-331.01	7,297.15	7,221.47	75.68	96.417		
3,500.00	3,498.30	18,757.54	10,679.98	9.41	118.63	96.194	-405.13	-331.01	7,197.30	7,121.50	75.81	94.943		
3,600.00	3,598.21	18,757.15	10,680.00	9.70	118.62	96.250	-404.74	-331.01	7,097.46	7,021.53	75.93	93.471		
3,700.00	3,698.12	18,756.76	10,680.02	9.99	118.62	96.307	-404.35	-331.00	6,997.62	6,921.56	76.06	92.000		
3,800.00	3,798.03	18,756.37	10,680.03	10.29	118.61	96.363	-403.95	-331.00	6,897.78	6,821.59	76.19	90.532		
3,900.00	3,897.94	18,755.98	10,680.05	10.58	118.61	96.419	-403.56	-331.00	6,797.95	6,721.63	76.33	89.065		
4,000.00	3,997.85	18,755.58	10,680.07	10.88	118.60	96.475	-403.17	-331.00	6,698.13	6,621.67	76.46	87.601		
4,100.00 4,200.00	4,097.76 4,197.68	18,755.19 18,754.80	10,680.09 10,680.10	11.18 11.48	118.60 118.59	96.531 96.587	-402.78 -402.39	-331.00 -331.00	6,598.31 6,498.49	6,521.71 6,421.75	76.60 76.74	86.139 84.679		
4,300.00	4,297.59	18,754.41	10,680.12	11.78	118.58	96.644	-402.00	-330.99	6,398.68	6,321.80	76.89	83.222		
4,400.00	4,297.59	18,754.02	10,680.12	12.08	118.58	96.700	-402.00	-330.99	6,298.88	6,221.85	77.03	81.768		
4,500.00	4,497.41	18,753.62	10,680.16	12.39	118.57	96.756	-401.21	-330.99	6,199.08	6,121.90	77.18	80.317		
4,600.00	4,597.32	18,753.23	10,680.18	12.69	118.57	96.812	-400.82	-330.99	6,099.29	6,021.96	77.34	78.868		
4,700.00	4,697.23	18,752.84	10,680.19	13.00	118.56	96.869	-400.43	-330.99	5,999.51	5,922.02	77.49	77.423		
4,800.00	4,797.14	18,752.45	10,680.21	13.31	118.56	96.925	-400.04	-330.99	5,899.74	5,822.09	77.65	75.981		
4,900.00	4,897.05	18,752.06	10,680.23	13.62	118.55	96.981	-399.65	-330.98	5,799.97	5,722.16	77.81	74.542		
5,000.00	4,996.97	18,751.67	10,680.25	13.92	118.55	97.037	-399.26	-330.98	5,700.21	5,622.24	77.97	73.107		
5,100.00	5,096.88	18,751.27	10,680.26	14.23	118.54	97.094	-398.87	-330.98	5,600.46	5,522.32	78.14	71.675		
5,200.00	5,196.79	18,750.88	10,680.28	14.55	118.53	97.150	-398.47	-330.98	5,500.72	5,422.41	78.30	70.248		
5,300.00	5,296.70	18,750.49	10,680.30	14.86	118.53	97.206	-398.08	-330.98	5,400.98	5,322.51	78.48	68.823		
5,400.00	5,396.61	18,750.10	10,680.32	15.17	118.52	97.262	-397.69	-330.98	5,301.26	5,222.61	78.65	67.403		
5,500.00	5,496.52	18,749.71	10,680.34	15.48	118.52	97.319	-397.30	-330.98	5,201.55	5,122.72	78.83	65.987		
5,600.00	5,596.43	18,749.31	10,680.35	15.79	118.51	97.375	-396.91	-330.97	5,101.85	5,022.84	79.01	64.575		
5,700.00	5,696.34	18,748.92	10,680.37	16.11	118.51	97.431	-396.52	-330.97	5,002.16	4,922.97	79.19	63.167		
5,800.00	5,796.26	18,748.53	10,680.39	16.42	118.50	97.488	-396.13	-330.97	4,902.48	4,823.11	79.38	61.763		
5,900.00	5,896.17	18,748.14	10,680.41	16.74	118.50	97.544	-395.73	-330.97	4,802.82	4,723.26	79.56	60.364		
6,000.00	5,996.08	18,747.75	10,680.42	17.05	118.49	97.600	-395.34	-330.97	4,703.17	4,623.42	79.76	58.969		
6,100.00	6,095.99	18,747.36	10,680.44	17.37	118.49	97.657	-394.95	-330.97	4,603.54	4,523.59	79.95	57.579		
6,200.00	6,195.90	18,746.96	10,680.46	17.68	118.48	97.713	-394.56	-330.96	4,503.92	4,423.77	80.15	56.194		
6,300.00	6,295.81	18,746.57	10,680.48	18.00	118.47	97.769	-394.17	-330.96	4,404.32	4,323.97	80.35	54.813		
6,400.00	6,395.72	18,746.18	10,680.50	18.32	118.47	97.826	-393.78	-330.96	4,304.74	4,224.18	80.56	53.438		
6,500.00	6,495.63	18,745.79	10,680.51	18.63	118.46	97.882	-393.39	-330.96	4,205.18	4,124.41	80.76	52.067		
6,600.00	6,595.55	18,745.40	10,680.53	18.95	118.46	97.938	-392.99	-330.96	4,105.64	4,024.66	80.98	50.702		
6,700.00	6,695.46	18,745.00	10,680.55	19.27	118.45	97.995	-392.60	-330.96	4,006.12	3,924.93	81.19	49.341		
6,800.00	6,795.37	18,744.61	10,680.57	19.59	118.45	98.051	-392.21	-330.95	3,906.63	3,825.22	81.41	47.986		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

Offset De	sign: Ca	illieman Fe	d Com 3 -	Cattleman	Fed Com	123H - OH /	/ 69915 - Surv	eys (H&P 6	16)				Offset Site Error:	0.00 usf
Survey Progr	ram: 20	06-MWD+HRG	M fset	Somi M	laior Axis		Offset Wellbe	ore Centro	Dies	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
6,900.00	6,895.28	18,744.22	10,680.58	19.91	118.44	98.107	-391.82	-330.95	3,807.16	3,725.53	81.63	46.637		
7,000.00	6,995.19	18,743.83	10,680.60	20.23	118.44	98.164	-391.43	-330.95	3,707.73	3,625.86	81.86	45.293		
7,100.00	7,095.10	18,743.44	10,680.62	20.54	118.43	98.220	-391.04	-330.95	3,608.32	3,526.23	82.09	43.954		
7,200.00	7,195.01	18,743.05	10,680.64	20.86	118.42	98.276	-390.65	-330.95	3,508.95	3,426.62	82.33	42.621		
7,300.00	7,294.92	18,742.65	10,680.66	21.18	118.42	98.333	-390.25	-330.95	3,409.61	3,327.04	82.57	41.294		
7,400.00	7,394.84	18,742.26	10,680.67	21.50	118.41	98.389	-389.86	-330.94	3,310.32	3,227.50	82.82	39.972		
7,500.00	7,494.75	18,741.87	10,680.69	21.82	118.41	98.446	-389.47	-330.94	3,211.06	3,128.00	83.07	38.656		
7,600.00	7,594.66	18,741.48	10,680.71	22.14	118.40	98.502	-389.08	-330.94	3,111.86	3,028.54	83.32	37.347		
7,700.00	7,694.57	18,741.09	10,680.73	22.46	118.40	98.558	-388.69	-330.94	3,012.71	2,929.12	83.59	36.043		
7,800.00	7,794.48	18,740.70	10,680.74	22.78	118.39	98.615	-388.30	-330.94	2,913.61	2,829.76	83.86	34.745		
7,900.00	7,894.39	18,740.30	10,680.76	23.10	118.39	98.671	-387.91	-330.94	2,814.58	2,730.45	84.13	33.453		
8,000.00	7,994.30	18,739.91	10,680.78	23.42	118.38	98.728	-387.52	-330.93	2,715.62	2,631.20	84.42	32.168		
8,100.00	8,094.21	18,739.52	10,680.80	23.75	118.37	98.784	-387.12	-330.93	2,616.74	2,532.03	84.72	30.888		
8,200.00	8,194.13	18,739.13	10,680.82	24.07	118.37	98.840	-386.73	-330.93	2,517.95	2,432.93	85.02	29.615		
8,300.00	8,294.04	18,738.74	10,680.83	24.39	118.36	98.897	-386.34	-330.93	2,419.26	2,333.92	85.34	28.349		
8,400.00	8,393.95	18,738.34	10,680.85	24.71	118.36	98.953	-385.95	-330.93	2,320.68	2,235.01	85.67	27.088		
8,500.00	8,493.86	18,737.95	10,680.87	25.03	118.35	99.010	-385.56	-330.93	2,222.23	2,136.21	86.02	25.834		
8,600.00	8,593.77	18,737.56	10,680.89	25.35	118.35	99.066	-385.17	-330.92	2,123.92	2,037.53	86.38	24.587		
8,700.00	8,693.68	18,737.17	10,680.90	25.67	118.34	99.122	-384.78	-330.92	2,025.77	1,939.00	86.77	23.346		
8,800.00	8,793.59	18,736.78	10,680.92	26.00	118.34	99.179	-384.38	-330.92	1,927.82	1,840.64	87.18	22.112		
8,900.00	8,893.50	18,736.39	10,680.94	26.32	118.33	99.235	-383.99	-330.92	1,830.09	1,742.46	87.63	20.884		
9,000.00	8,993.42	18,735.99	10,680.96	26.64	118.32	99.292	-383.60	-330.92	1,732.62	1,644.50	88.11	19.664		
9,100.00	9,093.33	18,735.60	10,680.98	26.96	118.32	99.348	-383.21	-330.92	1,635.45	1,546.81	88.64	18.450		
9,200.00	9,193.24	18,735.21	10,680.99	27.29	118.31	99.405	-382.82	-330.91	1,538.65	1,449.41	89.23	17.243		
9,300.00	9,293.15	18,734.82	10,681.01	27.61	118.31	99.461	-382.43	-330.91	1,442.28	1,352.38	89.90	16.044		
9,400.00	9,393.06	18,734.43	10,681.03	27.93	118.30	99.517	-382.04	-330.91	1,346.44	1,255.78	90.66	14.852		
9,500.00	9,492.97	18,734.03	10,681.05	28.25	118.30	99.574	-381.64	-330.91	1,251.25	1,159.71	91.54	13.669		
9,600.00	9,592.88	18,733.64	10,681.06	28.58	118.29	99.630	-381.25	-330.91	1,156.87	1,064.29	92.58	12.496		
9,700.00	9,692.79	18,733.25	10,681.08	28.90	118.29	99.687	-380.86	-330.91	1,063.53	969.68	93.84	11.333		
9,800.00	9,792.71	18,732.86	10,681.10	29.22	118.28	99.743	-380.47	-330.90	971.50	876.12	95.39	10.185		
9,900.00	9,892.62	18,732.47	10,681.12	29.55	118.28	99.800	-380.08	-330.90	881.22	783.90	97.32	9.055		
10,000.00	9,992.53	18,732.08	10,681.14	29.87	118.27	99.856	-379.69	-330.90	793.27	693.49	99.78	7.950		
10,100.00	10,092.44	18,731.68	10,681.15	30.19	118.26	99.912	-379.30	-330.90	708.53	605.58	102.95	6.882		
10,200.00	10,192.35	18,731.29	10,681.17	30.52	118.26	99.969	-378.90	-330.90	628.28	521.25	107.04	5.870		
10,300.00	10,292.26	18,730.90	10,681.19	30.84	118.25	100.025	-378.51	-330.90	554.50	442.27	112.23	4.941		
10,400.00	10,392.17	18,730.51	10,681.21	31.16	118.25	100.082	-378.12	-330.89	490.10	371.57	118.53	4.135		
10,500.00	10,492.08	18,730.12	10,681.22	31.49	118.24	100.138	-377.73	-330.89	439.24	313.87	125.37	3.504		
10,600.00	10,592.00	18,729.72	10,681.24	31.81	118.24	100.195	-377.34	-330.89	407.01	275.73	131.28	3.100		
10,686.36	10,678.27	18,729.39	10,681.26	32.09	118.23	100.243	-377.00	-330.89	397.74	263.61	134.13	2.965 CC,	ES	
10,700.00	10,691.91	18,729.33	10,681.26	32.13	118.23	100.251	-376.95	-330.89	397.98	263.66	134.32	2.963 SF		
10,800.00	10,791.82	18,728.94	10,681.28	32.46	118.23	100.307	-376.56	-330.89	413.66	280.15	133.51	3.098		
10,900.00	10,891.73	18,728.55	10,681.30	32.78	118.22	100.364	-376.16	-330.89	451.49	321.71	129.78	3.479		
11,000.00	10,991.64	18,728.16	10,681.31	33.11	118.21	100.420	-375.77	-330.88	506.53	381.63	124.89	4.056		
11,100.00	11,091.55	18,727.77	10,681.33	33.43	118.21	100.477	-375.38	-330.88	573.84	453.68	120.16	4.776		
11,200.00	11,191.46	18,727.37	10,681.35	33.75	118.20	100.533	-374.99 -374.60	-330.88 -330.88	649.63	533.50 618.36	116.13	5.594		
11,300.00	11,291.37	18,726.98	10,681.37	34.08	118.20	100.590	-374.60	-330.88	731.27	618.36	112.91	6.477		
11,400.00	11,391.29	18,726.59	10,681.38	34.40	118.19	100.646	-374.21	-330.88	816.99	706.60	110.39	7.401		
11,500.00	11,491.20	18,726.20	10,681.40	34.73	118.19	100.703	-373.82	-330.88	905.65	797.19	108.46	8.350		
11,600.00	11,591.11	18,725.81	10,681.42	35.05	118.18	100.759	-373.42	-330.87	996.46	889.47	106.98	9.314		
11,700.00	11,691.02	18,725.41	10,681.44	35.38	118.18	100.815	-373.03	-330.87	1,088.88	983.01	105.86	10.286		
11,800.00	11,790.93	18,725.02	10,681.46	35.70	118.17	100.872	-372.64	-330.87	1,182.53	1,077.52	105.01	11.261		
11,900.00	11,890.84	18,724.63	10,681.47	36.03	118.16	100.928	-372.25	-330.87	1,277.15	1,172.76	104.38	12.235		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

rvey Prog	ıram: 2	06-MWD+HRG	M							Rule Assi	aned:		Offset Well Error:	1.00 usft
	erence	Off		Semi N	lajor Axis		Offset Wellb	ore Centre	Dis	tance	grieu.		Oliset Well Litor.	1.00 0010
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
11,907.54	11,898.38	18,724.60	10,681.47	36.05	118.16	100.933	-372.22	-330.87	1,284.31	1,179.97	104.34	12.309		
12,000.00	11,990.80	18,723.00	10,681.55	36.33	118.14	106.806	-370.62	-330.86	1,372.43	1,268.53	103.90	13.209		
12,028.24	12,019.04	18,723.00	10,681.55	36.36	118.14	-81.469	-370.62	-330.86	1,399.41	1,295.62	103.79	13.484		
12,100.00	12,090.80	18,723.00	10,681.55	36.36	118.14	-81.469	-370.62	-330.86	1,468.14	1,364.60	103.54	14.179		
12,200.00	12,190.80	18,715.04	10,681.91	36.36	118.03	-80.377	-362.67	-330.83	1,564.36	1,461.11	103.25	15.151		
12,300.00	12,290.80	18,711.19	10,682.08	36.36	117.98	-79.851	-358.82	-330.82	1,661.02	1,557.94	103.08	16.114		
12,400.00	12,390.80	18,707.39	10,682.25	36.37	117.92	-79.333	-355.03	-330.81	1,758.04	1,655.06	102.98	17.072		
12,500.00	12,490.80	18,703.64	10,682.41	36.37	117.87	-78.825	-351.28	-330.80	1,855.37	1,752.43	102.95	18.023		
12,528.24	12,519.04	18,702.59	10,682.46	36.37	117.85	-78.683	-350.23	-330.79	1,882.91	1,779.96	102.95	18.290		
12,550.00	12,540.79	18,702.13	10,682.48	36.40	117.85	92.203	-349.77	-330.79	1,904.15	1,801.20	102.95	18.496		
12,600.00	12,590.61	18,703.73	10,682.41	36.63	117.87	69.692	-351.37	-330.80	1,952.98	1,849.99	102.99	18.962		
12,650.00	12,639.89	18,708.98	10,682.18	36.95	117.94	51.508	-356.61	-330.81	2,001.54	1,898.46	103.08	19.418		
12,700.00	12,688.24	18,723.00	10,681.55	37.29	118.14	38.771	-370.62	-330.86	2,049.45	1,946.22	103.23	19.853		
12,750.00	12,735.30	18,731.47	10,681.16	37.62	118.26	30.738	-379.08	-330.90	2,096.33	1,992.96	103.37	20.280		
12,800.00	12,780.72	18,750.25	10,680.31	37.96	118.53	25.077	-397.85	-330.98	2,141.84	2,038.25	103.58	20.677		
12,850.00	12,824.15	18,773.00	10,679.28	38.29	118.85	21.104	-420.57	-331.07	2,185.61	2,081.77	103.84	21.047		
12,900.00	12,865.26	18,799.54	10,678.07	38.60	119.22	18.221	-447.08	-331.18	2,227.30	2,123.16	104.14	21.388		
12,950.00	12,903.73	18,829.67	10,676.71	38.90	119.65	16.071	-477.18	-331.31	2,266.60	2,162.12	104.47	21.696		
13,000.00	12,939.27	18,863.17	10,675.19	39.18	120.12	14.433	-510.64	-331.45	2,303.18	2,198.34	104.84	21.969		
13,050.00	12,971.62	18,899.76	10,673.53	39.43	120.63	13.168	-547.20	-331.60	2,336.78	2,231.54	105.24	22.204		
13,100.00	13,000.52	18,912.00	10,672.97	39.65	120.81	12.271	-559.43	-331.65	2,367.28	2,261.81	105.47	22.445		
13,150.00	13,025.76	18,912.00	10,672.97	39.85	120.81	11.583	-559.43	-331.65	2,394.99	2,289.39	105.60	22.679		
13,200.00	13,047.14	18,912.00	10,672.97	40.02	120.81	11.022	-559.43	-331.65	2,419.81	2,314.10	105.71	22.890		
13,250.00	13,064.50	18,912.00	10,672.97	40.15	120.81	10.567	-559.43	-331.65	2,441.66	2,335.85	105.80	23.077		
13,300.00	13,077.71	18,912.00	10,672.97	40.26	120.81	10.202	-559.43	-331.65	2,460.44	2,354.57	105.87	23.240		
13,350.00	13,086.67	18,912.00	10,672.97	40.33	120.81	9.914	-559.43	-331.65	2,476.09	2,370.18	105.92	23.378		
10 400 00	40.004.00	40.040.00	40.070.07	40.00	400.04	0.005	550.40	224.05	0.400.54	0.000.04	405.00	00.400		
13,400.00	13,091.30	18,912.00	10,672.97	40.38	120.81	9.695	-559.43	-331.65	2,488.54	2,382.61	105.93	23.492		
13,428.24	13,092.00	18,912.00	10,672.97	40.39	120.81	9.599	-559.43	-331.65	2,494.15	2,388.27	105.88	23.556		
13,500.00	13,092.00	18,912.00	10,672.97	40.40	120.81	9.599	-559.43	-331.65	2,508.07	2,402.38	105.69	23.730		
13,600.00	13,092.00	18,912.00	10,672.97	40.43	120.81	9.599	-559.43	-331.65	2,530.73	2,425.41	105.31	24.030		
13,700.00	13,092.00	18,912.00	10,672.97	40.46	120.81	9.599	-559.43	-331.65	2,557.10	2,452.24	104.86	24.386		
13 000 00	12 002 00	19 012 00	10 672 07	40.50	120.01	0.500	550.42	221.65	2 507 07	2 402 74	104.22	24 707		
13,800.00	13,092.00	18,912.00	10,672.97 10,672.97	40.50	120.81	9.599	-559.43 -559.43	-331.65	2,587.07	2,482.74	104.33	24.797		
13,900.00	13,092.00	18,912.00		40.53	120.81	9.599	-559.43	-331.65	2,620.52	2,516.78	103.74	25.261		
14,000.00	13,092.00	18,912.00	10,672.97	40.58	120.81	9.599	-559.43	-331.65	2,657.31	2,554.22	103.09	25.777		
14,100.00 14,200.00	13,092.00	18,912.00	10,672.97	40.63	120.81	9.599	-559.43	-331.65	2,697.31	2,594.92	102.39	26.344		
14,∠∪∪.∪0	13,092.00	18,912.00	10,672.97	40.69	120.81	9.599	-559.43	-331.65	2,740.38	2,638.73	101.65	26.959		
14,300.00	13,092.00	18,912.00	10,672.97	40.76	120.81	9.599	-559.43	-331.65	2,786.37	2,685.49	100.88	27.622		
14,400.00	13,092.00	18,912.00	10,672.97	40.76	120.81	9.599	-559.43	-331.65	2,835.14	2,735.07	100.88	28.330		
14,500.00	13,092.00	18,912.00	10,672.97	40.85	120.81	9.599	-559.43	-331.65	2,886.56	2,787.30	99.26	29.081		
14,600.00	13,092.00	18,912.00	10,672.97	41.10	120.81	9.599	-559.43	-331.65	2,940.48	2,767.30	98.43	29.875		
14,700.00		18,912.00		41.10	120.81	9.599	-559.43	-331.65	2,940.46		96.43	30.708		
-,100.00	13,082.00	10,912.00	10,672.97	41.29	120.01	9.388	-339.43	-331.00	2,550.70	2,899.17	97.09	30.100		
14,800.00	13,092.00	18,912.00	10,672.97	41.57	120.81	9.599	-559.43	-331.65	3,055.28	2,958.54	96.75	31.580		
14,900.00	13,092.00	18,912.00	10,672.97	41.99	120.81	9.599	-559.43	-331.65	3,115.92	3,020.01	95.91	32.488		
15,000.00	13,092.00	18,912.00	10,672.97	42.60	120.81	9.599	-559.43	-331.65	3,178.54	3,083.47	95.08	33.431		
15,100.00	13,092.00	18,912.00	10,672.97	43.42	120.81	9.599	-559.43	-331.65	3,243.04	3,148.79	94.25	34.408		
15,200.00	13,092.00	18,912.00	10,672.97	44.43	120.81	9.599	-559.43	-331.65	3,309.30	3,215.86	93.44	35.416		
_,0.00	.0,002.00	.0,012.00	.0,072.07		.20.01	0.000	300.40	331.00	0,000.00	0,210.00	30.44	55.710		
15,300.00	13,092.00	18,912.00	10,672.97	45.56	120.81	9.599	-559.43	-331.65	3,377.23	3,284.58	92.64	36.454		
15,400.00	13,092.00	18,912.00	10,672.97	46.76	120.81	9.599	-559.43	-331.65	3,446.72	3,354.85	91.86	37.520		
15,500.00	13,092.00	18,912.00	10,672.97	48.01	120.81	9.599	-559.43	-331.65	3,517.68	3,426.57	91.10	38.613		
15,600.00	13,092.00	18,912.00	10,672.97	49.30	120.81	9.599	-559.43	-331.65	3,590.02	3,499.66	90.36	39.731		
15,700.00	13,092.00	18,912.00	10,672.97	50.61	120.81	9.599	-559.43	-331.65	3,663.66	3,574.03	89.63	40.874		
0,700.00	10,082.00	10,312.00	10,072.87	50.01	120.01	9.000	-308.43	-551.05	5,005.00	5,574.03	09.00	40.074		
15,800.00	13,092.00	18,912.00	10,672.97	51.93	120.81	9.599	-559.43	-331.65	3,738.53	3,649.60	88.93	42.039		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

USA Compass Reference Datum

Part	Offset Des	sign: Ca	ılleman Fe	a Com 3 -	Cattleman	rea Com	1 123H - OH /	69915 - Surve	eys (H&P 6	10)				Offset Site Error:	0.00 usft
					Semi N	laior Axis		Offset Wellbo	ore Centre	Dist		gned:		Offset Well Error:	1.00 usft
	Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Separation		Warning	
1.510.000 1.0002-00 1.0002	15,900.00		18,912.00	10,672.97	53.27	120.81	9.599	-559.43		3,814.55	3,726.30	88.25			
1,000,000 1,00															
18.300.00 19.002.00 18.912.00 10.672.97 8.80 120.81 9.590 59.40 33.165 4.202.80 4.120.80 9.500 4.120.80 9.500 59.40 120.80 9.500.40 120.80 9.500.40 120.80 9.500.40 120.80 9.500.40 120.80 9.500.40 120.80 9.500.40 120.80 120.80 9.500.40 120.8															
16,0000 13,002.00 16,007.0															
1.000.00 1.002.00 1.002.00 1.002.00 1.007.207 0.144 1.2081 0.909 .6508.41 .331.65 4.201.37 4.208.76 0.400.00 .300.00 .300.00 .309.00															
1.60000 1.3002 0 19.1200 10.91209 10.91209 10.91209 10.9131 9.909 1.9094 3.3165 4.373.70 4.29971 8.6105 2.0222 11.60000 1.30020 19.12100 10.91279 6.556 10.01 9.599 1.9594 3.3165 4.540.75 4.457.68 8.077 5.4681 11.60000 1.30020 19.12100 10.91279 6.556 10.01 9.599 1.5994 3.3165 4.540.75 4.457.68 8.077 5.4681 11.70000 1.30020 19.12100 10.91279 6.57 10.01 9.599 1.5994 3.3165 4.710.26 4.67814 8.214 5.6792 11.70000 1.30020 19.1210 10.91279 6.57 10.01 9.599 1.5994 3.3165 4.710.26 4.67814 8.214 5.6792 11.70000 1.30020 19.1210 10.91279 7.615 12.031 9.599 1.5994 3.3165 4.710.26 4.67814 8.214 5.6806 11.70000 1.30020 19.1210 10.91279 7.254 12.031 9.599 1.5994 3.3165 4.710.26 4.67814 8.214 5.6806 11.70000 1.30020 19.1210 10.91279 7.254 12.031 9.599 1.5994 3.3165 4.7803	16,400.00	13,092.00	18,912.00	10,672.97	60.06	120.81	9.599	-559.43	-331.05	4,209.71	4,124.55	85.16	49.432		
18.700.00 13.092.00 18.912.00 18.72.07 64.0 18.72.07 65.7 10.672.97 65.8 12.091 65.992 65.943 63.16 4.89.09 4.90.00 13.092.00 18.912.00 18.672.97 65.7 10.000 13.092.00 18.912.00 16.672.97 68.3 12.091 65.999 65.943 63.16 4.90.00 14.000.00 18.000.00 18.912.00 16.672.97 69.3 12.001 19.999 65.943 63.16 4.90.00 14.000.00 18.900.00 16.900.0	16,500.00	13,092.00	18,912.00	10,672.97	61.44	120.81	9.599	-559.43	-331.65	4,291.37	4,206.76	84.61	50.720		
18,000 13,002 0 18,012 0 18,012 0 16,072 0 7 08.58 19.00 19.00 19.00 13,002 0 18,012 0 16,072 0 10.072 0 10.00 10.00 19.00 13,002 0 18,012 0 16,072 0 10.072 0 10.00 19.00 19.00 13,002 0 18,012 0 16,072 0 10.072 0 10.00 19.00 19.00 13,002 0 18,012 0 16,072 0 10.072 0 7 72.00 19.00 1	16,600.00	13,092.00	18,912.00	10,672.97	62.81	120.81	9.599	-559.43	-331.65	4,373.79	4,289.71	84.08	52.022		
1.500.00 1.309.20 1.5	16,700.00	13,092.00	18,912.00	10,672.97	64.20	120.81	9.599	-559.43	-331.65	4,456.93	4,373.37	83.56	53.335		
1,000.00 13,002.00 18,012.00 10,072.07 68.38 120.81 0.599 .596.43 .331.65 4,710.28 4,628.14 82.14 57.342 7,100.00 13,002.00 18,012.00 10,072.07 72.54 120.81 0.599 .596.43 .331.65 4,862.31 4,860.04 81.29 60.058 7,300.00 18,012.00 10,072.07 72.54 120.81 0.599 .596.43 .331.65 4,862.31 4,860.04 81.29 60.958 14.28 17,300.00 18,012.00 10,072.07 75.34 120.81 0.599 .596.43 .331.65 5,056.04 4,875.53 80.50 61.428 17,500.00 13,002.00 18,012.00 10,072.97 75.34 120.81 0.599 .596.43 .331.65 5,143.70 5,069.57 80.14 64.187 17,500.00 13,002.00 18,012.00 10,072.97 75.34 120.81 0.599 .596.43 .331.65 5,230.31 5,120.03 79.78 65.574 17,500.00 13,002.00 18,012.00 10,072.97 75.34 120.81 0.599 .596.43 .331.65 5,203.31 5,120.03 79.78 65.574 17,500.00 13,002.00 18,012.00 10,072.97 75.54 120.81 0.599 .596.43 .331.65 5,203.31 5,120.03 79.78 65.574 17,500.00 13,002.00 18,012.00 10,072.97 75.55 120.81 0.599 .596.43 .331.65 5,203.31 5,120.03 79.78 66.574 17,500.00 13,002.00 18,012.00 10,072.97 75.55 120.81 0.599 .596.43 .331.65 5,480.82 5,480.27 5,330.15 76.13 86.363 18,012.00 10,072.97 82.36 120.81 0.599 .596.43 .331.65 5,480.82 5,480.27 5,330.15 76.13 86.363 18,012.00 10,072.97 82.36 120.81 0.599 .596.43 .331.65 5,580.28 5,680.37 75.22 71.166 13,002.00 13,002.00 18,012.00 10,072.97 82.36 120.81 0.599 .596.43 .331.65 5,680.28 5,680.34 .331.65 5,680.03 77.10 76.24 72.57 78.28 18,002.00 13,002.00 18,012.00 10,072.97 82.36 120.81 0.599 .596.43 .331.65 5,680.28 5,680.03 77.10 77.27 75.389 18,002.00 13,002.00 18,002.00 18,002.00 10,072.97 82.36 120.81 0.599 .596.43 .331.65 5,680.28 5,680.34 77.10 77.27 75.389 18,002.00 13,002.00 18,002.00 18,002.00															
1,100.00 13,002.00 13,00	16,900.00	13,092.00	18,912.00	10,672.97	66.97	120.81	9.599	-559.43	-331.65	4,625.21	4,542.62	82.60	55.997		
17,200	17,000.00	13,092.00	18,912.00	10,672.97	68.36	120.81	9.599	-559.43	-331.65	4,710.28	4,628.14	82.14	57.342		
17,300.00 13,092.00 18,912.00 10,672.97 72.54 120.81 9.599 .559.43 .331.65 4,868.84 4,867.95 80.89 14.28 17.74.00 13,092.00 18,912.00 10,672.97 75.34 120.81 9.599 .559.43 .331.65 5,068.04 4,975.53 80.50 62.804 17.74.00 13,092.00 18,912.00 10,672.97 76.74 120.81 9.599 .559.43 .331.65 5,231.81 5,152.03 76.78 165.674 17.70.00 13,092.00 18,912.00 10,672.97 76.74 120.81 9.599 .559.43 .331.65 5,231.81 5,152.03 76.78 165.674 17.70.00 13,092.00 18,912.00 10,672.97 78.55 120.81 9.599 .559.43 .331.65 5,231.81 5,152.03 76.78 165.674 17.70.00 13,092.00 18,912.00 10,672.97 78.55 120.81 9.599 .559.43 .331.65 5,231.81 5,152.03 76.78 169.33 17.500.00 13,092.00 18,912.00 10,672.97 78.55 120.81 9.599 .559.43 .331.65 5,231.81 5,152.03 77.78 1.00 18.00 18.00 18.00 10.00 10.00.72.97 89.55 120.81 9.599 .559.43 .331.65 5,409.27 5,500.00 78.22 71.78 1.00 18.00 18.00 18.00 10.	17,100.00	13,092.00	18,912.00	10,672.97	69.75	120.81	9.599	-559.43	-331.65	4,795.93	4,714.22	81.71	58.696		
17,500	17,200.00	13,092.00	18,912.00	10,672.97	71.14	120.81	9.599	-559.43	-331.65	4,882.13	4,800.84	81.29	60.058		
17,500.00 13,092.00 18,912.00 10,672.97 76.34 120.81 9.599 5690.4 580.43 -331.65 5.143.70 5.063.57 80.14 64.187 17,600.00 13,092.00 18,912.00 10,672.97 76.14 120.81 9.599 -559.43 -331.65 5.231.81 5.152.03 79.78 65.574 17,700.00 13,092.00 18,912.00 10,672.97 78.15 120.81 9.599 -559.43 -331.65 5.231.81 5.152.03 79.78 65.574 17,500.00 13,092.00 18,912.00 10,672.97 78.55 120.81 9.599 -559.43 -331.65 5.409.27 5.330.15 79.13 68.363 17,500.00 13,092.00 18,912.00 10,672.97 88.36 120.81 9.599 -559.43 -331.65 5.409.27 5.330.15 79.13 68.363 18,100.00 13,092.00 18,912.00 10,672.97 88.36 120.81 9.599 -559.43 -331.65 5.409.27 5.300.15 79.13 68.363 18,100.00 13,092.00 18,912.00 10,672.97 88.36 120.81 9.599 -559.43 -331.65 5.409.27 5.000.3 78.24 72.572 18,200.00 13,092.00 18,912.00 10,672.97 88.56 120.81 9.599 -559.43 -331.65 5.609.23 5.709.27 5.900.3 78.24 72.572 18,300.00 13,092.00 18,912.00 10,672.97 86.58 120.81 9.599 -559.43 -331.65 5.609.28 5.781.56 77.72 75.399 18,400.00 13,092.00 18,912.00 10,672.97 87.99 120.81 9.599 -559.43 -331.65 5.690.24 77.25 5.900.3 78.24 72.572 18,400.00 13,092.00 18,912.00 10,672.97 88.40 120.81 9.599 -559.43 -331.65 5.690.24 77.25 75.990 18,400.00 13,092.00 18,912.00 10,672.97 88.40 120.81 9.599 -559.43 -331.65 5.690.24 77.25 77.27 75.399 18,400.00 13,092.00 18,912.00 10,672.97 99.81 120.81 9.599 -559.43 -331.65 5.690.24 77.25 77.27 76.399 18,400.00 13,092.00 18,912.00 10,672.97 99.81 120.81 9.599 -559.43 -331.65 6.490.24 8.790.24 77.25 76.291 18,600.00 13,092.00 18,912.00 10,672.97 99.81 120.81 9.599 -559.43 -331.65 6.490.24 8.790.24 77.25 76.291 18,600.00 13,092.00 18,912.00 10,672.97 99.81 120.81 9.599 -559.43 -331.65 6.490.24 8.790.24 77.25 76.291 18,600.00 13,092.00 18,912.00 10,672.97 99.81 120.81 9.599 -559.43 -331.65 6.490.24 8.790.24 77.25 76.291 18,600.00 13,092.00 18,912.00 10,672.97 99.81 120.81 9.599 -559.43 -331.65 6.490.24 8.790.24 77.25 76.22 82.446 18,600.00 13,092.00 18,912.00 10,672.97 93.64 120.81 9.599 -559.43 -331.65 6.490.24 8.590.24 77.25 8.001 18,600.00 13,092.00 18,9	17,300.00	13,092.00	18,912.00	10,672.97	72.54	120.81	9.599	-559.43	-331.65	4,968.84	4,887.95	80.89	61.428		
1,760.00 13,082.00 18,812.00 10,672.97 76.74 120.81 9.599 -559.43 -331.65 5,231.81 5,152.03 79.78 65.574 1770.00 13,082.00 18,912.00 10,672.97 78.55 120.81 9.599 -559.43 -331.65 5,20.34 5,240.90 79.45 66.967 17.800.00 13,082.00 18,912.00 10,672.97 8.50 120.81 9.599 -559.43 -331.65 5,480.57 5,480.57 78.82 69.783 18.000.00 13,082.00 18,912.00 10,672.97 8.50 120.81 9.599 -559.43 -331.65 5,480.57 5,480.57 78.82 69.783 18.000.00 13,082.00 18,912.00 10,672.97 8.50 120.81 9.599 -559.43 -331.65 5,580.58 26 5,480.77 78.82 69.783 18.000.00 13,082.00 18,912.00 10,672.97 8.57 120.81 9.599 -559.43 -331.65 5,780.27 5,000.00 78.24 72.572 18.200.00 13,082.00 18,912.00 10,672.97 85.70 120.81 9.599 -559.43 -331.65 5,780.27 5,000.00 78.24 72.572 18.200.00 13,082.00 18,912.00 10,672.97 87.99 120.81 9.599 -559.43 -331.65 5,780.25 5,780.00 78.24 72.572 18.200.00 13,082.00 18,912.00 10,672.97 87.99 120.81 9.599 -559.43 -331.65 5,780.25 5,780.00 78.24 72.577 18.20 18.000.00 13,082.00 18,912.00 10,672.97 87.99 120.81 9.599 -559.43 -331.65 5,800.24 5,781.56 77.72 75.399 18.500.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 5,800.24 5,782.76 77.48 76.799 18.500.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 5,800.24 5,782.76 77.48 76.22 14.46 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 5,800.24 5,782.76 77.48 76.22 14.46 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.96 76.82 81.004 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.96 76.82 81.004 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.9 6 76.82 81.004 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.9 6 76.82 81.004 18.000 18.000.00 13,082.00 18,912.00 10,672.97 90.30 120.81 9.599 -559.43 -331.65 6,247.8 6,147.9 75.25 80.081 19.000.00 13,082.00 18,912.00 10,672.97 10.55 120.81 9.599 -559.43 -331.65 6,247.8 6,147.2 75.25 80.081 19.000.00 13,082.00	17,400.00	13,092.00	18,912.00	10,672.97	73.94	120.81	9.599	-559.43	-331.65	5,056.04	4,975.53	80.50	62.804		
1,760.00 13,082.00 18,812.00 10,672.97 76.74 120.81 9.599 -559.43 -331.65 5,231.81 5,152.03 79.78 65.574 1770.00 13,082.00 18,912.00 10,672.97 78.55 120.81 9.599 -559.43 -331.65 5,20.34 5,240.90 79.45 66.967 17.800.00 13,082.00 18,912.00 10,672.97 8.50 120.81 9.599 -559.43 -331.65 5,480.57 5,480.57 78.82 69.783 18.000.00 13,082.00 18,912.00 10,672.97 8.50 120.81 9.599 -559.43 -331.65 5,480.57 5,480.57 78.82 69.783 18.000.00 13,082.00 18,912.00 10,672.97 8.50 120.81 9.599 -559.43 -331.65 5,580.58 26 5,480.77 78.82 69.783 18.000.00 13,082.00 18,912.00 10,672.97 8.57 120.81 9.599 -559.43 -331.65 5,780.27 5,000.00 78.24 72.572 18.200.00 13,082.00 18,912.00 10,672.97 85.70 120.81 9.599 -559.43 -331.65 5,780.27 5,000.00 78.24 72.572 18.200.00 13,082.00 18,912.00 10,672.97 87.99 120.81 9.599 -559.43 -331.65 5,780.25 5,780.00 78.24 72.572 18.200.00 13,082.00 18,912.00 10,672.97 87.99 120.81 9.599 -559.43 -331.65 5,780.25 5,780.00 78.24 72.577 18.20 18.000.00 13,082.00 18,912.00 10,672.97 87.99 120.81 9.599 -559.43 -331.65 5,800.24 5,781.56 77.72 75.399 18.500.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 5,800.24 5,782.76 77.48 76.799 18.500.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 5,800.24 5,782.76 77.48 76.22 14.46 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 5,800.24 5,782.76 77.48 76.22 14.46 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.96 76.82 81.004 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.96 76.82 81.004 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.9 6 76.82 81.004 18.800.00 13,082.00 18,912.00 10,672.97 90.81 120.81 9.599 -559.43 -331.65 6,247.8 6,147.9 6 76.82 81.004 18.000 18.000.00 13,082.00 18,912.00 10,672.97 90.30 120.81 9.599 -559.43 -331.65 6,247.8 6,147.9 75.25 80.081 19.000.00 13,082.00 18,912.00 10,672.97 10.55 120.81 9.599 -559.43 -331.65 6,247.8 6,147.2 75.25 80.081 19.000.00 13,082.00	17.500.00	13.092.00	18.912.00	10.672.97	75.34	120.81	9,599	-559.43	-331.65	5.143.70	5.063.57	80.14	64.187		
1,770.00 13,002.00 18,002.00 18,002.00 10,002.07 78.14 120.81 9.599 .559.43 .331.65 5,320.34 5,240.00 79.45 68.967 7,800.00 13,002.00 18,002.00 10,002.07 80.55 120.81 9.599 .559.43 .331.65 5,409.27 5,330.15 79.13 68.363 17,900.00 13,002.00 18,002.00 10,002.07 80.55 120.81 9.599 .559.43 .331.65 5,880.26 5,409.27 78.82 99.763 18,100.00 13,002.00 18,002.00 10,002.07 83.76 120.81 9.599 .559.43 .331.65 5,880.26 5,509.73 78.52 71.166 18,100.00 13,002.00 18,002.00 10,002.07 83.76 120.81 9.599 .559.43 .331.65 5,880.26 5,809.73 77.96 77.99 73.99 13,000.00 13,002.00 18,002.00 10,002.07 86.58 120.81 9.599 .559.43 .331.65 5,802.26 5,800.03 78.24 72.572 18,500.00 13,002.00 18,002.00 10,002.07 88.58 120.81 9.599 .559.43 .331.65 5,802.26 5,809.26 5,809.26 77.72 73.99 18,500.00 13,002.00 18,002.00 10,002.07 88.98 120.81 9.599 .559.43 .331.65 5,802.26 5,809.26 5,															
1,780.00 13,002.00 18,012.00 10,72.97 79.55 120.81 9.599 -559.43 -331.65 5,409.27 5,409.28 5,409.27 78.82 89.763 17,900.00 13,002.00 18,002.00 10,072.97 82.08 120.81 9.599 -559.43 -331.65 5,409.28 5,409.27 78.82 89.763 18,000.00 13,002.00 18,002.00 10,072.97 82.36 120.81 9.599 -559.43 -331.65 5,788.62 5,409.27 78.82 71.166 18,100.00 13,002.00 18,002.00 10,072.97 85.17 120.81 9.599 -559.43 -331.65 5,788.62 5,409.27 77.72 75.899 18,400.00 13,002.00 18,002.00 10,072.97 89.40 120.81 9.599 -559.43 -331.65 5,788.62 5,409.27 77.72 75.899 18,400.00 13,002.00 18,002.00 10,072.97 89.40 120.81 9.599 -559.43 -331.65 5,809.28 5,781.65 77.72 75.899 18,500.00 13,002.00 18,002.00 10,072.97 89.40 120.81 9.599 -559.43 -331.65 5,809.28 5,781.65 77.72 75.899 18,500.00 13,002.00 18,002.00 10,072.97 89.40 120.81 9.599 -559.43 -331.65 5,809.28 5,781.65 77.63 77.63 78.621 18,700.00 13,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 18,002.00 10,072.97 92.23 120.81 9.599 -559.43 -331.65 6,224.78 6,414.96 76.82 81.034 18,000 13,002.00 18,002.00 18,002.00 10,072.97 99.04 120.81 9.599 -559.43 -331.65 6,409.08 6,332.65 76.43 83.856 18,000 13,002.00 18,002.00 18,002.00 10,072.97 99.04 120.81 9.599 -559.43 -331.65 6,409.08 6,332.65 76.43 83.856 18,000 13,002.00 18,002.00 18,002.00 10,072.97 99.04 120.81 9.599 -559.43 -331.65 6,600.18 6,244.78 6,444 77.52 86.244 78.2															
10,000 0 13,092 0 18,912 0 10,672 97 82,78 120,81 9.599 -559.43 -331.65 5.588.26 5.609.73 78.52 71.166 18,100 0 13,092 0 18,912 0 10,672 97 83.76 120.81 9.599 -559.43 -331.65 5.686.26 5.609.67 77.78 73.860 18,000 13,092 0 18,912 0 10,672 97 85.77 120.81 9.599 -559.43 -331.65 5.692.26 5.690.64 77.72 75.389 18,400 0 13,092 0 18,912 0 10,672 97 86.58 120.81 9.599 -559.43 -331.65 5.692.26 5.690.64 77.72 75.389 18,400 0 13,092 0 18,912 0 10,672 97 86.58 120.81 9.599 -559.43 -331.65 5.692.24 5.872.76 77.48 76.799 18,500 0 13,092 0 18,912 0 10,672 97 90.61 120.81 9.599 -559.43 -331.65 6.592.24 5.872.76 77.26 78.211 18,600 0 13,092 0 18,912 0 10,672 97 90.61 120.81 9.599 -559.43 -331.65 6.244.78 5.942.24 77.25 78.211 18,600 0 13,092 0 18,912 0 10,672 97 90.61 120.81 9.599 -559.43 -331.65 6.244.78 5.942.24 77.25 78.211 18,600 0 13,092 0 18,912 0 10,672 97 90.61 120.81 9.599 -559.43 -331.65 6.133.00 6.055 97 77.03 79.623 18,000 13,092 0 18,912 0 10,672 97 90.61 120.81 9.599 -559.43 -331.65 6.244.78 6.147.96 76.82 81.034 18,000 13,092 0 18,912 0 10,672 97 95.66 120.81 9.599 -559.43 -331.65 6.244.78 6.147.96 76.82 81.034 18,000 13,092 0 18,912 0 10,672 97 95.66 120.81 9.599 -559.43 -331.65 6.041.48 6.240.19 76.62 82.446 19,000 13,092 0 18,912 0 10,672 97 95.66 120.81 9.599 -559.43 -331.65 6.041.49 76.62 82.446 19,000 13,092 0 18,912 0 10,672 97 95.66 120.81 9.599 -559.43 -331.65 6.041.29 76.62 86.041 9.04 9.04 9.04 9.04 9.04 9.04 9.04 9.04															
18,100,00 13,092,00 18,912,00 10,672,97 85,76 120,81 9,599 -559,43 -331,65 5,678,622 5,600,03 76,24 72,572 18,200,00 13,092,00 18,912,00 10,672,97 86,58 120,81 9,599 -559,43 -331,65 5,678,622 5,608,64 77,78 75,399 18,400,00 13,092,00 18,912,00 10,672,97 86,58 120,81 9,599 -559,43 -331,65 5,659,22 5,781,56 77,72 75,389 18,500,00 13,092,00 18,912,00 10,672,97 90,81 120,81 9,599 -559,43 -331,65 5,659,22 5,781,56 77,72 75,389 18,500,00 13,092,00 18,912,00 10,672,97 90,81 120,81 9,599 -559,43 -331,65 6,133,00 6,559,47 77,30 79,623 18,700,00 13,092,00 18,912,00 10,672,97 90,81 120,81 9,599 -559,43 -331,65 6,133,00 6,559,47 77,30 79,623 18,700,00 13,092,00 18,912,00 10,672,97 93,64 120,81 9,599 -559,43 -331,65 6,224,78 6,147,96 76,82 81,034 18,500,00 13,092,00 18,912,00 10,672,97 93,64 120,81 9,599 -559,43 -331,65 6,638,00 6,332,65 77,43 83,866 19,000,00 13,092,00 18,912,00 10,672,97 95,00 120,81 9,599 -559,43 -331,65 6,639,12 76,62 82,446 19,000,00 13,092,00 18,912,00 10,672,97 95,00 120,81 9,599 -559,43 -331,65 6,694,29 6,518,21 76,62 86,674 19,000,00 13,092,00 18,912,00 10,672,97 99,30 120,81 9,599 -559,43 -331,65 6,694,29 6,518,21 76,09 86,674 19,000,00 13,092,00 18,912,00 10,672,97 99,30 120,81 9,599 -559,43 -331,65 6,694,29 6,518,21 76,09 86,674 19,000,00 13,092,00 18,912,00 10,672,97 19,30 120,81 9,599 -559,43 -331,65 6,694,29 6,518,21 76,09 86,674 19,000,00 13,092,00 18,912,00 10,672,97 102,14 120,81 9,599 -559,43 -331,65 6,694,29 6,786,62 76,786,9 86,674 19,000,00 13,092,00 18,912,00 10,672,97 103,55 120,81 9,599 -559,43 -331,65 6,694,29 6,786,62 77,48 9,599 8,5	17,900.00	13,092.00	18,912.00	10,672.97	80.95	120.81	9.599	-559.43	-331.65	5,498.58	5,419.77	78.82	69.763		
18.200.0 13.092.0 18.912.0 10.672.97 85.5 120.81 9.599 -559.43 -331.65 5,786.2 5,890.44 77.86 77.89 75.89 18.500.0 13.092.0 18.912.0 10.672.97 87.99 120.81 9.599 -559.43 -331.65 5,859.24 5,781.56 77.72 75.389 18.500.0 13.092.0 18.912.0 10.672.97 89.40 120.81 9.599 -559.43 -331.65 5,590.24 5.987.76 77.48 76.799 18.500.0 13.092.0 18.912.0 10.672.97 89.40 120.81 9.599 -559.43 -331.65 5,590.24 5.980.24 77.25 78.211 18.600.0 13.092.0 18.912.0 10.672.97 90.81 120.81 9.599 -559.43 -331.65 6,130.0 16.055.97 77.03 79.623 18.500.0 13.092.0 18.912.0 10.672.97 93.64 120.81 9.599 -559.43 -331.65 6,130.0 16.24 77.25 78.211 18.600.0 13.092.0 18.912.0 10.672.97 93.64 120.81 9.599 -559.43 -331.65 6,224.78 6,447.96 76.2 22.446 18.600.0 13.092.0 18.912.0 10.672.97 93.64 120.81 9.599 -559.43 -331.65 6,316.81 6,240.19 76.62 22.446 19.000.0 13.092.0 18.912.0 10.672.97 95.06 120.81 9.599 -559.43 -331.65 6,014.8 6,240.19 76.62 22.446 19.000.0 13.092.0 18.912.0 10.672.97 95.06 120.81 9.599 -559.43 -331.65 6,016.81 6,240.19 76.62 22.446 19.000.0 13.092.0 18.912.0 10.672.97 95.06 120.81 9.599 -559.43 -331.65 6,016.81 6,240.19 76.62 82.446 19.000.0 13.092.0 18.912.0 10.672.97 97.89 120.81 9.599 -559.43 -331.65 6,001.87 6,243.2 76.2 86.246 19.000.0 13.092.0 18.912.0 10.672.97 97.89 120.81 9.599 -559.43 -331.65 6,091.20 6,091.20 75.00 88.674 19.000.0 13.092.0 18.912.0 10.672.97 97.89 120.81 9.599 -559.43 -331.65 6,091.20 6,091.20 75.75 99.486 19.000.0 13.092.0 18.912.0 10.672.97 102.14 120.81 9.599 -559.43 -331.65 6,091.10 6,091.20 75.77 75.77 99.486 19.000.0 13.092.0 18.912.0 10.672.97 102.14 120.81 9.599 -559.43 -331.65 6,091.10 6,091.20 75.77 75.77 99.486 19.000.0 13.092.0 18.912.0 10.672.97 102.14 120.81 9.599 -559.43 -331.65 6,091.10 6,091.20 75.77 75.77 99.486 19.000.0 13.092.0 18.912.0 10.672.97 102.14 120.81 9.599 -559.43 -331.65 7.487.2 7.487.2 7.487.2 7.487.2 9.289 19.000.0 13.092.0 18.912.0 10.672.97 102.14 120.81 9.599 -559.43 -331.65 7.487.2 7.487.2 7.488.2 74.55 96.081 19.000.0 13.092.0 18	18,000.00	13,092.00	18,912.00	10,672.97	82.36	120.81	9.599	-559.43	-331.65	5,588.26	5,509.73	78.52	71.166		
18.300.0 13.992.0 18.912.0 10.672.97 86.98 120.81 9.599 -559.43 -331.65 5,859.2 5,851.56 77.72 75.389 18.400.0 13.092.0 18.912.0 10.672.97 87.99 120.81 9.599 -559.43 -331.65 5,950.2 5,852.76 77.48 76.799 18.500.0 13.092.0 18.912.0 10.672.97 90.81 120.81 9.599 -559.43 -331.65 6,131.0 0.055.97 77.0 796.2 18.00.0 18.00.0 18.00.0 18.00.0 10.672.97 90.81 120.81 9.599 -559.43 -331.65 6,131.0 0.055.97 77.0 796.2 18.00.0 10.672.97 90.81 120.81 9.599 -559.43 -331.65 6,131.0 0.055.97 77.0 796.2 18.00.0 10.672.97 95.0 120.81 9.599 -559.43 -331.65 6,131.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	18,100.00	13,092.00	18,912.00	10,672.97	83.76	120.81	9.599	-559.43	-331.65	5,678.27	5,600.03	78.24	72.572		
18.00.00 13.092.00 18.912.00 10.672.97 87.99 120.81 9.599 .559.43 .331.65 5.960.24 5.972.76 77.48 76.799 18.50.00 13.092.00 18.912.00 10.672.97 90.81 120.81 9.599 .559.43 .331.65 6.041.48 5.964.24 77.25 78.211 18.60.00 13.092.00 18.912.00 10.672.97 90.81 120.81 9.599 .559.43 .331.65 6.247.76 67.82 81.034 18.80.00 13.092.00 18.912.00 10.672.97 92.23 120.81 9.599 .559.43 .331.65 6.247.86 6.447.96 76.82 81.034 18.80.00 13.092.00 18.912.00 10.672.97 93.64 120.81 9.599 .559.43 .331.65 6.247.86 6.447.96 76.82 82.446 18.90.00 13.092.00 18.912.00 10.672.97 95.06 120.81 9.599 .559.43 .331.65 6.424.78 6.447.96 76.82 82.446 19.00.00 13.092.00 18.912.00 10.672.97 95.06 120.81 9.599 .559.43 .331.65 6.424.78 6.425.32 76.52 85.266 19.00.00 13.092.00 18.912.00 10.672.97 98.9 120.81 9.599 .559.43 .331.65 6.594.29 6.518.21 76.08 86.674 19.20.00 13.092.00 18.912.00 10.672.97 99.30 120.81 9.599 .559.43 .331.65 6.687.21 6.611.29 75.92 88.081 19.30.00 13.092.00 18.912.00 10.672.97 99.30 120.81 9.599 .559.43 .331.65 6.873.66 6.798.03 75.63 90.889 19.50.00 13.092.00 18.912.00 10.672.97 100.21 120.81 9.599 .559.43 .331.65 6.873.66 6.798.03 75.63 90.889 19.50.00 13.092.00 18.912.00 10.672.97 100.25 120.81 9.599 .559.43 .331.65 6.873.66 6.798.03 75.63 90.889 19.50.00 13.092.00 18.912.00 10.672.97 103.55 120.81 9.599 .559.43 .331.65 6.873.66 6.798.03 75.63 90.889 19.50.00 13.092.00 18.912.00 10.672.97 103.55 120.81 9.599 .559.43 .331.65 7.484.70 7.008.46 6.885.48 75.37 93.866 19.50.00 13.092.00 18.912.00 10.672.97 103.55 120.81 9.599 .559.43 .331.65 7.484.70 7.008.46 6.885.48 75.37 93.866 19.50.00 13.092.00 18.912.00 10.672.97 103.55 120.81 9.599 .559.43 .331.65 7.484.70 7.008.46 6.885.48 75.37 93.866 19.50.00 13.092.00 18.912.00 10.672.97 103.81 9.599 .559.43 .331.65 7.484.70 7.008.46 6.885.48 75.37 93.866 19.50.00 13.092.00 18.912.00 10.672.97 103.81 9.599 .559.43 .331.65 7.484.70 7.008.46 6.896.48 75.37 93.866 19.50.00 13.092.00 18.912.00 10.672.97 103.81 9.599 .559.43 .331.65 7.484.70 7.008.46 6.896.48 75.37 93.866	18,200.00	13,092.00	18,912.00	10,672.97	85.17	120.81	9.599	-559.43	-331.65	5,768.62	5,690.64	77.98	73.980		
18,000.00	18,300.00	13,092.00	18,912.00	10,672.97	86.58	120.81	9.599	-559.43	-331.65	5,859.28	5,781.56	77.72	75.389		
18,00,00 13,092,00 18,912,00 10,672,97 90.81 12,081 9,599 -559,43 -331,65 6,133,00 6,055,97 77,03 79,623 18,700,00 13,092,00 18,912,00 10,672,97 92,23 12,081 9,599 -559,43 -331,65 6,224,78 6,147,96 76.82 81,034 18,900,00 13,092,00 18,912,00 10,672,97 95.06 120,81 9,599 -559,43 -331,65 6,409,08 6,332,65 76.43 83,856 19,000,00 13,092,00 18,912,00 10,672,97 96.47 120,81 9,599 -559,43 -331,65 6,501,57 6,425,32 76.25 85,266 19,000,00 13,092,00 18,912,00 10,672,97 97.89 120,81 9,599 -559,43 -331,65 6,501,57 6,425,32 76.25 85,266 19,000,00 13,092,00 18,912,00 10,672,97 90.9 120,81 9,599 -559,43 -331,65 6,780,60 6,796,00 75,77	18,400.00	13,092.00	18,912.00	10,672.97	87.99	120.81	9.599	-559.43	-331.65	5,950.24	5,872.76	77.48	76.799		
18,700,00 13,092,00 18,912,00 10,672,97 92,23 120,81 9,599 -559,43 -331,65 6,224,78 6,147,66 76,82 81,034 18,800,00 13,092,00 18,912,00 10,672,97 93,64 120,81 9,599 -559,43 -331,65 6,316,81 6,240,19 76,62 82,446 19,000,00 13,092,00 18,912,00 10,672,97 96,47 120,81 9,599 -559,43 -331,65 6,501,57 6,425,32 76,25 86,674 19,000,00 13,092,00 18,912,00 10,672,97 99,89 120,81 9,599 -559,43 -331,65 6,504,29 6,518,21 76,08 86,674 19,000,00 13,092,00 18,912,00 10,672,97 99,30 120,81 9,599 -559,43 -331,65 6,687,21 6,611,29 75,92 88,081 19,000,00 13,092,00 18,912,00 10,672,97 100,72 120,81 9,599 -559,43 -331,65 6,891,67 75,49 92,289	18,500.00	13,092.00	18,912.00	10,672.97	89.40	120.81	9.599	-559.43	-331.65	6,041.48	5,964.24	77.25	78.211		
18,800.00 13,092.00 18,912.00 10,672.97 93.64 120.81 9,599 -559.43 -331.65 6,316.81 6,240.19 76.62 82.446 19,000.00 13,092.00 18,912.00 10,672.97 95.66 120.81 9,599 -559.43 -331.65 6,409.08 6,332.65 76.43 83.866 19,000.00 13,092.00 18,912.00 10,672.97 96.47 120.81 9,599 -559.43 -331.65 6,594.29 6,518.21 76.08 86.674 19,200.00 13,092.00 18,912.00 10,672.97 99.30 120.81 9,599 -559.43 -331.65 6,687.21 76.08 86.674 19,200.00 13,092.00 18,912.00 10,672.97 100.72 120.81 9,599 -559.43 -331.65 6,780.34 6,704.57 75.77 89.486 19,400.00 13,092.00 18,912.00 10,672.97 100.72 120.81 9,599 -559.43 -331.65 6,780.03 75.63 90.899 <	18,600.00	13,092.00	18,912.00	10,672.97	90.81	120.81	9.599	-559.43	-331.65	6,133.00	6,055.97	77.03	79.623		
18,900.00 18,902.00 18,912.00 10,672.97 95.06 120.81 9.599 -559.43 -331.65 6,409.08 6,332.65 76.43 83.856 19,000.00 13,092.00 18,912.00 10,672.97 97.89 120.81 9.599 -559.43 -331.65 6,591.57 6,425.32 76.25 85.266 19,000.00 13,092.00 18,912.00 10,672.97 99.89 120.81 9,599 -559.43 -331.65 6,687.21 6,611.29 75.92 88.081 19,300.00 13,092.00 18,912.00 10,672.97 100.72 120.81 9,599 -559.43 -331.65 6,687.21 6,611.29 75.77 89.486 19,400.00 13,092.00 18,912.00 10,672.97 100.71 120.81 9,599 -559.43 -331.65 6,873.66 6,780.03 75.63 90.889 19,500.00 13,092.00 18,912.00 10,672.97 103.55 120.81 9,599 -559.43 -331.65 6,967.16 6,891.67 75.49	18,700.00	13,092.00	18,912.00	10,672.97	92.23	120.81	9.599	-559.43	-331.65	6,224.78	6,147.96	76.82	81.034		
19,000,00 13,092,00 18,912,00 10,672,97 96,47 120,81 9.599 5.599,43 331,65 6,594,29 6,518,21 76,08 86,674 19,200,00 13,092,00 18,912,00 10,672,97 99,30 120,81 9.599 5.599,43 331,65 6,594,29 6,518,21 76,08 86,674 19,200,00 13,092,00 18,912,00 10,672,97 100,72 120,81 9.599 5.599,43 331,65 6,872,1 6,611,29 75,92 88,081 19,300,00 13,092,00 18,912,00 10,672,97 100,72 120,81 9.599 5.599,43 331,65 6,878,034 6,704,57 75,77 89,486 19,400,00 13,092,00 18,912,00 10,672,97 102,14 120,81 9.599 5.599,43 331,65 6,873,66 6,780,34 6,704,57 75,77 89,486 19,400,00 13,092,00 18,912,00 10,672,97 104,97 120,81 9.599 5.599,43 331,65 6,873,66 6,780,34 6,704,57 75,49 92,289 19,500,00 13,092,00 18,912,00 10,672,97 104,97 120,81 9.599 5.599,43 331,65 7,068,84 6,885,84 75,37 93,686 19,700,00 13,092,00 18,912,00 10,672,97 106,39 120,81 9.599 5.599,43 331,65 7,068,84 6,885,84 75,37 93,686 19,700,00 13,092,00 18,912,00 10,672,97 107,81 120,81 9.599 5.599,43 331,65 7,144,70 7,079,45 75,25 95,081 19,800,00 13,092,00 18,912,00 10,672,97 107,81 120,81 9.599 5.599,43 331,65 7,342,89 7,267,86 75,14 96,473 19,900,00 13,092,00 18,912,00 10,672,97 107,81 120,81 9.599 5.599,43 331,65 7,342,89 7,267,86 75,14 96,473 19,900,00 13,092,00 18,912,00 10,672,97 110,65 120,81 9.599 5.599,43 331,65 7,342,89 7,267,86 75,14 99,246 20,100,00 13,092,00 18,912,00 10,672,97 110,65 120,81 9.599 5.599,43 331,65 7,342,89 7,267,86 75,03 97,861 20,100,00 13,092,00 18,912,00 10,672,97 110,65 120,81 9.599 5.599,43 331,65 7,531,70 7,456,85 74,94 99,246 20,100,00 13,092,00 18,912,00 10,672,97 110,65 120,81 9.599 5.599,43 331,65 7,515,94 7,741,33 74,62 104,747 20,500,00 13,092,00 18,912,00 10,672,97 113,49 120,81 9.599 5.599,43 331,65 7,515,94 7,741,33 74,62 104,747 20,500,00 13,092,00 18,912,00 10,672,97 113,49 120,81 9.599 5.599,43 331,65 7,815,94 7,741,33 74,62 104,747 20,500,00 13,092,00 18,912,00 10,672,97 113,49 120,81 9.599 5.599,43 331,65 7,815,94 7,741,33 74,62 104,747 20,500,00 13,092,00 18,912,00 10,672,97 113,49 120,81 9.599 5.599,43 331,65 7,815,94 7,741,33 74,62	18,800.00	13,092.00	18,912.00	10,672.97	93.64	120.81	9.599	-559.43	-331.65	6,316.81	6,240.19	76.62	82.446		
19,100.00 13,092.00 18,912.00 10,672.97 99.89 120.81 9.599 -559.43 -331.65 6,594.29 6,518.21 76.08 86.674 19,200.00 13,092.00 18,912.00 10,672.97 99.30 120.81 9.599 -559.43 -331.65 6,687.21 6,611.29 75.92 88.081 19,300.00 13,092.00 18,912.00 10,672.97 100.72 120.81 9.599 -559.43 -331.65 6,780.34 6,704.57 75.77 89.486 19,400.00 13,092.00 18,912.00 10,672.97 102.14 120.81 9.599 -559.43 -331.65 6,873.66 6,798.03 75.63 99.889 19,500.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 6,780.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,248.72 7,173.58 75.14 96.473 19,900.00 13,092.00 18,912.00 10,672.97 109.23 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 75.03 97.861 19,000.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 75.94 99.246 10,000.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 74.85 100.627 10,000.00 13,092.00 18,912.00 10,672.97 113.49 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 10,000.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 10,000.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 100.005 10,000.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 100.005 10,000.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 100.005 10,000.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,910.95 7,910.9	18,900.00	13,092.00	18,912.00	10,672.97	95.06	120.81	9.599	-559.43	-331.65	6,409.08	6,332.65	76.43	83.856		
19,200.00 13,092.00 18,912.00 10,672.97 99.30 120.81 9.599 -559.43 -331.65 6,687.21 6,611.29 75.92 88.081 19,300.00 13,092.00 18,912.00 10,672.97 100.72 120.81 9.599 -559.43 -331.65 6,687.21 6,611.29 75.92 88.081 19,500.00 13,092.00 18,912.00 10,672.97 103.55 120.81 9.599 -559.43 -331.65 6,967.16 6,891.67 75.49 92.289 19,500.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 7,960.84 6,885.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 106.39 120.81 9.599 -559.43 -331.65 7,164.70 7,079.45 75.25 95.081 19,800.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,248.72 7,173.58 75.14 <td>19,000.00</td> <td>13,092.00</td> <td>18,912.00</td> <td>10,672.97</td> <td>96.47</td> <td>120.81</td> <td>9.599</td> <td>-559.43</td> <td>-331.65</td> <td>6,501.57</td> <td>6,425.32</td> <td>76.25</td> <td>85.266</td> <td></td> <td></td>	19,000.00	13,092.00	18,912.00	10,672.97	96.47	120.81	9.599	-559.43	-331.65	6,501.57	6,425.32	76.25	85.266		
19,300.00 13,092.00 18,912.00 10,672.97 100.72 120.81 9.599 -559.43 -331.65 6,780.34 6,704.57 75.77 89.486 19,400.00 13,092.00 18,912.00 10,672.97 102.14 120.81 9.599 -559.43 -331.65 6,873.66 6,780.03 75.63 90.889 19,500.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 6,967.16 6,891.67 75.49 92.289 19,600.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 106.39 120.81 9.599 -559.43 -331.65 7,248.72 7,173.58 75.14 96.473 19,900.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 </td <td>19,100.00</td> <td>13,092.00</td> <td>18,912.00</td> <td>10,672.97</td> <td>97.89</td> <td>120.81</td> <td>9.599</td> <td>-559.43</td> <td>-331.65</td> <td>6,594.29</td> <td>6,518.21</td> <td>76.08</td> <td>86.674</td> <td></td> <td></td>	19,100.00	13,092.00	18,912.00	10,672.97	97.89	120.81	9.599	-559.43	-331.65	6,594.29	6,518.21	76.08	86.674		
19,400.00 13,092.00 18,912.00 10,672.97 102.14 120.81 9,599 -559.43 -331.65 6,873.66 6,980.03 75.63 90.889 19,500.00 13,092.00 18,912.00 10,672.97 103.55 120.81 9,599 -559.43 -331.65 6,967.16 6,891.67 75.49 92.289 19,600.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9,599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 106.39 120.81 9,599 -559.43 -331.65 7,154.70 7,079.45 75.25 95.081 19,800.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9,599 -559.43 -331.65 7,248.72 7,173.58 75.14 96.473 20,000.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9,599 -559.43 -331.65 7,342.28 7,362.28 74.94 </td <td>19,200.00</td> <td>13,092.00</td> <td>18,912.00</td> <td>10,672.97</td> <td>99.30</td> <td>120.81</td> <td>9.599</td> <td>-559.43</td> <td>-331.65</td> <td>6,687.21</td> <td>6,611.29</td> <td>75.92</td> <td>88.081</td> <td></td> <td></td>	19,200.00	13,092.00	18,912.00	10,672.97	99.30	120.81	9.599	-559.43	-331.65	6,687.21	6,611.29	75.92	88.081		
19,500.00 13,092.00 18,912.00 10,672.97 103.55 120.81 9.599 -559.43 -331.65 6,967.16 6,891.67 75.49 92.289 19,600.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 106.39 120.81 9.599 -559.43 -331.65 7,154.70 7,079.45 75.25 95.081 19,800.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,248.72 7,173.58 75.14 96.473 19,900.00 13,092.00 18,912.00 10,672.97 109.23 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 75.03 97.861 19,900.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 99.246 10,000.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,531.70 7,456.85 74.85 100.627 10,000.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 10,000.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 13,092.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 13,092.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 10.60 13,092.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 10.50 10.5															
19,600.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 106.39 120.81 9.599 -559.43 -331.65 7,154.70 7,079.45 75.25 95.081 19,800.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,248.72 7,173.58 75.14 96.473 19,900.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 75.03 97.861 20,000.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 99.246 20,100.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 </td <td>19,400.00</td> <td>13,092.00</td> <td>18,912.00</td> <td>10,672.97</td> <td>102.14</td> <td>120.81</td> <td>9.599</td> <td>-559.43</td> <td>-331.65</td> <td>6,873.66</td> <td>6,798.03</td> <td>75.63</td> <td>90.889</td> <td></td> <td></td>	19,400.00	13,092.00	18,912.00	10,672.97	102.14	120.81	9.599	-559.43	-331.65	6,873.66	6,798.03	75.63	90.889		
19,600.00 13,092.00 18,912.00 10,672.97 104.97 120.81 9.599 -559.43 -331.65 7,060.84 6,985.48 75.37 93.686 19,700.00 13,092.00 18,912.00 10,672.97 106.39 120.81 9.599 -559.43 -331.65 7,154.70 7,079.45 75.25 95.081 19,800.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,248.72 7,173.58 75.14 96.473 19,900.00 13,092.00 18,912.00 10,672.97 109.23 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 75.03 97.861 20,000.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 99.246 20,000.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,531.70 7,456.85 74.85 </td <td>19,500.00</td> <td>13,092.00</td> <td>18,912.00</td> <td>10,672.97</td> <td>103.55</td> <td>120.81</td> <td>9.599</td> <td>-559.43</td> <td>-331.65</td> <td>6,967.16</td> <td>6,891.67</td> <td>75.49</td> <td>92.289</td> <td></td> <td></td>	19,500.00	13,092.00	18,912.00	10,672.97	103.55	120.81	9.599	-559.43	-331.65	6,967.16	6,891.67	75.49	92.289		
19,700.00 13,092.00 18,912.00 10,672.97 106.39 120.81 9.599 -559.43 -331.65 7,154.70 7,079.45 75.25 95.081 19,800.00 13,092.00 18,912.00 10,672.97 107.81 120.81 9.599 -559.43 -331.65 7,248.72 7,173.58 75.14 96.473 19,900.00 13,092.00 18,912.00 10,672.97 109.23 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 75.03 97.861 20,000.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 99.246 20,100.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 99.246 20,200.00 13,092.00 18,912.00 10,672.97 113.49 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 </td <td></td>															
19,900.00 13,092.00 18,912.00 10,672.97 109.23 120.81 9.599 -559.43 -331.65 7,342.89 7,267.86 75.03 97.861 20,000.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 99.246 20,100.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,531.70 7,456.85 74.85 100.627 20,200.00 13,092.00 18,912.00 10,672.97 113.49 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 20,300.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,721.06 7,646.37 74.69 103.378 20,400.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 20,500.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,106.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,106.08 7,931.59 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,106.69 8,122.29 74.39 110.179															
20,000.00 13,092.00 18,912.00 10,672.97 110.65 120.81 9.599 -559.43 -331.65 7,437.22 7,362.28 74.94 99.246 20,100.00 13,092.00 18,912.00 10,672.97 113.49 120.81 9.599 -559.43 -331.65 7,531.70 7,456.85 74.85 100.627 20,300.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 20,300.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,721.06 7,646.37 74.69 103.378 20,400.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 20,500.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,101.33 8,026.89 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.97 120.00 120.81 9.599 -559.43 -331.65 8,106.69 8,122.29 74.39 110.179	19,800.00	13,092.00	18,912.00	10,672.97	107.81	120.81	9.599	-559.43	-331.65	7,248.72	7,173.58	75.14	96.473		
20,100.00 13,092.00 18,912.00 10,672.97 112.07 120.81 9.599 -559.43 -331.65 7,531.70 7,456.85 74.85 100.627 20,200.00 13,092.00 18,912.00 10,672.97 113.49 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 20,300.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,21.06 7,646.37 74.69 103.378 20,400.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 20,500.00 13,092.00 18,912.00 10,672.97 117.76 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97	19,900.00	13,092.00	18,912.00	10,672.97	109.23	120.81	9.599	-559.43	-331.65	7,342.89	7,267.86	75.03	97.861		
20,200.00 13,092.00 18,912.00 10,672.97 113.49 120.81 9.599 -559.43 -331.65 7,626.31 7,551.55 74.76 102.005 20,300.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,721.06 7,646.37 74.69 103.378 20,400.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 20,500.00 13,092.00 18,912.00 10,672.97 117.76 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,106.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.9															
20,300.00 13,092.00 18,912.00 10,672.97 114.91 120.81 9.599 -559.43 -331.65 7,721.06 7,646.37 74.69 103.378 20,400.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 20,500.00 13,092.00 18,912.00 10,672.97 117.76 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,101.33 8,026.89 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.97 122.03 120.81 9.599 -559.43 -331.65 8,101.33 8,026.89 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.9															
20,400.00 13,092.00 18,912.00 10,672.97 116.34 120.81 9.599 -559.43 -331.65 7,815.94 7,741.33 74.62 104.747 20,500.00 13,092.00 18,912.00 10,672.97 117.76 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,101.33 8,026.89 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.97 122.03 120.81 9.599 -559.43 -331.65 8,196.69 8,122.29 74.39 110.179															
20,500.00 13,092.00 18,912.00 10,672.97 117.76 120.81 9.599 -559.43 -331.65 7,910.95 7,836.40 74.55 106.112 20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,101.33 8,026.89 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.97 122.03 120.81 9.599 -559.43 -331.65 8,196.69 8,122.29 74.39 110.179															
20,600.00 13,092.00 18,912.00 10,672.97 119.18 120.81 9.599 -559.43 -331.65 8,006.08 7,931.59 74.49 107.472 20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,101.33 8,026.89 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.97 122.03 120.81 9.599 -559.43 -331.65 8,196.69 8,122.29 74.39 110.179															
20,700.00 13,092.00 18,912.00 10,672.97 120.60 120.81 9.599 -559.43 -331.65 8,101.33 8,026.89 74.44 108.828 20,800.00 13,092.00 18,912.00 10,672.97 122.03 120.81 9.599 -559.43 -331.65 8,196.69 8,122.29 74.39 110.179															
20,800.00 13,092.00 18,912.00 10,672.97 122.03 120.81 9.599 -559.43 -331.65 8,196.69 8,122.29 74.39 110.179															
20,000.00 10,002.00 10,012.00 12,010 12,010 12,001 10,000 1															
21,000.00 13,092.00 18,912.00 10,672.97 124.87 120.81 9.599 -559.43 -331.65 8,387.73 8,313.42 74.32 112.866															







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma
USA Compass
Reference Datum

urvey Progr		06-MWD+HRG		Samt 5	Aninu Avis		Office Malling	one Combre	D!-	Rule Assig	gned:		Offset Well Error:	1.00 ust
Refer Measured Depth	rence Vertical Depth	Off Measured Depth	set Vertical Depth	Reference	lajor Axis Offset	Highside Toolface	Offset Wellbo	+E/-W	Between Centres	tance Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
21,100.00	13,092.00	18,912.00	10,672.97	126.30	120.81	9.599	-559.43	-331.65	8,483.41	8,409.13	74.28	114.203		
21,200.00	13,092.00	18,912.00	10,672.97	127.72	120.81	9.599	-559.43	-331.65	8,579.19	8,504.93	74.26	115.534		
21,300.00	13,092.00	18,912.00	10,672.97	129.15	120.81	9.599	-559.43	-331.65	8,675.06	8,600.82	74.24	116.859		
21,400.00	13,092.00	18,912.00	10,672.97	130.57	120.81	9.599	-559.43	-331.65	8,771.02	8,696.80	74.22	118.180		
21,500.00	13,092.00	18,912.00	10,672.97	132.00	120.81	9.599	-559.43	-331.65	8,867.07	8,792.87	74.20	119.495		
21,600.00	13,092.00	18,912.00	10,672.97	133.42	120.81	9.599	-559.43	-331.65	8,963.21	8,889.02	74.20	120.804		
21,700.00	13,092.00	18,912.00	10,672.97	134.85	120.81	9.599	-559.43	-331.65	9,059.43	8,985.24	74.19	122.108		
21,800.00	13,092.00	18,912.00	10,672.97	136.27	120.81	9.599	-559.43	-331.65	9,155.74	9,081.55	74.19	123.406		
21,900.00	13,092.00	18,912.00	10,672.97	137.70	120.81	9.599	-559.43	-331.65	9,252.12	9,177.92	74.20	124.699		
22,000.00	13,092.00	18,912.00	10,672.97	139.12	120.81	9.599	-559.43	-331.65	9,348.58	9,274.37	74.20	125.985		
22,100.00	13,092.00	18,912.00	10,672.97	140.55	120.81	9.599	-559.43	-331.65	9,445.11	9,370.89	74.22	127.266		
22,200.00	13,092.00	18,912.00	10,672.97	141.98	120.81	9.599	-559.43	-331.65	9,541.71	9,467.48	74.23	128.541		
22,300.00	13,092.00	18,912.00	10,672.97	143.40	120.81	9.599	-559.43	-331.65	9,638.38	9,564.13	74.25	129.811		
22,400.00	13,092.00	18,912.00	10,672.97	144.83	120.81	9.599	-559.43	-331.65	9,735.12	9,660.85	74.27	131.074		
22,500.00	13,092.00	18,912.00	10,672.97	146.26	120.81	9.599	-559.43	-331.65	9,831.93	9,757.63	74.30	132.331		
22,600.00	13,092.00	18,912.00	10,672.97	147.69	120.81	9.599	-559.43	-331.65	9,928.80	9,854.47	74.33	133.582		
22,700.00	13,092.00	18,912.00	10,672.97	149.11	120.81	9.599	-559.43	-331.65	10,025.73	9,951.37	74.36	134.827		
22,728.24	13,092.00	18,912.00	10,672.97	149.52	120.81	9.599	-559.43	-331.65	10,053.11	9,978.74	74.37	135.177		







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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

Well El Campeon Fed Com 513H TVD Reference: RKB @ 3200.50usft (TBD) MD Reference: RKB @ 3200.50usft (TBD)

Grid North Reference:

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma **USA Compass** Database:

Offset TVD Reference: Reference Datum

Offset De	sign:	Cattleman Fe	d Com 3 -	Cattleman	Fed Com	213H - OH	/ 69914 - Surve	ys (H&P 6	16)				Offset Site Error:	0.00 usft
Survey Progr	ram:	177-MWD+HRG	M							Rule Ass	gned:		Offset Well Error:	1.00 usft
	rence Vertical		fset Vertical	Semi M Reference	Major Axis Offset	Highside	Offset Wellbo	re Centre	Dist Between	tance Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth	11010101100		Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.00	0.0		2.31	1.00	1.05	-0.447	7,680.55	-59.90	7,680.79					
100.00	100.0		106.92	1.08	1.37	-0.443	7,680.50	-59.38	7,680.73	7,678.28	2.45	3,139.625		
200.00	200.0		205.83	1.60	1.93	-0.437	7,680.41	-58.61	7,680.64	7,677.14	3.50	2,195.270		
300.00 400.00	300.0 400.0		304.79 404.53	2.01 2.35	2.52 3.06	-0.432 -0.426	7,680.35 7,680.30	-57.90 -57.17	7,680.57 7,680.51	7,676.10 7,675.18	4.47 5.33	1,718.327 1,441.321		
489.99	489.9		489.99	2.62	3.31	-0.426	7,680.27	-57.17 -56.57	7,680.51	7,673.16	5.81	1,321.294		
400.00	400.	040.00	400.00	2.02	0.01	-0.422	7,000.27	-00.01	7,000.40	1,014.01	0.01	1,021.204		
500.00	500.0	00 548.98	498.96	2.65	3.33	-0.422	7,680.28	-56.51	7,680.48	7,674.62	5.86	1,310.405		
600.00	600.0	00 637.21	587.20	2.93	3.55	-0.418	7,680.36	-55.99	7,680.58	7,674.27	6.31	1,217.378		
700.00	700.0	00 733.87	683.85	3.18	3.77	-0.415	7,680.54	-55.58	7,680.76	7,674.02	6.74	1,139.061		
800.00	800.0	00 823.28	773.27	3.41	3.95	-0.413	7,680.79	-55.38	7,681.04	7,673.90	7.14	1,076.090		
900.00	900.0	00 911.85	861.84	3.64	4.12	-0.413	7,681.18	-55.31	7,681.47	7,673.95	7.52	1,021.575		
1,000.00	1,000.0	00 1,017.10	967.08	3.85	4.29	-0.413	7,681.67	-55.31	7,681.94	7,674.02	7.92	970.004		
1,100.00	1,100.0		1,072.80	4.05	4.29	-0.413	7,682.07	-55.43	7,682.32	7,674.02	7.92 8.30	925.945		
1,200.00	1,200.0		1,159.80	4.05	4.45	-0.415	7,682.42	-55.43	7,682.73	7,674.02	8.61	892.143		
1,300.00	1,300.0		1,298.93	4.43	4.68	-0.410	7,682.91	-56.67	7,683.12	7,674.11	9.01	852.726		
1,400.00	1,400.0		1,412.38	4.61	4.78	-0.425	7,682.78	-57.00	7,683.00	7,673.68	9.32	824.355		
1,500.00	1,500.0		1,503.89	4.78	4.87	-0.426	7,682.69	-57.11	7,682.90	7,673.30	9.60	800.129		
1,501.44	1,501.4	1,555.25	1,505.23	4.79	4.87	-170.412	7,682.69	-57.12	7,682.90	7,673.29	9.61	799.768		
1,600.00	1,599.9		1,609.44	4.98	4.98	-170.411	7,682.65	-57.38	7,684.59	7,674.67	9.92	774.746		
1,620.70	1,620.0		1,635.80	4.99	5.01	-170.410	7,682.60	-57.46	7,685.34	7,675.38	9.96	771.394		
1,700.00	1,699.8	39 1,767.84	1,717.81	5.07	5.09	-170.416	7,682.40	-57.68	7,688.44	7,678.30	10.14	758.219		
1,800.00	1,799.8	31 1,882.03	1,832.00	5.23	5.21	-170.423	7,682.07	-57.74	7,692.31	7,681.89	10.42	738.139		
1,900.00	1,899.		1,930.17	5.41	5.32	-170.427	7,681.65	-57.68	7,696.04	7,685.33	10.71	718.660		
2,000.00	1,999.0		2,026.14	5.60	5.45	-170.430	7,681.30	-57.30	7,699.82	7,688.81	11.01	699.157		
2,100.00	2,099.		2,112.92	5.80	5.57	-170.429	7,681.08	-56.53	7,703.71	7,692.39	11.32	680.485		
2,200.00	2,199.4		2,199.42	6.02	5.71	-170.424	7,681.01	-55.37	7,707.78	7,696.14	11.64	662.158		
2,300.00	2,299.3		2,287.73	6.24	5.86	-170.418	7,681.09	-53.83	7,712.01	7,700.04	11.97	644.254		
2,400.00	2,399.2		2,369.45	6.47	6.00	-170.407	7,681.31	-51.90	7,716.42	7,704.12	12.30	627.362		
2,500.00	2,499.		2,411.90	6.72	6.08	-170.401	7,681.52	-50.68	7,721.20	7,708.61	12.59	613.382		
2,600.00	2,599.		2,463.49	6.96	6.23	-170.389	7,682.12	-48.77	7,726.64	7,713.72	12.92	598.072		
2,700.00	2,699.0	01 2,557.00	2,506.80	7.22	6.36	-170.375	7,683.12	-46.64	7,732.98	7,719.74	13.24	583.989		
2,800.00	2,798.9	92 2,614.08	2,563.76	7.48	6.53	-170.354	7,684.80	-43.40	7,739.97	7,726.38	13.60	569.315		
2,900.00	2,898.8		2,634.36	7.74	6.72	-170.325	7,687.10	-39.02	7,747.34	7,733.37	13.96	554.857		
3,000.00	2,998.		2,703.68	8.01	6.88	-170.295	7,689.64	-34.45	7,755.10	7,740.78	14.32	541.686		
3,100.00	3,098.6		2,789.03	8.28	7.08	-170.255	7,693.02	-28.40	7,763.16	7,748.46	14.70	528.054		
3,200.00	3,198.		2,855.41	8.56	7.25	-170.221	7,695.85	-23.36	7,771.52	7,756.46	15.07	515.848		
3,300.00	3,298.4		11,048.80	8.84	119.55	-85.282	-375.41	269.41	7,760.50	7,684.40	76.11	101.969		
3,400.00	3,398.3		11,048.80	9.13	119.55	-85.253	-375.51	269.41	7,660.54	7,584.31	76.23	100.495		
3,500.00	3,498.3		11,048.79	9.41	119.55	-85.224	-375.61	269.41	7,560.57	7,484.22	76.35	99.021		
3,600.00	3,598.2		11,048.79	9.70	119.55	-85.194 95.164	-375.71	269.41	7,460.61	7,384.13	76.48	97.550		
3,700.00	3,698.	12 19,085.64	11,048.79	9.99	119.55	-85.164	-375.82	269.41	7,360.64	7,284.03	76.61	96.080		
3,800.00	3,798.0	03 19,085.75	11,048.78	10.29	119.55	-85.134	-375.93	269.41	7,260.68	7,183.94	76.74	94.612		
3,900.00	3,897.9		11,048.78	10.58	119.56	-85.103	-376.04	269.40	7,160.72	7,083.84	76.88	93.146		
4,000.00	3,997.8		11,048.77	10.88	119.56	-85.071	-376.15	269.40	7,060.76	6,983.75	77.01	91.682		
4,100.00	4,097.		11,048.77	11.18	119.56	-85.039	-376.26	269.40	6,960.80	6,883.65	77.15	90.221		
4,200.00	4,197.6	19,086.20	11,048.76	11.48	119.56	-85.006	-376.38	269.40	6,860.84	6,783.55	77.29	88.762		
4,300.00	4,297.		11,048.76	11.78	119.56	-84.973	-376.49	269.40	6,760.89	6,683.45	77.44	87.306		
4,400.00	4,397.		11,048.75	12.08	119.56	-84.939	-376.61	269.40	6,660.93	6,583.35	77.59	85.852		
4,500.00	4,497.4		11,048.75	12.39	119.57	-84.905	-376.73	269.40	6,560.98	6,483.24	77.74	84.402		
4,600.00	4,597.3		11,048.75	12.69	119.57	-84.870	-376.85	269.40	6,461.03	6,383.14	77.89	82.954		
4,700.00	4,697.2	23 19,086.80	11,048.74	13.00	119.57	-84.834	-376.98	269.40	6,361.07	6,283.03	78.04	81.509		
4,800.00	4,797.	14 19,086.93	11,048.74	13.31	119.57	-84.798	-377.11	269.40	6,261.12	6,182.93	78.20	80.068		
,	,	.,	00 Min						-,	- FC				







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method:

Survey Calculation Method:
Output errors are at
Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

USA Compass Reference Datum

Offset Des	sign: Ca	ittleman Fe	d Com 3 -	Cattleman	Fed Com	1 213H - OH	/ 69914 - Surve	eys (H&P 6	316)				Offset Site Error:	0.00 usft
Survey Progra Refer		77-MWD+HRG Of f	M fset	Semi N	Major Axis		Offset Wellbo	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,900.00	4,897.05	19,087.06	11,048.73	13.62	119.57	-84.761	-377.24	269.40	6,161.18	6,082.82	78.36	78.629		
5,000.00	4,996.97	19,087.19	11,048.73	13.92	119.58	-84.723	-377.37	269.40	6,061.23	5,982.71	78.52	77.195		
5,100.00	5,096.88	19,087.33	11,048.72	14.23	119.58	-84.685	-377.50	269.40	5,961.29	5,882.60	78.68	75.763		
5,200.00	5,196.79	19,087.46	11,048.72	14.55	119.58	-84.646	-377.64	269.40	5,861.34	5,782.49	78.85	74.336		
5,300.00	5,296.70	19,087.60	11,048.71	14.86	119.58	-84.606	-377.78	269.39	5,761.40	5,682.38	79.02	72.912		
5,400.00	5,396.61	19,087.74	11,048.70	15.17	119.58	-84.566	-377.92	269.39	5,661.47	5,582.27	79.19	71.492		
5,500.00	5,496.52	19,087.89	11,048.70	15.48	119.58	-84.525	-378.07	269.39	5,561.53	5,482.16	79.36	70.076		
5,600.00	5,596.43	19,088.04	11,048.69	15.79	119.59	-84.483	-378.21	269.39	5,461.60	5,382.05	79.54	68.664		
5,700.00	5,696.34	19,088.19	11,048.69	16.11	119.59	-84.440	-378.36	269.39	5,361.66	5,281.94	79.72	67.257		
5,800.00	5,796.26	19,088.34	11,048.68	16.42	119.59	-84.396	-378.52	269.39	5,261.73	5,181.83	79.90	65.853		
5,900.00	5,896.17	19,088.50	11,048.68	16.74	119.59	-84.352	-378.67	269.39	5,161.81	5,081.72	80.08	64.454		
6,000.00	5,996.08	19,088.65	11,048.67	17.05	119.60	-84.306	-378.83	269.39	5,061.89	4,981.61	80.27	63.060		
6,100.00	6,095.99	19,088.82	11,048.66	17.37	119.60	-84.260	-378.99	269.39	4,961.97	4,881.51	80.46	61.670		
6,200.00	6,195.90	19,088.98	11,048.66	17.68	119.60	-84.213	-379.16	269.39	4,862.05	4,781.40	80.65	60.285		
6,300.00	6,295.81	19,089.15	11,048.65	18.00	119.60	-84.165	-379.33	269.39	4,762.14	4,681.29	80.84	58.905		
6,400.00	6,395.72	19,089.33	11,048.64	18.32	119.60	-84.115	-379.50	269.38	4,662.23	4,581.19	81.04	57.529		
6,500.00	6,495.63	19,089.50	11,048.64	18.63	119.61	-84.065	-379.68	269.38	4,562.32	4,481.08	81.24	56.159		
6,600.00	6,595.55	19,089.68	11,048.63	18.95	119.61	-84.014	-379.86	269.38	4,462.42	4,380.98	81.44	54.794		
6,700.00	6,695.46	19,089.87	11,048.62	19.27	119.61	-83.961	-380.04	269.38	4,362.52	4,280.88	81.64	53.434		
6,800.00	6,795.37	19,090.05	11,048.62	19.59	119.61	-83.908	-380.23	269.38	4,262.63	4,180.78	81.85	52.079		
6,900.00	6,895.28	19,090.25	11,048.61	19.91	119.62	-83.853	-380.42	269.38	4,162.74	4,080.69	82.06	50.729		
7,000.00	6,995.19	19,090.44	11,048.60	20.23	119.62	-83.797	-380.62	269.38	4,062.86	3,980.59	82.27	49.385		
7,100.00	7,095.10	19,090.64	11,048.59	20.54	119.62	-83.740	-380.82	269.38	3,962.99	3,880.51	82.48	48.047		
7,200.00	7,195.01	19,090.85	11,048.59	20.86	119.63	-83.681	-381.02	269.38	3,863.12	3,780.42	82.70	46.714		
7,300.00	7,294.92	19,091.06	11,048.58	21.18	119.63	-83.621	-381.23	269.37	3,763.26	3,680.34	82.91	45.387		
7,400.00	7,394.84	19,091.27	11,048.57	21.50	119.63	-83.560	-381.45	269.37	3,663.40	3,580.27	83.13	44.066		
7,500.00	7,494.75	19,091.49	11,048.56	21.82	119.63	-83.497	-381.67	269.37	3,563.55	3,480.20	83.36	42.751		
7,600.00	7,594.66	19,091.72	11,048.55	22.14	119.64	-83.433	-381.89	269.37	3,463.72	3,380.14	83.58	41.441		
7,700.00	7,694.57	19,091.95	11,048.54	22.46	119.64	-83.368	-382.12	269.37	3,363.89	3,280.08	83.81	40.138		
7,800.00	7,794.48	19,092.18	11,048.54	22.78	119.64	-83.300	-382.36	269.37	3,264.07	3,180.03	84.04	38.840		
7,900.00	7,894.39	19,092.42	11,048.53	23.10	119.65	-83.231	-382.60	269.37	3,164.27	3,080.00	84.27	37.549		
8,000.00	7,994.30	19,092.67	11,048.52	23.42	119.65	-83.161	-382.84	269.36	3,064.47	2,979.97	84.50	36.264		
8,100.00	8,094.21	19,092.92	11,048.51	23.75	119.65	-83.088	-383.10	269.36	2,964.69	2,879.95	84.74	34.986		
8,200.00	8,194.13	19,093.18	11,048.50	24.07	119.66	-83.014	-383.36	269.36	2,864.93	2,779.95	84.98	33.714		
8,300.00	8,294.04	19,093.45	11,048.49	24.39	119.66	-82.938	-383.62	269.36	2,765.18	2,679.96	85.22	32.448		
8,400.00	8,393.95	19,093.72	11,048.48	24.71	119.67	-82.860	-383.90	269.36	2,665.45	2,579.99	85.46	31.189		
8,500.00	8,493.86	19,094.00	11,048.47	25.03	119.67	-82.779	-384.18	269.36	2,565.75	2,480.04	85.71	29.936		
8,600.00	8,593.77	19,094.29	11,048.46	25.35	119.67	-82.697	-384.46	269.35	2,466.06	2,380.11	85.95	28.690		
8,700.00	8,693.68	19,094.59	11,048.45	25.67	119.68	-82.612	-384.76	269.35	2,366.41	2,280.20	86.21	27.451		
8,800.00	8,793.59	19,094.89	11,048.43	26.00	119.68	-82.525	-385.06	269.35	2,266.78	2,180.32	86.46	26.218		
8,900.00	8,893.50	19,095.20	11,048.42	26.32	119.69	-82.436	-385.38	269.35	2,167.19	2,080.47	86.71	24.992		
9,000.00	8,993.42	19,095.53	11,048.41	26.64	119.69	-82.344	-385.70	269.35	2,067.64	1,980.66	86.97	23.773		
9,100.00	9,093.33	19,095.86	11,048.40	26.96	119.70	-82.249	-386.03	269.35	1,968.13	1,880.89	87.24	22.561		
9,200.00	9,193.24	19,096.20	11,048.39	27.29	119.70	-82.152	-386.37	269.34	1,868.67	1,781.17	87.50	21.356		
9,300.00 9,400.00	9,293.15 9,393.06	19,096.55 19,096.91	11,048.37 11,048.36	27.61 27.93	119.71 119.71	-82.051 -81.948	-386.72 -387.08	269.34 269.34	1,769.28 1,669.96	1,681.50 1,581.91	87.77 88.05	20.157 18.965		
9,500.00	9,492.97	19,097.28	11,048.35	28.25	119.72	-81.842	-387.45	269.34	1,570.72	1,482.38	88.34	17.781		
9,600.00	9,592.88	19,097.66	11,048.33	28.58	119.72	-81.732	-387.83	269.33	1,471.59	1,382.96	88.63	16.603		
9,700.00	9,692.79	19,098.06	11,048.32	28.90	119.73	-81.619	-388.23	269.33	1,372.58	1,283.64	88.94	15.432		
9,800.00 9,900.00	9,792.71 9,892.62	19,098.47 19,098.89	11,048.30 11,048.29	29.22 29.55	119.73 119.74	-81.502 -81.381	-388.64 -389.06	269.33 269.33	1,273.73 1,175.08	1,184.46 1,085.45	89.27 89.63	14.268 13.110		
10,000.00	9,992.53	19,099.32	11,048.27	29.87	119.74	-81.257	-389.49	269.32	1,076.67	986.64	90.03	11.959		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

Well El Campeon Fed Com 513H TVD Reference: RKB @ 3200.50usft (TBD) MD Reference: RKB @ 3200.50usft (TBD)

Grid North Reference:

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma

USA Compass Database:

Offset TVD Reference: Reference Datum

Offset De	sign: Ca	attleman Fe	d Com 3 -	Cattleman	Fed Com	213H - OH	/ 69914 - Surve	ys (H&P 6	16)				Offset Site Error:	0.00 usft
Survey Progr		77-MWD+HRG								Rule Assi	gned:		Offset Well Error:	1.00 usft
Refe Measured	rence Vertical	Off Measured	set Vertical	Semi M Reference	Major Axis Offset	Highside	Offset Wellbo	re Centre	Dis Between	tance Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor	· ·	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
10,100.00	10,092.44		11,048.26	30.19	119.75	-81.128	-389.94	269.32	978.58	888.10	90.49	10.815		
10,200.00 10,300.00	10,192.35 10,292.26		11,048.24 11,048.22	30.52 30.84	119.76 119.76	-80.995 -80.857	-390.40 -390.88	269.32 269.32	880.92 783.86	789.89 692.12	91.04 91.73	9.677 8.545		
10,300.00	10,292.20		11,048.20	31.16	119.70	-80.714	-391.38	269.32	687.63	594.95	92.68	7.419		
10,500.00	10,492.08		11,048.19	31.49	119.78	-80.567	-391.90	269.31	592.66	498.60	94.06	6.301		
10,600.00	10,592.00		11,048.17	31.81	119.79	-80.414	-392.43	269.31	499.65	403.44	96.20	5.194		
10,700.00	10,691.91	19,102.82	11,048.15	32.13	119.79	-80.255	-392.98	269.30	409.94	310.14	99.80	4.107		
10,800.00	10,791.82		11,048.13	32.46	119.80	-80.090	-393.56	269.30	326.27	220.14	106.14	3.074		
10,900.00	10,891.73		11,048.11	32.78	119.81	-79.919	-394.15	269.30	254.67	137.73	116.94	2.178		
11,000.00 11,058.00	10,991.64 11,049.59	19,104.61 19,104.98	11,048.08 11,048.07	33.11 33.29	119.82 119.82	-79.741 -79.634	-394.77 -395.14	269.29 269.29	207.99 199.74	77.09 63.54	130.89 136.20	1.589	vel 3, CC, ES, SF	
11,056.00	11,049.59	19,104.90	11,040.07	33.29	119.02	-79.034	-393.14	209.29	199.74	03.54	130.20	1.407 Le	vei 3, CC, E3, 3F	
11,100.00	11,091.55	19,105.25	11,048.06	33.43	119.83	-79.556	-395.42	269.29	204.11	67.18	136.93	1.491 Le	vel 3	
11,200.00	11,191.46	19,105.92	11,048.04	33.75	119.84	-79.363	-396.09	269.28	245.07	114.80	130.28	1.881		
11,300.00	11,291.37	19,106.62	11,048.01	34.08	119.85	-79.162	-396.79	269.28	313.78	192.61	121.17	2.590		
11,400.00	11,391.29		11,047.99	34.40	119.86	-78.953	-397.52	269.27	396.05	281.50	114.55	3.457		
11,500.00	11,491.20	19,108.11	11,047.96	34.73	119.87	-78.735	-398.28	269.27	485.03	374.75	110.28	4.398		
11,600.00	11,591.11	19,108.91	11,047.94	35.05	119.88	-78.507	-399.07	269.26	577.62	470.08	107.55	5.371		
11,700.00	11,691.02		11,047.91	35.38	119.89	-78.268	-399.90	269.26	672.34	566.57	105.78	6.356		
11,800.00	11,790.93		11,047.88	35.70	119.90	-78.019	-400.77	269.25	768.40	663.79	104.61	7.345		
11,900.00	11,890.84	19,111.52	11,047.85	36.03	119.91	-77.758	-401.69	269.25	865.35	761.50	103.85	8.333		
11,907.54	11,898.38	19,111.59	11,047.84	36.05	119.92	-77.737	-401.76	269.25	872.69	768.89	103.80	8.407		
12,000.00	11,990.80		11,047.88	36.33	119.90	-86.309	-400.83	269.25	962.97	859.62	103.35	9.318		
12,028.24 12,100.00	12,019.04 12,090.80		11,047.91 11,048.02	36.36 36.36	119.89 119.84	80.622 79.731	-399.81 -396.71	269.26 269.28	990.64 1,061.08	887.40 958.04	103.25 103.04	9.595 10.298		
12,100.00	12,190.80		11,048.02	36.36	119.78	78.444	-392.21	269.26	1,159.50	1,056.64	102.85	11.273		
12,300.00	12,290.80		11,048.35	36.36	119.72	77.102	-387.47	269.34	1,258.15	1,155.38	102.77	12.242		
,	,	,	,						.,	.,				
12,400.00	12,390.80	19,092.30	11,048.53	36.37	119.65	75.703	-382.47	269.37	1,356.99	1,254.22	102.76	13.205		
12,500.00	12,490.80	19,087.01	11,048.73	36.37	119.57	74.245	-377.19	269.40	1,455.97	1,353.16	102.81	14.161		
12,528.24	12,519.04		11,048.79	36.37	119.55	73.823	-375.65	269.41	1,483.95	1,381.11	102.84	14.430		
12,550.00	12,540.79		11,048.82	36.40	119.54	-89.564	-375.03	269.41	1,505.52	1,402.66	102.86	14.637		
12,600.00	12,590.61	19,087.94	11,048.70	36.63	119.59	-54.756	-378.11	269.39	1,555.05	1,452.10	102.95	15.105		
12,650.00	12,639.89	19,097.49	11,048.34	36.95	119.72	-34.474	-387.66	269.34	1,604.21	1,501.12	103.09	15.561		
12,700.00	12,688.24	19,113.72	11,047.77	37.29	119.94	-23.944	-403.88	269.23	1,652.61	1,549.33	103.28	16.001		
12,750.00	12,735.30	19,136.78	11,047.06	37.62	120.27	-17.954	-426.93	269.08	1,699.83	1,596.31	103.52	16.420		
12,800.00	12,780.72		11,046.29	37.96	120.68	-14.206	-456.88	268.86	1,745.45	1,641.63	103.82	16.813		
12,850.00	12,824.15	19,203.64	11,045.58	38.29	121.20	-11.689	-493.77	268.57	1,789.04	1,684.87	104.16	17.175		
12,900.00	12,865.26	19,223.91	11,045.14	38.60	121.48	-10.103	-514.03	268.42	1,830.43	1,725.97	104.46	17.522		
12,900.00	12,865.26		11,045.14	38.90	121.48	-8.895	-514.03 -540.12	268.42	1,869.26	1,725.97	104.46	17.522		
13,000.00	12,939.27	19,250.00	11,044.63	39.18	121.84	-8.110	-540.12	268.21	1,905.64	1,800.60	105.05	18.141		
13,050.00	12,971.62		11,044.63	39.43	121.84	-7.482	-540.12	268.21	1,939.62	1,834.35	105.27	18.425		
13,100.00	13,000.52		11,044.63	39.65	121.84	-6.973	-540.12	268.21	1,971.06	1,865.59	105.47	18.688		
13,150.00	13,025.76		11,044.63	39.85	121.84	-6.558	-540.12	268.21	1,999.86	1,894.20	105.65	18.928		
13,200.00	13,047.14		11,044.63	40.02	121.84	-6.218	-540.12	268.21	2,025.90	1,920.10	105.81	19.147		
13,250.00	13,064.50		11,044.63	40.15	121.84	-5.940 -5.715	-540.12 -540.12	268.21	2,049.11	1,943.18	105.93	19.345 19.520		
13,300.00 13,350.00	13,077.71 13,086.67		11,044.63 11,044.63	40.26 40.33	121.84 121.84	-5.715 -5.534	-540.12 -540.12	268.21 268.21	2,069.40 2,086.70	1,963.39 1,980.64	106.01 106.06	19.520		
10,000.00	10,000.07	10,200.00	11,0-14.00	40.55	121.04	-0.004	J40.12	200.21	2,000.10	1,000.04	100.00	10.014		
13,400.00	13,091.30	19,250.00	11,044.63	40.38	121.84	-5.392	-540.12	268.21	2,100.97	1,994.89	106.08	19.806		
13,428.24	13,092.00	19,250.00	11,044.63	40.39	121.84	-5.328	-540.12	268.21	2,107.66	2,001.64	106.02	19.880		
13,500.00	13,092.00	19,250.00	11,044.63	40.40	121.84	-5.328	-540.12	268.21	2,124.57	2,018.77	105.79	20.082		
13,600.00	13,092.00		11,044.63	40.43	121.84	-5.328	-540.12	268.21	2,151.90	2,046.55	105.35	20.427		
13,700.00	13,092.00	19,250.00	11,044.63	40.46	121.84	-5.328	-540.12	268.21	2,183.48	2,078.68	104.79	20.836		
13,800.00	13,092.00	19,250.00	11,044.63	40.50	121.84	-5.328	-540.12	268.21	2,219.11	2,114.96	104.15	21.307		
.0,000.00	.0,002.00	.0,200.00	00 Min	70.00	.21.07	0.020	370.12	200.21	_,_ 10.11	Z,114.90	.54.10	2007		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

Offset Des	sign: Ca	ittleman Fe	d Com 3 -	Cattleman	Fed Com	213H - OH	/ 69914 - Surve	eys (H&P 6	516)				Offset Site Error:	0.00 usft
Survey Progr Refer	ram: 17	77-MWD+HRG Of f	M fset	Semi N	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,900.00	13,092.00	19,250.00	11,044.63	40.53	121.84	-5.328	-540.12	268.21	2,258.62	2,155.19	103.42	21.839		
14,000.00	13,092.00	19,250.00	11,044.63	40.58	121.84	-5.328	-540.12	268.21	2,301.79	2,199.16	102.63	22.427		
14,100.00	13,092.00	19,250.00	11,044.63	40.63	121.84	-5.328	-540.12	268.21	2,348.43	2,246.64	101.79	23.071		
14,200.00	13,092.00	19,250.00	11,044.63	40.69	121.84	-5.328	-540.12	268.21	2,398.33	2,297.43	100.91	23.768		
14,300.00	13,092.00	19,250.00	11,044.63	40.76	121.84	-5.328	-540.12	268.21	2,451.31	2,351.31	99.99	24.515		
14,400.00	13,092.00	19,250.00	11,044.63	40.85	121.84	-5.328	-540.12	268.21	2,507.15	2,408.09	99.06	25.310		
14,500.00	13,092.00	19,250.00	11,044.63	40.95	121.84	-5.328	-540.12	268.21	2,565.67	2,467.56	98.11	26.150		
14,600.00	13,092.00	19,250.00	11,044.63	41.10	121.84	-5.328	-540.12	268.21	2,626.70	2,529.54	97.17	27.033		
14,700.00	13,092.00	19,250.00	11,044.63	41.29	121.84	-5.328	-540.12	268.21	2,690.07	2,593.84	96.22	27.957		
14,800.00	13,092.00	19,250.00	11,044.63	41.57	121.84	-5.328	-540.12	268.21	2,755.60	2,660.31	95.29	28.919		
14,900.00	13,092.00	19,250.00	11,044.63	41.99	121.84	-5.328	-540.12	268.21	2,823.16	2,728.79	94.36	29.917		
15,000.00	13,092.00	19,250.00	11,044.63	42.60	121.84	-5.328	-540.12	268.21	2,892.60	2,799.14	93.46	30.950		
15,100.00	13,092.00	19,250.00	11,044.63	43.42	121.84	-5.328	-540.12	268.21	2,963.78	2,871.21	92.57	32.015		
15,200.00	13,092.00	19,250.00	11,044.63	44.43	121.84	-5.328	-540.12	268.21	3,036.59	2,944.88	91.71	33.110		
15,300.00	13,092.00	19,250.00	11,044.63	45.56	121.84	-5.328	-540.12	268.21	3,110.91	3,020.04	90.87	34.233		
15,400.00	13,092.00	19,250.00	11,044.63	46.76	121.84	-5.328	-540.12	268.21	3,186.64	3,096.58	90.06	35.383		
15,500.00	13,092.00	19,250.00	11,044.63	48.01	121.84	-5.328	-540.12	268.21	3,263.67	3,174.40	89.27	36.558		
15,600.00	13,092.00	19,250.00	11,044.63	49.30	121.84	-5.328	-540.12	268.21	3,341.92	3,253.41	88.51	37.756		
15,700.00	13,092.00	19,250.00	11,044.63	50.61	121.84	-5.328	-540.12	268.21	3,421.31	3,333.53	87.78	38.976		
15,800.00	13,092.00	19,250.00	11,044.63	51.93	121.84	-5.328	-540.12	268.21	3,501.75	3,414.67	87.07	40.216		
15,900.00	13,092.00	19,250.00	11,044.63	53.27	121.84	-5.328	-540.12	268.21	3,583.17	3,496.78	86.39	41.475		
16,000.00	13,092.00	19,250.00	11,044.63	54.61	121.84	-5.328	-540.12	268.21	3,665.52	3,579.78	85.74	42.752		
16,100.00	13,092.00	19,250.00	11,044.63	55.97	121.84	-5.328	-540.12	268.21	3,748.72	3,663.61	85.11	44.044		
16,200.00	13,092.00	19,250.00	11,044.63	57.33	121.84	-5.328	-540.12	268.21	3,832.72	3,748.21	84.51	45.352		
16,300.00	13,092.00	19,250.00	11,044.63	58.69	121.84	-5.328	-540.12	268.21	3,917.48	3,833.55	83.93	46.674		
16,400.00	13,092.00	19,250.00	11,044.63	60.06	121.84	-5.328	-540.12	268.21	4,002.94	3,919.56	83.38	48.009		
16,500.00	13,092.00	19,250.00	11,044.63	61.44	121.84	-5.328	-540.12	268.21	4,089.06	4,006.21	82.85	49.355		
16,600.00	13,092.00	19,250.00	11,044.63	62.81	121.84	-5.328	-540.12	268.21	4,175.80	4,093.46	82.34	50.713		
16,700.00	13,092.00	19,250.00	11,044.63	64.20	121.84	-5.328	-540.12	268.21	4,263.12	4,181.27	81.86	52.081		
16,800.00	13,092.00	19,250.00	11,044.63	65.58	121.84	-5.328	-540.12	268.21	4,350.99	4,269.60	81.39	53.457		
16,900.00	13,092.00	19,250.00	11,044.63	66.97	121.84	-5.328	-540.12	268.21	4,439.37	4,358.42	80.95	54.842		
17,000.00	13,092.00	19,250.00	11,044.63	68.36	121.84	-5.328	-540.12	268.21	4,528.23	4,447.71	80.52	56.235		
17,100.00	13,092.00	19,250.00	11,044.63	69.75	121.84	-5.328	-540.12	268.21	4,617.55	4,537.43	80.12	57.634		
17,200.00	13,092.00	19,250.00	11,044.63	71.14	121.84	-5.328	-540.12	268.21	4,707.30	4,627.57	79.73	59.040		
17,300.00	13,092.00	19,250.00	11,044.63	72.54	121.84	-5.328	-540.12	268.21	4,797.45	4,718.09	79.36	60.451		
17,400.00	13,092.00	19,250.00	11,044.63	73.94	121.84	-5.328	-540.12	268.21	4,887.99	4,808.98	79.01	61.867		
17,500.00	13,092.00	19,250.00	11,044.63	75.34	121.84	-5.328	-540.12	268.21	4,978.89	4,900.22	78.67	63.287		
17,600.00	13,092.00	19,250.00	11,044.63	76.74	121.84	-5.328	-540.12	268.21	5,070.13	4,991.78	78.35	64.710		
17,700.00	13,092.00	19,250.00	11,044.63	78.14	121.84	-5.328	-540.12	268.21	5,161.70	5,083.65	78.05	66.137		
17,800.00	13,092.00	19,250.00	11,044.63	79.55	121.84	-5.328	-540.12	268.21	5,253.57	5,175.82	77.75	67.567		
17,900.00	13,092.00	19,250.00	11,044.63	80.95	121.84	-5.328	-540.12	268.21	5,345.74	5,268.26	77.48	68.998		
18,000.00	13,092.00	19,250.00	11,044.63	82.36	121.84	-5.328	-540.12	268.21	5,438.18	5,360.97	77.21	70.432		
18,100.00	13,092.00	19,250.00	11,044.63	83.76	121.84	-5.328	-540.12	268.21	5,530.88	5,453.92	76.96	71.866		
18,200.00	13,092.00	19,250.00	11,044.63	85.17	121.84	-5.328	-540.12	268.21	5,623.84	5,547.12	76.72	73.301		
18,300.00	13,092.00	19,250.00	11,044.63	86.58	121.84	-5.328	-540.12	268.21	5,717.03	5,640.54	76.50	74.737		
18,400.00	13,092.00	19,250.00	11,044.63	87.99	121.84	-5.328	-540.12	268.21	5,810.45	5,734.17	76.28	76.173		
18,500.00	13,092.00	19,250.00	11,044.63	89.40	121.84	-5.328	-540.12	268.21	5,904.08	5,828.01	76.07	77.609		
18,600.00	13,092.00	19,250.00	11,044.63	90.81	121.84	-5.328	-540.12	268.21	5,997.92	5,922.04	75.88	79.044		
18,700.00	13,092.00	19,250.00	11,044.63	92.23	121.84	-5.328	-540.12	268.21	6,091.96	6,016.26	75.70	80.478		
18,800.00	13,092.00	19,250.00	11,044.63	93.64	121.84	-5.328	-540.12	268.21	6,186.18	6,110.66	75.52	81.911		
18,900.00	13,092.00	19,250.00	11,044.63	95.06	121.84	-5.328	-540.12	268.21	6,280.59	6,205.23	75.36	83.342		
19,000.00	13,092.00	19,250.00	11,044.63	96.47	121.84	-5.328	-540.12	268.21	6,375.16	6,299.96	75.20	84.771		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

USA Compass Reference Datum

urvey Prog Refe	ram: 17 erence	7-MWD+HRG Of f		Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,100.00	13,092.00	19,250.00	11,044.63	97.89	121.84	-5.328	-540.12	268.21	6,469.90	6,394.84	75.06	86.199		
19,200.00	13,092.00	19,250.00	11,044.63	99.30	121.84	-5.328	-540.12	268.21	6,564.79	6,489.87	74.92	87.624		
19,300.00	13,092.00	19,250.00	11,044.63	100.72	121.84	-5.328	-540.12	268.21	6,659.83	6,585.04	74.79	89.046		
19,400.00	13,092.00	19,250.00	11,044.63	102.14	121.84	-5.328	-540.12	268.21	6,755.01	6,680.34	74.67	90.466		
19,500.00	13,092.00	19,250.00	11,044.63	103.55	121.84	-5.328	-540.12	268.21	6,850.34	6,775.78	74.56	91.883		
19,600.00	13,092.00	19,250.00	11,044.63	104.97	121.84	-5.328	-540.12	268.21	6,945.79	6,871.34	74.45	93.297		
19,700.00	13,092.00	19,250.00	11,044.63	106.39	121.84	-5.328	-540.12	268.21	7,041.37	6,967.02	74.35	94.707		
19,800.00	13,092.00	19,250.00	11,044.63	107.81	121.84	-5.328	-540.12	268.21	7,137.07	7,062.81	74.26	96.113		
19,900.00	13,092.00	19,250.00	11,044.63	109.23	121.84	-5.328	-540.12	268.21	7,232.89	7,158.72	74.17	97.516		
20,000.00	13,092.00	19,250.00	11,044.63	110.65	121.84	-5.328	-540.12	268.21	7,328.82	7,254.72	74.09	98.915		
20,100.00	13,092.00	19,250.00	11,044.63	112.07	121.84	-5.328	-540.12	268.21	7,424.85	7,350.83	74.02	100.310		
20,200.00	13,092.00	19,250.00	11,044.63	113.49	121.84	-5.328	-540.12	268.21	7,520.99	7,447.04	73.95	101.701		
20,300.00	13,092.00	19,250.00	11,044.63	114.91	121.84	-5.328	-540.12	268.21	7,617.23	7,543.34	73.89	103.088		
20,400.00	13,092.00	19,250.00	11,044.63	116.34	121.84	-5.328	-540.12	268.21	7,713.57	7,639.73	73.84	104.470		
20,500.00	13,092.00	19,250.00	11,044.63	117.76	121.84	-5.328	-540.12	268.21	7,809.99	7,736.21	73.79	105.847		
20,600.00	13,092.00	19,250.00	11,044.63	119.18	121.84	-5.328	-540.12	268.21	7,906.51	7,832.77	73.74	107.220		
20,700.00	13,092.00	19,250.00	11,044.63	120.60	121.84	-5.328	-540.12	268.21	8,003.11	7,929.41	73.70	108.588		
20,800.00	13,092.00	19,250.00	11,044.63	122.03	121.84	-5.328	-540.12	268.21	8,099.79	8,026.13	73.67	109.951		
20,900.00	13,092.00	19,250.00	11,044.63	123.45	121.84	-5.328	-540.12	268.21	8,196.56	8,122.92	73.64	111.309		
21,000.00	13,092.00	19,250.00	11,044.63	124.87	121.84	-5.328	-540.12	268.21	8,293.40	8,219.78	73.61	112.661		
21,100.00	13,092.00	19,250.00	11,044.63	126.30	121.84	-5.328	-540.12	268.21	8,390.31	8,316.72	73.59	114.009		
21,200.00	13,092.00	19,250.00	11,044.63	127.72	121.84	-5.328	-540.12	268.21	8,487.30	8,413.72	73.58	115.351		
21,300.00	13,092.00	19,250.00	11,044.63	129.15	121.84	-5.328	-540.12	268.21	8,584.35	8,510.78	73.57	116.688		
21,400.00	13,092.00	19,250.00	11,044.63	130.57	121.84	-5.328	-540.12	268.21	8,681.47	8,607.91	73.56	118.020		
21,500.00	13,092.00	19,250.00	11,044.63	132.00	121.84	-5.328	-540.12	268.21	8,778.66	8,705.10	73.56	119.346		
21,600.00	13,092.00	19,250.00	11,044.63	133.42	121.84	-5.328	-540.12	268.21	8,875.91	8,802.35	73.56	120.666		
21,700.00	13,092.00	19,250.00	11,044.63	134.85	121.84	-5.328	-540.12	268.21	8,973.22	8,899.66	73.56	121.981		
21,800.00	13,092.00	19,250.00	11,044.63	136.27	121.84	-5.328	-540.12	268.21	9,070.59	8,997.01	73.57	123.289		
21,900.00	13,092.00	19,250.00	11,044.63	137.70	121.84	-5.328	-540.12	268.21	9,168.01	9,094.43	73.58	124.593		
22,000.00	13,092.00	19,250.00	11,044.63	139.12	121.84	-5.328	-540.12	268.21	9,265.49	9,191.89	73.60	125.890		
22,100.00	13,092.00	19,250.00	11,044.63	140.55	121.84	-5.328	-540.12	268.21	9,363.02	9,289.40	73.62	127.182		
22,200.00	13,092.00	19,250.00	11,044.63	141.98	121.84	-5.328	-540.12	268.21	9,460.61	9,386.96	73.64	128.467		
22,300.00	13,092.00	19,250.00	11,044.63	143.40	121.84	-5.328	-540.12	268.21	9,558.24	9,484.57	73.67	129.747		
22,400.00	13,092.00	19,250.00	11,044.63	144.83	121.84	-5.328	-540.12	268.21	9,655.92	9,582.23	73.70	131.020		
22,500.00	13,092.00	19,250.00	11,044.63	146.26	121.84	-5.328	-540.12	268.21	9,753.65	9,679.92	73.73	132.288		
22,600.00	13,092.00	19,250.00	11,044.63	147.69	121.84	-5.328	-540.12	268.21	9,851.43	9,777.66	73.77	133.550		
22,700.00	13,092.00	19,250.00	11,044.63	149.11	121.84	-5.328	-540.12	268.21	9,949.25	9,875.44	73.80	134.805		
22,728.24	13,092.00	19,250.00	11,044.63	149.52	121.84	-5.328	-540.12	268.21	9,976.88	9,903.07	73.82	135.159		





Database:



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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

USA Compass Reference Datum

urvey Progr	ram: 17	5-MWD+HRG	M		Semi Maior Axis			Rule Assigned:				Offset Well Error:		
Refer	rence Vertical	Off Measured	set Vertical	Semi N Reference	lajor Axis Offset	Highside	Offset Wellb		Dist Between	ance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
0.00	0.00	63.40	21.40	1.00	1.07	6.667	7,816.67	913.66	7,869.91					
100.00	100.00	198.42	156.42	1.08	1.62	6.667	7,815.93	913.57	7,869.35	7,866.64	2.70	2,912.025		
200.00	200.00	288.28	246.28	1.60	2.40	6.667	7,815.35	913.50	7,868.69	7,864.69	4.00	1,967.547		
300.00	300.00	382.03	340.03	2.01	3.12	6.667	7,814.86	913.45	7,868.16	7,863.03	5.13	1,533.747		
400.00	400.00	470.01	428.00	2.35	3.34	6.670	7,814.35	913.86	7,867.66	7,861.97	5.69	1,383.156		
465.48	465.48	507.49	465.48	2.55	3.40	6.672	7,814.26	914.08	7,867.54	7,861.59	5.95	1,322.030		
500.00	500.00	538.00	495.99	2.65	3.46	6.673	7,814.28	914.23	7,867.58	7,861.48	6.11	1,287.913		
600.00	600.00	662.16	620.15	2.93	3.76	6.678	7,814.07	914.96	7,867.48	7,860.81	6.67	1,180.105		
700.00	700.00	744.65	702.64	3.18	4.10	6.682	7,813.89	915.44	7,867.33	7,860.09	7.24	1,086.425		
715.07	715.07	757.09	715.07	3.21	4.16	6.683	7,813.88	915.51	7,867.33	7,860.01	7.33	1,073.943		
800.00	800.00	824.79	782.78	3.41	4.40	6.685	7,813.91	915.85	7,867.42	7,859.66	7.76	1,014.307		
900.00	900.00	900.00	857.98	3.64	4.55	6.689	7,814.15	916.37	7,867.82	7,859.71	8.11	970.626		
1,000.00	1,000.00	992.51	950.48	3.85	4.70	6.693	7,814.64	917.08	7,868.43	7,859.99	8.43	932.905		
1,100.00	1,100.00	1,098.49	1,056.46	4.05	5.00	6.699	7,815.18	917.88	7,869.02	7,860.11	8.91	883.213		
1,200.00	1,200.00	1,238.96	1,196.93	4.24	5.36	6.707	7,815.56	919.03	7,869.41	7,860.01	9.40	836.851		
1,300.00	1,300.00	1,378.03	1,336.00	4.43	5.87	6.716	7,815.11	920.22	7,869.18	7,859.15	10.03	784.520		
1,400.00	1,400.00	1,496.07	1,454.02	4.61	6.34	6.726	7,814.21	921.60	7,868.55	7,857.92	10.63	740.150		
1,500.00	1,500.00	1,596.06	1,554.00	4.78	6.77	6.736	7,813.38	922.79	7,867.87	7,856.68	11.19	703.190		
1,520.54	1,520.54	1,616.60	1,574.53	4.82	6.86	-163.249	7,813.21	923.02	7,867.79	7,856.49	11.31	695.904		
1,600.00	1,599.98	1,636.00	1,593.94	4.98	6.94	-163.241	7,813.05	923.25	7,869.08	7,857.55	11.53	682.742		
1,620.70	1,620.67	1,680.79	1,638.73	4.99	7.08	-163.236	7,812.78	923.76	7,869.66	7,858.00	11.65	675.273		
1,700.00	1,699.89	1,724.75	1,682.68	5.07	7.22	-163.236	7,812.72	924.26	7,872.85	7,861.00	11.85	664.238		
1,800.00	1,799.81	1,780.15	1,738.08	5.23	7.39	-163.237	7,812.92	924.88	7,877.38	7,865.23	12.15	648.327		
1,900.00	1,899.72	1,825.00	1,782.92	5.41	7.52	-163.238	7,813.32	925.37	7,882.50	7,870.05	12.44	633.609		
2,000.00	1,999.63	1,919.92	1,877.83	5.60	7.84	-163.239	7,814.52	926.53	7,887.93	7,875.01	12.92	610.648		
2,100.00	2,099.54	2,014.00	1,971.89	5.80	8.17	-163.238	7,815.96	927.88	7,893.64	7,880.24	13.40	589.018		
2,200.00	2,199.45	2,097.15	2,055.01	6.02	8.45	-163.236	7,817.33	929.34	7,899.49	7,885.64	13.85	570.194		
2,300.00	2,299.36	2,198.53	2,156.36	6.24	8.80	-163.231	7,818.93	931.53	7,905.34	7,890.98	14.37	550.244		
2,400.00	2,399.27	2,271.69	2,229.48	6.47	9.06	-163.225	7,820.15	933.40	7,911.34	7,896.54	14.80	534.563		
2,500.00	2,499.18	2,343.51	2,301.25	6.72	9.31	-163.218	7,821.59	935.46	7,917.70	7,902.46	15.24	519.690		
2,600.00	2,599.10	2,433.75	2,391.43	6.96	9.63	-163.207	7,823.65	938.35	7,924.37	7,908.63	15.73	503.690		
2,700.00	2,699.01	18,351.93	10,542.51	7.22	118.19	-90.301	-210.59	957.63	7,902.43	7,829.78	72.65	108.779		
2,800.00	2,798.92	18,353.45	10,542.48	7.48	118.21	-90.206	-212.11	957.62	7,803.10	7,730.31	72.78	107.212		
2,900.00	2,898.83	18,354.98	10,542.45	7.74	118.23	-90.111	-213.65	957.61	7,703.78	7,630.86	72.92	105.645		
3,000.00	2,998.74	18,356.53	10,542.42	8.01	118.25	-90.015	-215.19	957.60	7,604.48	7,531.42	73.06	104.080		
3,100.00	3,098.65	18,358.08	10,542.39	8.28	118.27	-89.918	-216.74	957.59	7,505.20	7,431.99	73.21	102.516		
3,200.00	3,198.56	18,359.64	10,542.36	8.56	118.29	-89.821	-218.30	957.58	7,405.94	7,332.58	73.36	100.954		
3,300.00	3,298.47	18,361.22	10,542.33	8.84	118.32	-89.723	-219.88	957.57	7,306.70	7,233.19	73.51	99.393		
3,400.00	3,398.39	18,362.80	10,542.29	9.13	118.34	-89.624	-221.46	957.57	7,207.48	7,133.81	73.67	97.835		
3,500.00	3,498.30	18,364.39	10,542.26	9.41	118.36	-89.525	-223.05	957.56	7,108.28	7,034.46	73.83	96.280		
3,600.00	3,598.21	18,365.99	10,542.23	9.70	118.38	-89.425	-224.65	957.55	7,009.11	6,935.11	73.99	94.726		
3,700.00	3,698.12	18,367.61	10,542.20	9.99	118.41	-89.324	-226.26	957.54	6,909.96	6,835.79	74.16	93.175		
3,800.00	3,798.03	18,369.23	10,542.17	10.29	118.43	-89.223	-227.89	957.53	6,810.83	6,736.49	74.33	91.627		
3,900.00	3,897.94	18,370.86	10,542.14	10.58	118.45	-89.121	-229.52	957.53	6,711.72	6,637.22	74.51	90.082		
4,000.00	3,997.85	18,372.51	10,542.11	10.88	118.47	-89.018	-231.16	957.52	6,612.65	6,537.96	74.69	88.540		
4,100.00	4,097.76	18,374.16	10,542.07	11.18	118.50	-88.914	-232.82	957.51	6,513.60	6,438.73	74.87	87.001		
4,200.00	4,197.68	18,375.82	10,542.04	11.48	118.52	-88.810	-234.48	957.50	6,414.58	6,339.52	75.05	85.465		
4,300.00	4,297.59	18,389.00	10,541.79	11.78	118.71	-87.982	-247.66	957.45	6,315.60	6,240.27	75.33	83.843		
4,400.00	4,397.50	18,389.00	10,541.79	12.08	118.71	-87.982	-247.66	957.45	6,216.64	6,141.13	75.51	82.329		
4,500.00	4,497.41	18,389.00	10,541.79	12.39	118.71	-87.982	-247.66	957.45	6,117.71	6,042.01	75.70	80.818		
4,600.00	4,597.32	18,389.00	10,541.79	12.69	118.71	-87.982	-247.66	957.45	6,018.82	5,942.93	75.89	79.311		
4,700.00	4,697.23	18,389.00	10,541.79	13.00	118.71	-87.982	-247.66	957.45	5,919.96	5,843.87	76.08	77.807		

8/31/2022 1:50:34PM

COMPASS 5000.15 Build 93A







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

														0.00 ust
urvey Progi Refe	ram: 17 rence	5-MWD+HRG Off		Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi tance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,800.00	4,797.14	18,389.00	10,541.79	13.31	118.71	-87.982	-247.66	957.45	5,821.14	5,744.86	76.29	76.307		
4,900.00	4,897.05	18,389.00	10,541.79	13.62	118.71	-87.982	-247.66	957.45	5,722.37	5,645.88	76.49	74.811		
5,000.00	4,996.97	18,389.00	10,541.79	13.92	118.71	-87.982	-247.66	957.45	5,623.63	5,546.93	76.70	73.318		
5,100.00	5,096.88	18,389.00	10,541.79	14.23	118.71	-87.982	-247.66	957.45	5,524.95	5,448.03	76.92	71.830		
5,200.00	5,196.79	18,389.00	10,541.79	14.55	118.71	-87.982	-247.66	957.45	5,426.31	5,349.17	77.14	70.346		
5,300.00	5,296.70	18,389.00	10,541.79	14.86	118.71	-87.982	-247.66	957.45	5,327.72	5,250.36	77.36	68.865		
5,400.00	5,396.61	18,389.00	10,541.79	15.17	118.71	-87.982	-247.66	957.45	5,229.19	5,151.59	77.60	67.390		
5,500.00	5,496.52	18,389.00	10,541.79	15.48	118.71	-87.982	-247.66	957.45	5,130.71	5,052.87	77.83	65.918		
5,600.00	5,596.43	18,389.00	10,541.79	15.79	118.71	-87.982	-247.66	957.45	5,032.29	4,954.21	78.08	64.451		
5,700.00	5,696.34	18,389.00	10,541.79	16.11	118.71	-87.982	-247.66	957.45	4,933.94	4,855.61	78.33	62.989		
5,800.00	5,796.26	18,389.00	10,541.79	16.42	118.71	-87.982	-247.66	957.45	4,835.65	4,757.06	78.59	61.532		
5,900.00	5,896.17	18,389.00	10,541.79	16.74	118.71	-87.982	-247.66	957.45	4,737.44	4,658.58	78.85	60.080		
6,000.00	5,996.08	18,389.00	10,541.79	17.05	118.71	-87.982	-247.66	957.45	4,639.30	4,560.17	79.12	58.633		
6,100.00	6,095.99	18,389.00	10,541.79	17.37	118.71	-87.982	-247.66	957.45	4,541.24	4,461.84	79.41	57.190		
6,200.00	6,195.90	18,389.00	10,541.79	17.68	118.71	-87.982	-247.66	957.45	4,443.27	4,363.58	79.69	55.754		
6,300.00	6,295.81	18,389.00	10,541.79	18.00	118.71	-87.982	-247.66	957.45	4,345.39	4,265.40	79.99	54.322		
6,400.00	6,395.72	18,389.00	10,541.79	18.32	118.71	-87.982	-247.66	957.45	4,247.61	4,167.31	80.30	52.896		
6,500.00	6,495.63	18,389.00	10,541.79	18.63	118.71	-87.982	-247.66	957.45	4,149.94	4,069.32	80.62	51.476		
6,600.00	6,595.55	18,389.00	10,541.79	18.95	118.71	-87.982	-247.66	957.45	4,052.38	3,971.43	80.95	50.062		
6,700.00	6,695.46	18,389.00	10,541.79	19.27	118.71	-87.982	-247.66	957.45	3,954.94	3,873.65	81.29	48.653		
6,800.00	6,795.37	18,389.00	10,541.79	19.59	118.71	-87.982	-247.66	957.45	3,857.63	3,775.99	81.64	47.251		
6,900.00	6,895.28	18,389.00	10,541.79	19.91	118.71	-87.982	-247.66	957.45	3,760.47	3,678.46	82.01	45.854		
7,000.00	6,995.19	18,389.00	10,541.79	20.23	118.71	-87.982	-247.66	957.45	3,663.45	3,581.06	82.39	44.464		
7,100.00	7,095.10	18,389.00	10,541.79	20.54	118.71	-87.982	-247.66	957.45	3,566.61	3,483.82	82.79	43.081		
7,200.00	7,195.01	18,389.00	10,541.79	20.86	118.71	-87.982	-247.66	957.45	3,469.94	3,386.73	83.20	41.704		
7,300.00	7,294.92	18,389.00	10,541.79	21.18	118.71	-87.982	-247.66	957.45	3,373.46	3,289.82	83.64	40.334		
7,400.00	7,394.84	18,389.00	10,541.79	21.50	118.71	-87.982	-247.66	957.45	3,277.20	3,193.10	84.09	38.971		
7,500.00	7,494.75	18,389.00	10,541.79	21.82	118.71	-87.982	-247.66	957.45	3,181.17	3,096.59	84.57	37.615		
7,600.00	7,594.66	18,389.00	10,541.79	22.14	118.71	-87.982	-247.66	957.45	3,085.38	3,000.31	85.07	36.267		
7,700.00	7,694.57	18,389.00	10,541.79	22.46	118.71	-87.982	-247.66	957.45	2,989.88	2,904.27	85.61	34.926		
7,800.00	7,794.48	18,389.00	10,541.79	22.78	118.71	-87.982	-247.66	957.45	2,894.68	2,808.51	86.17	33.594		
7,900.00	7,894.39	18,417.19	10,541.48	23.10	119.10	-86.200	-275.84	957.36	2,799.47	2,712.48	86.99	32.181		
8,000.00	7,994.30	18,418.80	10,541.48	23.42	119.12	-86.098	-277.46	957.36	2,704.93	2,617.29	87.64	30.863		
8,100.00	8,094.21	18,420.49	10,541.47	23.75	119.15	-85.990	-279.14	957.35	2,610.79	2,522.46	88.34	29.555		
8,200.00	8,194.13	18,422.26	10,541.47	24.07	119.17	-85.878	-280.91	957.34	2,517.10	2,428.03	89.08	28.257		
8,300.00	8,294.04	18,424.11	10,541.47	24.39	119.20	-85.760	-282.77	957.34	2,423.92	2,334.04	89.88	26.969		
8,400.00	8,393.95	18,426.06	10,541.47	24.71	119.23	-85.637	-284.71	957.33	2,331.29	2,240.55	90.74	25.692		
8,500.00	8,493.86	18,428.10	10,541.47	25.03	119.25	-85.507	-286.75	957.33	2,239.30	2,147.63	91.67	24.428		
8,600.00	8,593.77	18,430.25	10,541.48	25.35	119.28	-85.370	-288.90	957.32	2,148.02	2,055.34	92.68	23.177		
8,700.00 8,800.00	8,693.68 8,793.59	18,432.51 18,434.90	10,541.49 10,541.50	25.67 26.00	119.32 119.35	-85.226 -85.074	-291.16 -293.55	957.31 957.30	2,057.54 1,967.98	1,963.76 1,872.99	93.78 94.98	21.940 20.719		
8,900.00	8,893.50 8,993.42	18,437.42	10,541.51	26.32	119.39	-84.914 -84.744	-296.07 -208.73	957.30	1,879.46	1,783.16	96.30 97.75	19.517		
9,000.00	9,093.33	18,440.08	10,541.53	26.64	119.42	-84.744	-298.73	957.29	1,792.15	1,694.40	97.75	18.334		
9,100.00		18,442.90	10,541.56	26.96	119.46	-84.564 -84.373	-301.56 -304.55	957.28	1,706.23	1,606.88	99.35	17.175		
9,200.00 9,300.00	9,193.24 9,293.15	18,445.90 18,449.09	10,541.59 10,541.63	27.29 27.61	119.50 119.55	-84.373 -84.170	-304.55 -307.74	957.27 957.26	1,621.90 1,539.45	1,520.80 1,436.40	101.11 103.05	16.042 14.939		
9,400.00	9,393.06	18,452.48	10,541.68	27.93	119.60	-83.953	-311.13	957.25	1,459.18	1,353.98	105.20	13.871		
9,500.00	9,393.06	18,456.10	10,541.73	28.25	119.65	-83.722	-311.13	957.25	1,381.47	1,273.91	105.20	12.843		
9,600.00	9,492.97	18,459.98	10,541.73	28.58	119.05	-03.722 -83.474	-314.75	957.24	1,301.47	1,196.62	110.16	11.863		
9,700.00	9,692.79	18,464.13	10,541.88	28.90	119.76	-83.209	-310.03	957.22	1,235.66	1,122.67	112.99	10.936		
9,800.00	9,792.71	18,468.60	10,541.88	29.22	119.76	-82.923	-327.25	957.21	1,168.74	1,052.72	116.03	10.936		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	sign:	Cattleman Fe	d Com 4 -	Cattleman	Fed Com	114H - OH	/ 69918 - Surve	eys (H&P 6	56)				Offset Site Error:	0.00 usft
Survey Progr		175-MWD+HRG					~			Rule Assi	gned:		Offset Well Error:	1.00 usft
Refer Measured	rence Vertical		fset Vertical	Semi I Reference	Major Axis Offset	Highside	Offset Wellbo	ore Centre	Dis Between	tance Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	0.500		
10,000.00	9,992.5		10,542.40	29.87	120.04	-81.937	-342.64	957.15	1,050.73	928.07	122.66	8.566		
10,100.00 10,200.00	10,092.4 10,192.3		10,542.41 10,542.64	30.19 30.52	120.04 120.15	-81.916 -81.441	-342.97 -350.39	957.15 957.12	1,001.45 960.07	875.56 830.98	125.89 129.08	7.955 7.438		
10,300.00	10,192.0		10,542.87	30.84	120.15	-80.970	-357.73	957.12	927.60	795.67	131.93	7.031		
10,400.00	10,392.1		10,543.09	31.16	120.35	-80.504	-365.00	957.08	905.01	770.78	134.22	6.743		
10,500.00	10,492.0		10,543.30	31.49	120.45	-80.043	-372.18	957.05	893.05	757.25	135.80	6.576		
10,558.05	10,550.0		10,543.42	31.67	120.51	-79.777	-376.32	957.04	891.17	754.83	136.34	6.536 CC,	ES	
10,600.00	10,592.0		10,543.51	31.81	120.55	-79.587	-379.30	957.03	892.15	755.60	136.55	6.533 SF		
10,700.00 10,800.00	10,691.9		10,543.72 10,543.92	32.13 32.46	120.65 120.75	-79.135 -78.688	-386.34 -393.31	957.01 956.98	902.35 923.27	765.89 787.68	136.46 135.59	6.613 6.809		
10,900.00	10,791.7		10,544.11	32.78	120.75	-78.246	-400.20	956.96	954.22	820.11	134.11	7.115		
10,300.00	10,031.7	3 10,341.09	10,544.11	32.70	120.03	-70.240	-400.20	330.30	334.22	020.11	104.11	7.115		
11,000.00	10,991.6	18,548.41	10,544.30	33.11	120.94	-77.808	-407.03	956.94	994.25	862.07	132.18	7.522		
11,100.00	11,091.5	55 18,555.17	10,544.49	33.43	121.04	-77.375	-413.79	956.91	1,042.33	912.33	130.00	8.018		
11,200.00	11,191.4		10,544.67	33.75	121.13	-76.947	-420.48	956.89	1,097.39	969.67	127.72	8.592		
11,300.00	11,291.3		10,544.85	34.08	121.23	-76.523	-427.10	956.87	1,158.45	1,032.99	125.46	9.234		
11,400.00	11,391.2	29 18,575.05	10,545.03	34.40	121.32	-76.104	-433.65	956.84	1,224.60	1,101.29	123.30	9.932		
11,500.00	11,491.2	20 18,581.71	10,545.20	34.73	121.41	-75.679	-440.31	956.82	1,295.06	1,173.76	121.30	10.676		
11,600.00	11,591.2		10,545.20	35.05	121.41	-75.079 -75.247	-447.08	956.80	1,369.18	1,173.76	119.49	11.459		
11,700.00	11,691.0		10,545.56	35.38	121.60	-74.815	-453.86	956.77	1,446.38	1,328.52	117.86	12.272		
11,800.00	11,790.9		10,545.74	35.70	121.70	-74.384	-460.63	956.75	1,526.20	1,409.77	116.43	13.109		
11,900.00	11,890.8		10,545.92	36.03	121.79	-73.953	-467.41	956.73	1,608.25	1,493.08	115.17	13.964		
11,907.54	11,898.3		10,545.93	36.05	121.80	-73.921	-467.92	956.73	1,614.52	1,499.44	115.08	14.029		
12,000.00	11,990.8		10,546.06	36.33	121.87	-76.410	-472.71	956.71	1,692.41	1,578.35	114.07	14.837		
12,028.24	12,019.0		10,546.08	36.36	121.88	92.725	-473.60	956.71	1,716.57	1,602.80	113.77	15.088		
12,100.00	12,090.8		10,546.13	36.36	121.91	92.848	-475.49	956.70	1,778.53	1,665.45	113.08	15.728		
12,200.00	12,190.8	18,619.53	10,546.20	36.36	121.94	93.019	-478.12	956.69	1,866.03	1,753.80	112.23	16.626		
12,300.00	12,290.8	18,622.17	10,546.27	36.36	121.98	93.190	-480.75	956.68	1,954.74	1,843.22	111.52	17.529		
12,400.00	12,390.8	18,624.80	10,546.34	36.37	122.02	93.360	-483.39	956.67	2,044.48	1,933.56	110.91	18.433		
12,500.00	12,490.8	18,627.44	10,546.41	36.37	122.05	93.531	-486.02	956.66	2,135.13	2,024.71	110.41	19.337		
12,528.24	12,519.0	18,628.18	10,546.43	36.37	122.07	93.580	-486.77	956.66	2,160.88	2,050.59	110.29	19.593		
12,550.00	12,540.7	79 18,629.17	10,546.45	36.40	122.08	-80.972	-487.75	956.66	2,180.74	2,070.54	110.20	19.789		
40.000.00	40 500 0	40.004.55	40.540.00	20.00	100.15	60,000	400.44	050.04	0.000.07	0.440.00	440.05	00.000		
12,600.00	12,590.6		10,546.60	36.63	122.15	-69.998	-493.14	956.64	2,226.27	2,116.22	110.05	20.230		
12,650.00 12,700.00	12,639.8 12,688.2		10,546.85 10,547.22	36.95 37.29	122.29 122.49	-60.059 -51.594	-502.83 -516.76	956.60 956.55	2,271.35 2,315.61	2,161.38 2,205.67	109.97 109.95	20.655 21.061		
12,700.00	12,735.3		10,547.22	37.62	122.49	-44.658	-516.76	956.49	2,315.01	2,205.67	109.95	21.445		
12,730.00	12,780.7		10,548.28	37.02	123.05	-39.082	-556.86	956.41	2,400.27	2,240.71	110.10	21.801		
,	, 5	.,	.,						,	, ,		***		
12,850.00	12,824.1		10,548.45	38.29	123.15	-34.978	-563.56	956.39	2,440.07	2,330.00	110.07	22.169		
12,900.00	12,865.2	26 18,705.00	10,548.45	38.60	123.15	-31.772	-563.56	956.39	2,478.01	2,368.03	109.98	22.531		
12,950.00	12,903.7		10,548.45	38.90	123.15	-29.155	-563.56	956.39	2,513.92	2,404.01	109.91	22.873		
13,000.00	12,939.2		10,548.45	39.18	123.15	-27.009	-563.56	956.39	2,547.60	2,437.76	109.84	23.193		
13,050.00	12,971.6	32 18,705.00	10,548.45	39.43	123.15	-25.241	-563.56	956.39	2,578.90	2,469.12	109.78	23.492		
13,100.00	13,000.5	18,705.00	10,548.45	39.65	123.15	-23.781	-563.56	956.39	2,607.66	2,497.95	109.72	23.767		
13,150.00	13,025.7		10,548.45	39.85	123.15	-22.576	-563.56	956.39	2,633.76	2,524.11	109.66	24.018		
13,200.00	13,047.1		10,548.45	40.02	123.15	-21.585	-563.56	956.39	2,657.08	2,547.49	109.59	24.246		
13,250.00	13,064.5		10,548.45	40.15	123.15	-20.776	-563.56	956.39	2,677.51	2,567.99	109.52	24.448		
13,300.00	13,077.7	18,705.00	10,548.45	40.26	123.15	-20.125	-563.56	956.39	2,694.96	2,585.52	109.44	24.625		
13,350.00	13,086.6		10,548.45	40.33	123.15	-19.613	-563.56	956.39	2,709.37	2,600.01	109.35	24.776		
13,400.00	13,091.3		10,548.45	40.38	123.15	-19.227	-563.56	956.39	2,720.66	2,611.41	109.26	24.901		
13,428.24	13,092.0		10,548.45	40.39	123.15	-19.061	-563.56	956.39	2,725.65	2,616.50	109.15	24.971		
13,500.00	13,092.0		10,548.45	40.40	123.15	-19.061 -19.061	-563.56 -563.56	956.39	2,737.96	2,629.12	108.84	25.156 25.465		
13,600.00	13,092.0	10,705.00	10,548.45	40.43	123.15	-19.061	-563.56	956.39	2,758.13	2,649.82	108.31	25.465		
13,700.00	13,092.0	00 18,705.00	10,548.45	40.46	123.15	-19.061	-563.56	956.39	2,781.76	2,674.03	107.73	25.823		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD)

RKB @ 3200.50usft (TBD)

Grid Minimum Curvature

2.00 sigma **USA Compass**

Offset TVD Reference: Reference Datum

	sign: Ca												Offset Site Error:	0.00 usft
urvey Progi		75-MWD+HRG								Rule Assi	gned:		Offset Well Error:	1.00 usft
Refe Measured	rence Vertical	Off Measured	set Vertical	Semi N Reference	lajor Axis Offset	Highside	Offset Wellbe	ore Centre	Dist Between	tance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	Ţ.	
13,800.00	13,092.00	18,705.00	10,548.45	40.50	123.15	-19.061	-563.56	956.39	2,808.74	2,701.66	107.09	26.229		
13,900.00	13,092.00	18,705.00	10,548.45	40.53	123.15	-19.061	-563.56	956.39	2,839.00	2,732.60	106.40	26.683		
14,000.00	13,092.00	18,705.00	10,548.45	40.58	123.15	-19.061	-563.56	956.39	2,872.42	2,766.76	105.66	27.185		
14,100.00	13,092.00	18,705.00	10,548.45	40.63	123.15	-19.061	-563.56	956.39	2,908.90	2,804.00	104.89	27.732		
14,200.00	13,092.00	18,705.00	10,548.45	40.69	123.15	-19.061	-563.56	956.39	2,948.31	2,844.22	104.09	28.324		
14,300.00	13,092.00	18,705.00	10,548.45	40.76	123.15	-19.061	-563.56	956.39	2,990.56	2,887.29	103.27	28.959		
14,400.00	13,092.00	18,705.00	10,548.45	40.85	123.15	-19.061	-563.56	956.39	3,035.51	2,933.08	102.43	29.636		
14,500.00	13,092.00	18,705.00	10,548.45	40.95	123.15	-19.061	-563.56	956.39	3,083.05	2,981.48	101.57	30.355		
14,600.00	13,092.00	18,705.00	10,548.45	41.10	123.15	-19.061	-563.56	956.39	3,133.06	3,032.36	100.70	31.112		
14,700.00	13,092.00	18,705.00	10,548.45	41.29	123.15	-19.061	-563.56	956.39	3,185.42	3,085.59	99.83	31.908		
14,800.00	13,092.00	18,705.00	10,548.45	41.57	123.15	-19.061	-563.56	956.39	3,240.03	3,141.07	98.96	32.741		
14,900.00	13,092.00	18,705.00	10,548.45	41.99	123.15	-19.061	-563.56	956.39	3,296.77	3,198.68	98.09	33.609		
15,000.00	13,092.00	18,705.00	10,548.45	42.60	123.15	-19.061	-563.56	956.39	3,355.53	3,258.29	97.23	34.510		
15,100.00	13,092.00	18,705.00	10,548.45	43.42	123.15	-19.061	-563.56	956.39	3,416.20	3,319.82	96.38	35.444		
15,200.00	13,092.00	18,705.00	10,548.45	44.43	123.15	-19.061	-563.56	956.39	3,478.69	3,383.15	95.54	36.410		
15,300.00	13,092.00	18,705.00	10,548.45	45.56	123.15	-19.061	-563.56	956.39	3,542.91	3,448.19	94.72	37.404		
15,400.00	13,092.00	18,705.00	10,548.45	46.76	123.15	-19.061	-563.56	956.39	3,608.75	3,514.84	93.91	38.427		
15,500.00	13,092.00	18,705.00	10,548.45	48.01	123.15	-19.061	-563.56	956.39	3,676.13	3,583.01	93.12	39.477		
15,600.00	13,092.00	18,705.00	10,548.45	49.30	123.15	-19.061	-563.56	956.39	3,744.97	3,652.62	92.35	40.552		
15,700.00	13,092.00	18,705.00	10,548.45	50.61	123.15	-19.061	-563.56	956.39	3,815.19	3,723.59	91.60	41.652		
15,800.00	13,092.00	18,705.00	10,548.45	51.93	123.15	-19.061	-563.56	956.39	3,886.72	3,795.85	90.87	42.774		
15,900.00	13,092.00	18,705.00	10,548.45	53.27	123.15	-19.061	-563.56	956.39	3,959.47	3,869.32	90.16	43.918		
16,000.00	13,092.00	18,705.00	10,548.45	54.61	123.15	-19.061	-563.56	956.39	4,033.40	3,943.93	89.47	45.082		
16,100.00	13,092.00	18,705.00	10,548.45	55.97	123.15	-19.061	-563.56	956.39	4,108.43	4,019.63	88.80	46.265		
16,200.00	13,092.00	18,705.00	10,548.45	57.33	123.15	-19.061	-563.56	956.39	4,184.50	4,096.35	88.16	47.467		
16,300.00	13,092.00	18,705.00	10,548.45	58.69	123.15	-19.061	-563.56	956.39	4,261.57	4,174.03	87.53	48.685		
16,400.00	13,092.00	18,705.00	10,548.45	60.06	123.15	-19.061	-563.56	956.39	4,339.56	4,252.63	86.93	49.920		
16,500.00	13,092.00	18,705.00	10,548.45	61.44	123.15	-19.061	-563.56	956.39	4,418.45	4,332.10	86.35	51.169		
16,600.00	13,092.00	18,705.00	10,548.45	62.81	123.15	-19.061	-563.56	956.39	4,498.17	4,412.38	85.79	52.431		
16,700.00	13,092.00	18,705.00	10,548.45	64.20	123.15	-19.061	-563.56	956.39	4,578.69	4,493.44	85.25	53.707		
16,800.00	13,092.00	18,705.00	10,548.45	65.58	123.15	-19.061	-563.56	956.39	4,659.97	4,575.23	84.74	54.994		
16,900.00	13,092.00	18,705.00	10,548.45	66.97	123.15	-19.061	-563.56	956.39	4,741.96	4,657.72	84.24	56.293		
17,000.00	13,092.00	18,705.00	10,548.45	68.36	123.15	-19.061	-563.56	956.39	4,824.63	4,740.87	83.76	57.601		
17,100.00	13,092.00	18,705.00	10,548.45	69.75	123.15	-19.061	-563.56	956.39	4,907.95	4,824.65	83.30	58.919		
17,200.00	13,092.00	18,705.00	10,548.45	71.14	123.15	-19.061	-563.56	956.39	4,991.88	4,909.02	82.86	60.245		
17,300.00	13,092.00	18,705.00	10,548.45	72.54	123.15	-19.061	-563.56	956.39	5,076.39	4,993.95	82.44	61.579		
17 400 00	12 000 00	10 705 00	10 549 45	72.04	100 15	10.064	F60 F6	050 20	E 164 4F	5 070 40	90.00	62.040		
17,400.00	13,092.00 13,092.00	18,705.00	10,548.45	73.94	123.15	-19.061	-563.56	956.39	5,161.45	5,079.42	82.03	62.919		
17,500.00		18,705.00	10,548.45	75.34 76.74	123.15	-19.061 10.061	-563.56	956.39	5,247.04	5,165.40	81.65	64.266		
17,600.00 17,700.00	13,092.00 13,092.00	18,705.00 18,705.00	10,548.45 10,548.45	76.74 78.14	123.15 123.15	-19.061 -19.061	-563.56 -563.56	956.39 956.39	5,333.14 5,419.71	5,251.86 5,338.79	81.27 80.92	65.619 66.976		
17,800.00	13,092.00		10,548.45	79.55	123.15	-19.061	-563.56	956.39	5,506.73	5,336.79	80.58	68.338		
										E E40.00				
17,900.00 18,000.00	13,092.00 13,092.00	18,705.00 18,705.00	10,548.45 10,548.45	80.95 82.36	123.15 123.15	-19.061 -19.061	-563.56 -563.56	956.39 956.39	5,594.19 5,682.06	5,513.93 5,602.11	80.26 79.95	69.704 71.072		
18,100.00	13,092.00	18,705.00	10,548.45	83.76	123.15	-19.061	-563.56	956.39	5,770.33	5,690.68	79.65	72.444		
18,200.00	13,092.00	18,705.00	10,548.45	85.17	123.15	-19.061	-563.56	956.39	5,858.97	5,779.60	79.37	73.817		
18,300.00	13,092.00	18,705.00	10,548.45	86.58	123.15	-19.061	-563.56	956.39	5,947.98	5,868.88	79.10	75.193		
18,400.00	13,092.00	18,705.00	10 549 45	87.99	123.15	-19.061	-563.56	956.39	6,037.33	5,958.48	78.85	76.569		
18,500.00	13,092.00	18,705.00	10,548.45 10,548.45	89.40	123.15	-19.061	-563.56	956.39	6,127.01	6,048.40	78.61	76.569		
18,600.00	13,092.00	18,705.00	10,548.45	90.81	123.15	-19.061	-563.56	956.39	6,217.00	6,138.62	78.38	79.324		
18,700.00	13,092.00	18,705.00	10,548.45	92.23	123.15	-19.061	-563.56	956.39	6,307.29	6,229.14	78.16	80.701		
18,800.00	13,092.00	18,705.00	10,548.45	92.23	123.15	-19.061	-563.56	956.39	6,397.88	6,319.93	77.95	82.078		
8,900.00	13,092.00	18,705.00	10,548.45	95.06	123.15	-19.061	-563.56	956.39	6,488.74	6,410.99	77.75	83.454		







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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Output errors are at Database:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma **USA Compass**

Offset TVD Reference: Reference Datum

Offset Des	sign: Ca	ttleman Fe	d Com 4 -	Cattleman	Fed Com	114H - OF	1 / 69918 - Surve	eys (H&P 6	556)				Offset Site Error:	0.00 usft
Survey Progr		5-MWD+HRG								Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured	rence Vertical	Measured	set Vertical	Semi M Reference	Major Axis Offset	Highside	Offset Wellbo		Between	tance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
19,000.00	13,092.00	18,705.00	10,548.45	96.47	123.15	-19.061	-563.56	956.39	6,579.86	6,502.30	77.57	84.830		
19,100.00	13,092.00	18,705.00	10,548.45	97.89	123.15	-19.061	-563.56	956.39	6,671.24	6,593.85	77.39	86.203		
19,200.00	13,092.00	18,705.00	10,548.45	99.30	123.15	-19.061	-563.56	956.39	6,762.87	6,685.64	77.22	87.575		
19,300.00	13,092.00	18,705.00	10,548.45	100.72	123.15	-19.061	-563.56	956.39	6,854.72	6,777.66	77.07	88.945		
19,400.00	13,092.00	18,705.00	10,548.45	102.14	123.15	-19.061	-563.56	956.39	6,946.80	6,869.89	76.92	90.313		
19,500.00	13,092.00	18,705.00	10,548.45	103.55	123.15	-19.061	-563.56	956.39	7,039.10	6,962.32	76.78	91.678		
19,600.00	13,092.00	18,705.00	10,548.45	104.97	123.15	-19.061	-563.56	956.39	7,131.61	7,054.96	76.65	93.041		
19,700.00	13,092.00	18,705.00	10,548.45	106.39	123.15	-19.061	-563.56	956.39	7,224.31	7,147.79	76.53	94.400		
19,800.00	13,092.00	18,705.00	10,548.45	107.81	123.15	-19.061	-563.56	956.39	7,317.21	7,240.80	76.42	95.756		
19,900.00	13,092.00	18,705.00	10,548.45	109.23	123.15	-19.061	-563.56	956.39	7,410.30	7,333.99	76.31	97.109		
20,000.00	13,092.00	18,705.00	10,548.45	110.65	123.15	-19.061	-563.56	956.39	7,503.56	7,427.34	76.21	98.458		
20,100.00	13,092.00	18,705.00	10,548.45	112.07	123.15	-19.061	-563.56	956.39	7,596.99	7,520.87	76.12	99.803		
20,200.00	13,092.00	18,705.00	10,548.45	113.49	123.15	-19.061	-563.56	956.39	7,690.59	7,614.55	76.04	101.144		
20,300.00	13,092.00	18,705.00	10,548.45	114.91	123.15	-19.061	-563.56	956.39	7,784.34	7,708.38	75.96	102.481		
20,400.00	13,092.00	18,705.00	10,548.45	116.34	123.15	-19.061	-563.56	956.39	7,878.25	7,802.36	75.89	103.814		
20,500.00	13,092.00	18,705.00	10,548.45	117.76	123.15	-19.061	-563.56	956.39	7,972.31	7,896.49	75.82	105.142		
20,600.00	13,092.00	18,705.00	10,548.45	119.18	123.15	-19.061	-563.56	956.39	8,066.51	7,990.74	75.77	106.465		
20,700.00	13,092.00	18,705.00	10,548.45	120.60	123.15	-19.061	-563.56	956.39	8,160.85	8,085.14	75.71	107.784		
20,800.00	13,092.00	18,705.00	10,548.45	122.03	123.15	-19.061	-563.56	956.39	8,255.32	8,179.65	75.67	109.098		
20,900.00	13,092.00	18,705.00	10,548.45	123.45	123.15	-19.061	-563.56	956.39	8,349.92	8,274.30	75.63	110.407		
21,000.00	13,092.00	18,705.00	10,548.45	124.87	123.15	-19.061	-563.56	956.39	8,444.65	8,369.06	75.59	111.711		
21,100.00	13,092.00	18,705.00	10,548.45	126.30	123.15	-19.061	-563.56	956.39	8,539.50	8,463.93	75.56	113.010		
21,200.00	13,092.00	18,705.00	10,548.45	127.72	123.15	-19.061	-563.56	956.39	8,634.46	8,558.92	75.54	114.303		
21,300.00	13,092.00	18,705.00	10,548.45	129.15	123.15	-19.061	-563.56	956.39	8,729.53	8,654.01	75.52	115.591		
21,400.00	13,092.00	18,705.00	10,548.45	130.57	123.15	-19.061	-563.56	956.39	8,824.72	8,749.21	75.51	116.874		
21,500.00	13,092.00	18,705.00	10,548.45	132.00	123.15	-19.061	-563.56	956.39	8,920.01	8,844.51	75.50	118.151		
21,600.00	13,092.00	18,705.00	10,548.45	133.42	123.15	-19.061	-563.56	956.39	9,015.40	8,939.90	75.49	119.423		
21,700.00	13,092.00	18,705.00	10,548.45	134.85	123.15	-19.061	-563.56	956.39	9,110.89	9,035.40	75.49	120.689		
21,800.00	13,092.00	18,705.00	10,548.45	136.27	123.15	-19.061	-563.56	956.39	9,206.47	9,130.98	75.49	121.949		
21,900.00	13,092.00	18,705.00	10,548.45	137.70	123.15	-19.061	-563.56	956.39	9,302.15	9,226.65	75.50	123.204		
22,000.00	13,092.00	18,705.00	10,548.45	139.12	123.15	-19.061	-563.56	956.39	9,397.92	9,322.40	75.51	124.453		
22,100.00	13,092.00	18,705.00	10,548.45	140.55	123.15	-19.061	-563.56	956.39	9,493.77	9,418.24	75.53	125.696		
22,200.00	13,092.00	18,705.00	10,548.45	141.98	123.15	-19.061	-563.56	956.39	9,589.71	9,514.16	75.55	126.933		
22,300.00	13,092.00	18,705.00	10,548.45	143.40	123.15	-19.061	-563.56	956.39	9,685.74	9,610.16	75.57	128.164		
22,400.00	13,092.00	18,705.00	10,548.45	144.83	123.15	-19.061	-563.56	956.39	9,781.84	9,706.24	75.60	129.389		
22,500.00	13,092.00	18,705.00	10,548.45	146.26	123.15	-19.061	-563.56	956.39	9,878.02	9,802.39	75.63	130.608		
22,600.00	13,092.00	18,705.00	10,548.45	147.69	123.15	-19.061	-563.56	956.39	9,974.27	9,898.61	75.67	131.821		
22,700.00	13,092.00	18,705.00	10,548.45	149.11	123.15	-19.061	-563.56	956.39	10,070.60	9,994.90	75.70	133.028		
22,728.24	13,092.00	18,705.00	10,548.45	149.52	123.15	-19.061	-563.56	956.39	10,097.82	10,022.11	75.71	133.368		
	-,	,	-,0						-,	-,				







RKB @ 3200.50usft (TBD)

Grid

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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

Well El Campeon Fed Com 513H TVD Reference: RKB @ 3200.50usft (TBD) MD Reference:

North Reference:

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma

USA Compass Database: Offset TVD Reference: Reference Datum

Offset De	sign: Ca	attleman Fe	d Com 4 -	Cattleman	Fed Com	204H - OH	/ 69917 - Surve	eys H&P 65	56)				Offset Site Error:	0.00 usft
Survey Progr	ram: 17	75-MWD+HRG	М							Rule Assi	gned:		Offset Well Error:	1.00 usft
	rence		fset		Major Axis	Himbaida	Offset Wellbo	re Centre		tance	Minimo	Camanatian	Mountage	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.00	0.00	97.91	56.91	1.00	1.16	6.884	7,816.61	943.64	7,873.57					
100.00	100.00	221.27	180.26	1.08	1.76	6.885	7,815.29	943.66	7,872.46	7,869.62	2.84	2,767.849		
200.00	200.00	289.60	248.59	1.60	2.28	6.884	7,814.74	943.54	7,871.64	7,867.76	3.88	2,026.988		
300.00	300.00	358.00	316.99	2.01	2.84	6.883	7,814.48	943.28	7,871.23	7,866.37	4.85	1,621.993		
393.35	393.35	434.37	393.35	2.33	3.08	6.882	7,814.42	943.13	7,871.13	7,865.71	5.41	1,454.003		
400.00	400.00	439.81	398.80	2.35	3.10	6.882	7,814.42	943.14	7,871.13	7,865.67	5.45	1,443.211		
500.00	500.00	521.70	480.68	2.65	3.36	6.884	7,814.48	943.51	7,871.26	7,865.24	6.02	1,308.313		
600.00	600.00	617.98	576.97	2.93	3.83	6.890	7,814.66	944.30	7,871.54	7,864.79	6.75	1,165.854		
700.00	700.00	717.85	676.83	3.18	4.35	6.895	7,814.88	944.97	7,871.84	7,864.32	7.52	1,046.758		
800.00	800.00	809.00	767.98	3.41	4.53	6.900	7,815.11	945.72	7,872.18	7,864.27	7.92	994.366		
900.00	900.00	903.33	862.31	3.64	4.84	6.906	7,815.42	946.54	7,872.10	7,864.19	8.44	932.836		
							.,		.,	.,				
1,000.00	1,000.00	990.00	948.97	3.85	5.13	6.908	7,815.82	946.99	7,873.15	7,864.22	8.93	881.933		
1,100.00	1,100.00	1,068.93	1,027.90	4.05	5.37	6.910	7,816.37	947.22	7,873.89	7,864.52	9.37	840.654		
1,200.00	1,200.00	1,145.00	1,103.96	4.24	5.61	6.909	7,817.20	947.30	7,874.97	7,865.18	9.79	804.298		
1,300.00	1,300.00	1,233.00	1,191.96	4.43	5.91	6.907	7,818.40	947.07	7,876.29	7,865.99	10.30	764.734		
1,400.00	1,400.00	2,095.00	2,052.02	4.61	15.84	6.990	7,790.79	955.22	7,876.17	7,860.49	15.68	502.375		
1,500.00	1,500.00	2,095.00	2,052.02	4.78	15.84	6.990	7,790.79	955.22	7,868.52	7,852.66	15.86	496.062		
1,600.00	1,599.98	2,095.00	2,052.02	4.78	15.84	-163.024	7,790.79	955.22	7,863.80	7,847.75	16.05	489.895		
1,620.70	1,620.67	2,095.00	2,052.02	4.99	15.84	-163.026	7,790.79	955.22	7,863.40	7,847.34	16.06	489.513		
1,700.00	1,699.89	2,178.97	2,135.54	5.07	16.27	-162.991	7,783.87	960.24	7,860.58	7,843.10	17.47	449.884		
1,800.00	1,799.81	2,200.56	2,157.03	5.23	16.39	-162.979	7,782.55	962.01	7,859.56	7,841.59	17.97	437.288		
1,000.00	1,700.01	2,200.00	2,107.00	0.20	10.00	102.070	7,702.00	002.01	,,000.00	7,011.00		101.200		
1,846.14	1,845.91	2,210.52	2,166.93	5.31	16.45	-162.973	7,782.01	962.89	7,859.43	7,841.21	18.21	431.512		
1,900.00	1,899.72	2,285.00	2,240.93	5.41	16.96	-162.920	7,779.28	970.82	7,860.70	7,841.21	19.49	403.295		
1,924.74	1,924.44	2,285.00	2,240.93	5.46	16.96	-162.920	7,779.28	970.82	7,860.66	7,841.13	19.54	402.316		
2,000.00	1,999.63	2,285.00	2,240.93	5.60	16.96	-162.920	7,779.28	970.82	7,861.02	7,841.34	19.68	399.405		
2,100.00	2,099.54	2,285.00	2,240.93	5.80	16.96	-162.920	7,779.28	970.82	7,862.62	7,842.74	19.88	395.491		
2 200 00	2 100 45	2 295 00	2 240 02	6.02	16.06	162 020	7 770 20	970.82	7 065 10	7 9 4 5 4 0	20.00	201 502		
2,200.00	2,199.45	2,285.00	2,240.93	6.02	16.96	-162.920	7,779.28		7,865.48	7,845.40	20.09	391.582		
2,300.00	2,299.36 2,399.27	2,285.00 2,285.00	2,240.93	6.24 6.47	16.96	-162.920	7,779.28	970.82	7,869.62	7,849.32	20.30	387.704		
2,400.00 2,500.00	2,399.27	2,265.00	2,240.93 2,331.09	6.72	16.96 17.65	-162.920 -162.856	7,779.28 7,778.73	970.82 980.80	7,875.02 7,879.93	7,854.50 7,857.37	20.51 22.56	383.875 349.333		
2,600.00	2,599.10	2,405.26	2,360.49	6.96	17.03	-162.839	7,778.73	983.58	7,886.53	7,863.15	23.38	337.308		
2,000.00	2,000.10	2,403.20	2,300.43	0.90	17.55	-102.039	1,110.14	300.00	7,000.55	7,000.10	25.50	337.300		
2,700.00	2,699.01	2,473.00	2,427.98	7.22	18.74	-162.807	7,781.21	989.06	7,894.33	7,869.34	24.99	315.933		
2,800.00	2,798.92	2,473.00	2,427.98	7.48	18.74	-162.807	7,781.21	989.06	7,902.41	7,877.19	25.22	313.335		
2,900.00	2,898.83	2,540.88	2,495.61	7.74	18.93	-162.779	7,784.05	994.11	7,911.45	7,885.75	25.70	307.834		
3,000.00	2,998.74	2,636.94	2,591.28	8.01	19.20	-162.736	7,788.02	1,001.83	7,920.58	7,894.29	26.29	301.310		
3,100.00	3,098.65	2,849.71	2,803.02	8.28	19.55	-162.621	7,795.19	1,021.41	7,929.22	7,902.32	26.91	294.702		
2 200 00	2 400 50	10 170 10	10.000.04	0.50	107.40	72 000	EE4.40	1 600 45	7 000 00	7 000 55	70.07	102.000		
3,200.00	3,198.56	19,173.43	10,930.81	8.56	127.42	-73.869	-554.19	1,606.45	7,909.88	7,833.55	76.34	103.620		
3,300.00	3,298.47	19,171.93	10,930.90	8.84	127.40	-73.924	-552.70	1,606.49	7,811.84	7,735.38	76.46	102.165		
3,400.00	3,398.39	19,170.44	10,930.98	9.13	127.38	-73.980	-551.20	1,606.54	7,713.84	7,637.25	76.59	100.711		
3,500.00	3,498.30	19,168.94	10,931.06	9.41	127.36	-74.035	-549.71	1,606.59	7,615.90	7,539.17	76.73	99.257		
3,600.00	3,598.21	19,167.45	10,931.15	9.70	127.34	-74.090	-548.22	1,606.64	7,518.01	7,441.14	76.87	97.804		
3,700.00	3,698.12	19,165.95	10,931.23	9.99	127.32	-74.146	-546.72	1,606.68	7,420.17	7,343.16	77.01	96.351		
3,800.00	3,798.03	19,164.45	10,931.32	10.29	127.30	-74.201	-545.23	1,606.73	7,322.40	7,245.24	77.16	94.900		
3,900.00	3,897.94	19,162.96	10,931.40	10.58	127.28	-74.256	-543.74	1,606.78	7,224.68	7,147.37	77.31	93.449		
4,000.00	3,997.85	19,161.46	10,931.48	10.88	127.26	-74.312	-542.25	1,606.83	7,127.03	7,049.56	77.47	92.000		
4,100.00	4,097.76	19,159.97	10,931.57	11.18	127.24	-74.367	-540.75	1,606.88	7,029.44	6,951.81	77.63	90.552		
4,200.00	4,197.68	19,158.47	10,931.65	11.48	127.22	-74.422	-539.26	1,606.92	6,931.93	6,854.13	77.79	89.106		
4,300.00	4,297.59	19,156.97	10,931.74	11.78	127.20	-74.478	-537.77	1,606.97	6,834.48	6,756.51	77.97	87.661		
4,400.00	4,397.50	19,155.48	10,931.82	12.08	127.18	-74.533	-536.27	1,607.02	6,737.11	6,658.96	78.14	86.217		
4,500.00	4,497.41	19,153.98	10,931.90	12.39	127.16	-74.588	-534.78	1,607.07	6,639.81	6,561.49	78.32	84.776		
4,600.00	4,597.32	19,152.48	10,931.99	12.69	127.14	-74.644	-533.29	1,607.11	6,542.60	6,464.09	78.51	83.336		
4,700.00	4,697.23	19,150.99	10,932.07	13.00	127.12	-74.699	-531.79	1,607.16	6,445.47	6,366.77	78.70	81.899		
4,700.00	7,001.20	10,100.00	10,002.07	15.00	161.16	-1000	-551.75	1,007.10	0,440.47	0,000.17	10.10	01.000		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	oigii.			Cattleman	red Com	204H - OH /	′ 69917 - Surv	eys H&P 68	06)				Offset Site Error:	0.00 usft
Survey Progr	ram: 17	5-MWD+HRG	M set	Sami N	laior Axis		Offset Wellb	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,800.00	4,797.14	19,149.49	10,932.16	13.31	127.10	-74.754	-530.30	1,607.21	6,348.43	6,269.53	78.90	80.463		
4,900.00	4,897.05	19,148.00	10,932.24	13.62	127.08	-74.810	-528.81	1,607.26	6,251.48	6,172.38	79.10	79.030		
5,000.00	4,996.97	19,146.50	10,932.32	13.92	127.06	-74.865	-527.31	1,607.30	6,154.63	6,075.32	79.31	77.599		
5,100.00	5,096.88	19,145.00	10,932.41	14.23	127.04	-74.921	-525.82	1,607.35	6,057.89	5,978.36	79.53	76.171		
5,200.00	5,196.79	19,143.51	10,932.49	14.55	127.02	-74.976	-524.33	1,607.40	5,961.25	5,881.49	79.75	74.745		
5,300.00	5,296.70	19,142.01	10,932.58	14.86	127.00	-75.031	-522.84	1,607.45	5,864.72	5,784.73	79.99	73.322		
5,400.00	5,396.61	19,140.51	10,932.66	15.17	126.98	-75.087	-521.34	1,607.50	5,768.31	5,688.08	80.23	71.901		
5,500.00	5,496.52	19,139.02	10,932.74	15.48	126.96	-75.142	-519.85	1,607.54	5,672.02	5,591.55	80.47	70.484		
5,600.00	5,596.43	19,137.52	10,932.83	15.79	126.94	-75.198	-518.36	1,607.59	5,575.87	5,495.14	80.73	69.069		
5,700.00	5,696.34	19,136.03	10,932.91	16.11	126.92	-75.253	-516.86	1,607.64	5,479.85	5,398.85	80.99	67.658		
5,800.00	5,796.26	19,134.53	10,933.00	16.42	126.90	-75.309	-515.37	1,607.69	5,383.97	5,302.71	81.27	66.250		
5,900.00	5,896.17	19,133.03	10,933.08	16.74	126.88	-75.364	-513.88	1,607.73	5,288.25	5,206.70	81.55	64.845		
6,000.00	5,996.08	19,131.54	10,933.16	17.05	126.86	-75.419	-512.38	1,607.78	5,192.69	5,110.84	81.85	63.444		
6,100.00	6,095.99	19,130.04	10,933.25	17.37	126.84	-75.475	-510.89	1,607.83	5,097.30	5,015.15	82.15	62.047		
6,200.00	6,195.90	19,128.55	10,933.33	17.68	126.82	-75.530	-509.40	1,607.88	5,002.09	4,919.62	82.47	60.653		
6,300.00	6,295.81	19,127.05	10,933.42	18.00	126.80	-75.586	-507.90	1,607.92	4,907.07	4,824.26	82.80	59.263		
6,400.00	6,395.72	19,125.55	10,933.50	18.32	126.78	-75.641	-506.41	1,607.97	4,812.25	4,729.10	83.14	57.878		
6,500.00	6,495.63	19,124.06	10,933.59	18.63	126.76	-75.697	-504.92	1,608.02	4,717.64	4,634.13	83.50	56.496		
6,600.00	6,595.55	19,122.56	10,933.67	18.95	126.74	-75.752	-503.43	1,608.07	4,623.26	4,539.38	83.88	55.119		
6,700.00	6,695.46	19,121.08	10,933.75	19.27	126.72	-75.807	-501.94	1,608.12	4,529.12	4,444.85	84.27	53.747		
6,800.00	6,795.37	19,119.59	10,933.84	19.59	126.70	-75.863	-500.46	1,608.16	4,435.24	4,350.56	84.68	52.379		
6,900.00	6,895.28	19,118.09	10,933.92	19.91	126.68	-75.918	-498.96	1,608.21	4,341.62	4,256.52	85.10	51.016		
7,000.00	6,995.19	19,116.58	10,934.01	20.23	126.66	-75.974	-497.46	1,608.26	4,248.30	4,162.75	85.55	49.659		
7,100.00	7,095.10	19,115.06	10,934.09	20.54	126.64	-76.031	-495.94	1,608.31	4,155.29	4,069.27	86.02	48.307		
7,200.00	7,195.01	19,113.53	10,934.18	20.86	126.62	-76.087	-494.41	1,608.35	4,062.62	3,976.10	86.51	46.960		
7,300.00	7,294.92	19,111.98	10,934.27	21.18	126.59	-76.145	-492.87	1,608.40	3,970.29	3,883.26	87.03	45.620		
7,400.00	7,394.84	19,110.43	10,934.35	21.50	126.57	-76.202	-491.32	1,608.45	3,878.35	3,790.77	87.57	44.286		
7,500.00	7,494.75	19,108.86	10,934.44	21.82	126.55	-76.260	-489.76	1,608.50	3,786.81	3,698.66	88.15	42.959		
7,600.00	7,594.66	19,107.29	10,934.53	22.14	126.53	-76.319	-488.18	1,608.55	3,695.71	3,606.96	88.76	41.639		
7,700.00	7,694.57	19,105.70	10,934.62	22.46	126.51	-76.378	-486.60	1,608.59	3,605.09	3,515.69	89.40	40.327		
7,800.00	7,794.48	19,104.10	10,934.71	22.78	126.49	-76.437	-485.00	1,608.64	3,514.97	3,424.89	90.08	39.022		
7,900.00	7,894.39	19,102.48	10,934.80	23.10	126.47	-76.497	-483.39	1,608.69	3,425.40	3,334.60	90.79	37.727		
8,000.00	7,994.30	19,100.86	10,934.90	23.42	126.45	-76.558	-481.77	1,608.74	3,336.42	3,244.86	91.56	36.441		
8,100.00	8,094.21	19,099.22	10,934.99	23.75	126.42	-76.618	-480.13	1,608.79	3,248.08	3,155.71	92.37	35.165		
8,200.00	8,194.13	19,097.57	10,935.08	24.07	126.40	-76.680	-478.49	1,608.84	3,160.43	3,067.20	93.23	33.899		
8,300.00	8,294.04	19,095.91	10,935.18	24.39	126.38	-76.741	-476.83	1,608.89	3,073.54	2,979.40	94.15	32.646		
8,400.00	8,393.95	19,094.23	10,935.27	24.71	126.36	-76.803	-475.16	1,608.94	2,987.47	2,892.35	95.12	31.406		
8,500.00	8,493.86	19,092.55	10,935.37	25.03	126.33	-76.866	-473.47	1,608.99	2,902.29	2,806.12	96.17	30.180		
8,600.00	8,593.77	19,090.85	10,935.47	25.35	126.31	-76.929	-471.78	1,609.03	2,818.08	2,720.80	97.28	28.969		
8,700.00	8,693.68	19,089.13	10,935.57	25.67	126.29	-76.993	-470.07	1,609.08	2,734.94	2,636.47	98.47	27.775		
8,800.00	8,793.59	19,087.40	10,935.67	26.00	126.27	-77.057	-468.34	1,609.13	2,652.96	2,553.22	99.74	26.600		
8,900.00	8,893.50	19,085.66	10,935.77	26.32	126.24	-77.122	-466.61	1,609.18	2,572.25	2,471.16	101.09	25.445		
9,000.00	8,993.42	19,083.91	10,935.87	26.64	126.22	-77.187	-464.86	1,609.23	2,492.94	2,390.41	102.54	24.313		
9,100.00	9,093.33	19,082.14	10,935.97	26.96	126.20	-77.252	-463.09	1,609.28	2,415.17	2,311.09	104.08	23.205		
9,200.00	9,193.24	19,080.36	10,936.07	27.29	126.17 126.15	-77.319 -77.385	-461.31 -459.52	1,609.33 1,609.38	2,339.09 2,264.86	2,233.36	105.72	22.125		
9,300.00	9,293.15	19,078.56	10,936.18	27.61	126.15	-77.385	-459.52	1,008.30	2,204.00	2,157.39	107.47	21.075		
9,400.00	9,393.06	19,076.75	10,936.28	27.93	126.12	-77.453	-457.71	1,609.43	2,192.68	2,083.36	109.32	20.057		
9,500.00	9,492.97	19,074.93	10,936.39	28.25	126.10	-77.520	-455.89	1,609.48	2,122.76	2,011.47	111.28	19.075		
9,600.00	9,592.88	19,073.09	10,936.49	28.58	126.07	-77.589	-454.06	1,609.54	2,055.32	1,941.97	113.35	18.133		
9,700.00 9,800.00	9,692.79 9,792.71	19,071.24 19,069.37	10,936.60 10,936.71	28.90 29.22	126.05 126.02	-77.657 -77.727	-452.21 -450.34	1,609.59 1,609.64	1,990.63 1,928.94	1,875.11 1,811.17	115.51 117.77	17.233 16.379		
9,900.00	9,892.62	19,067.48	10,936.82	29.55	126.00	-77.797	-448.46	1,609.69	1,870.58	1,750.47	120.11	15.574		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	sign: Ca	ttleman Fe	d Com 4 -	Cattleman	Fed Com	204H - OH	69917 - Surve	eys H&P 65	56)				Offset Site Error:	0.00 usft
Survey Progr	ram: 17	'5-MWD+HRG	М							Rule Assi	gned:		Offset Well Error:	1.00 usft
	rence		set		Major Axis	Higheide	Offset Wellbo	ore Centre		ance	Minimum	Congretion	Marning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
10,000.00	9,992.53	19,065.59	10,936.93	29.87	125.97	-77.867	-446.57	1,609.74	1,815.84	1,693.34	122.50	14.823		
10,100.00	10,092.44	19,063.67	10,937.04	30.19	125.95	-77.939	-444.66	1,609.79	1,765.08	1,640.14	124.94	14.128		
10,200.00	10,192.35	19,061.87	10,937.14	30.52	125.92	-78.005	-442.86	1,609.84	1,718.63	1,591.26	127.38	13.493		
10,300.00	10,292.26	19,059.87	10,937.26	30.84	125.90	-78.080	-440.86	1,609.89	1,676.87	1,547.09	129.78	12.921		
10,400.00	10,392.17	19,057.86	10,937.38	31.16	125.87	-78.154	-438.86	1,609.94	1,640.15	1,508.04	132.12	12.415		
10,500.00	10,492.08	19,055.85	10,937.50	31.49	125.84	-78.229	-436.85	1,609.99	1,608.82	1,474.48	134.33	11.976		
10,600.00	10,592.00	19,053.83	10,937.62	31.81	125.82	-78.304	-434.84	1,610.04	1,583.19	1,446.79	136.39	11.607		
10,700.00	10,691.91	19,051.81	10,937.73	32.13	125.79	-78.379	-432.82	1,610.10	1,563.54	1,425.29	138.25	11.310		
10,800.00	10,791.82	19,049.79	10,937.85	32.46	125.76	-78.454	-430.80	1,610.15	1,550.10	1,410.24	139.86	11.083		
10,900.00	10,891.73	19,047.76	10,937.97	32.78	125.73	-78.530	-428.78	1,610.20	1,543.04	1,401.84	141.20	10.928		
10,959.23	10,950.91	19,046.55	10,938.04	32.97	125.72	-78.575	-427.57	1,610.23	1,541.91	1,400.05	141.86	10.869 CC,	ES	
11,000.00	10,991.64	19,045.72	10,938.09	33.11	125.71	-78.605	-426.74	1,610.25	1,542.45	1,400.20	142.25	10.843		
11,100.00	11,091.55	19,043.68	10,938.21	33.43	125.68	-78.681	-424.71	1,610.30	1,548.32	1,405.33	142.99	10.828 SF		
11,200.00	11,191.46	19,041.63	10,938.33	33.75	125.65	-78.757	-422.67	1,610.35	1,560.58	1,417.15	143.44	10.880		
11,300.00	11,291.37	19,039.58	10,938.45	34.08	125.62	-78.833	-420.62	1,610.40	1,579.10	1,435.51	143.59	10.997		
11,400.00	11,391.29	19,037.53	10,938.57	34.40	125.60	-78.910	-418.57	1,610.45	1,603.65	1,460.16	143.49	11.176		
11,500.00	11,491.20	19,035.47	10,938.69	34.73	125.57	-78.986	-416.51	1,610.50	1,633.95	1,490.80	143.15	11.414		
11,600.00	11,591.11	19,033.40	10,938.82	35.05	125.54	-79.063	-414.45	1,610.55	1,669.70	1,527.09	142.62	11.708		
11,700.00	11,691.02	19,033.40	10,938.94	35.38	125.54	-79.140	-412.38	1,610.60	1,710.56	1,568.65	141.92	12.053		
11,800.00	11,790.93	19,031.33	10,939.06	35.70	125.48	-79.217	-410.31	1,610.65	1,756.16	1,615.08	141.09	12.447		
11,900.00	11,890.84	19,023.23	10,939.18	36.03	125.46	-79.295	-408.23	1,610.69	1,806.16	1,665.99	140.17	12.886		
11,000.00	11,000.04	10,027.17	10,000.10	00.00	120.40	-10.200	400.20	1,010.00	1,000.10	1,000.00	140.17	12.000		
11,907.54	11,898.38	19,027.02	10,939.19	36.05	125.45	-79.300	-408.08	1,610.70	1,810.10	1,670.00	140.09	12.921		
12,000.00	11,990.80	19,023.36	10,939.41	36.33	125.40	-80.618	-404.43	1,610.78	1,860.40	1,721.25	139.15	13.370		
12,028.24	12,019.04	19,021.55	10,939.51	36.36	125.38	88.915	-402.62	1,610.82	1,876.49	1,737.65	138.84	13.516		
12,100.00	12,090.80	19,016.54	10,939.81	36.36	125.31	88.728	-397.62	1,610.93	1,918.66	1,780.65	138.02	13.902		
12,200.00	12,190.80	19,009.54	10,940.22	36.36	125.22	88.468	-390.64	1,611.09	1,980.26	1,843.38	136.88	14.467		
12,300.00	12,290.80	19,002.53	10,940.64	36.36	125.12	88.207	-383.64	1,611.24	2,044.87	1,909.11	135.76	15.062		
12,400.00	12,390.80	18,995.49	10,941.05	36.37	125.03	87.945	-376.62	1,611.38	2,112.22	1,977.55	134.68	15.684		
12,500.00	12,490.80	18,988.44	10,941.47	36.37	124.93	87.683	-369.58	1,611.52	2,182.06	2,048.44	133.63	16.329		
12,528.24	12,519.04	18,986.45	10,941.59	36.37	124.91	87.609	-367.59	1,611.56	2,202.21	2,068.87	133.34	16.516		
12,550.00	12,540.79	18,985.40	10,941.65	36.40	124.89	-89.628	-366.54	1,611.58	2,217.85	2,084.72	133.12	16.660		
12,600.00	12,590.61	18,986.72	10,941.58	36.63	124.91	-84.316	-367.86	1,611.55	2,254.13	2,121.43	132.69	16.987		
12,650.00	12,639.89	18,993.22	10,941.19	36.95	125.00	-78.800	-374.35	1,611.43	2,290.62	2,158.28	132.34	17.308		
12,700.00	12,688.24	19,004.87	10,940.50	37.29	125.15	-73.248	-385.98	1,611.19	2,327.02	2,194.95	132.07	17.620		
12,750.00	12,735.30	19,021.59	10,939.51	37.62	125.38	-67.831	-402.66	1,610.82	2,362.99	2,231.11	131.88	17.918		
12,800.00	12,780.72	19,043.25	10,938.24	37.96	125.67	-62.701	-424.28	1,610.31	2,398.19	2,266.42	131.77	18.200		
12,850.00	12,824.15	19,070.54	10,936.64	38.29	126.04	-57.948	-451.51	1,609.60	2,432.28	2,300.54	131.75	18.462		
12,900.00	12,865.26	19,103.55	10,930.04	38.60	126.48	-53.644	-484.45	1,608.66	2,432.28	2,333.11	131.73	18.700		
12,950.00	12,903.73	19,103.35	10,932.85	38.90	126.93	-49.913	-517.98	1,607.60	2,495.79	2,363.86	131.93	18.917		
13,000.00	12,939.27	19,137.13	10,932.83	39.18	120.93	-49.913	-550.97	1,606.55	2,524.64	2,392.56	132.08	19.114		
13,050.00	12,939.27	19,170.21	10,930.99	39.43	127.47	-44.374	-557.75	1,606.33	2,551.38	2,419.35	132.03	19.324		
		10 177 00		20.05		40.440	EC7 7C		0.670.40	2 444 24	404.05	10 504		
13,100.00 13,150.00	13,000.52 13,025.76	19,177.00 19,177.00	10,930.61 10,930.61	39.65 39.85	127.47 127.47	-42.413 -40.722	-557.75 -557.75	1,606.33 1,606.33	2,576.16 2,598.86	2,444.21 2,466.97	131.95 131.89	19.524 19.705		
		19,177.00												
13,200.00 13,250.00	13,047.14 13,064.50	19,177.00	10,930.61 10,930.61	40.02 40.15	127.47 127.47	-39.277 -38.056	-557.75 -557.75	1,606.33 1,606.33	2,619.36 2,637.56	2,487.51 2,505.73	131.85 131.82	19.867 20.008		
13,300.00	13,064.50	19,177.00	10,930.61	40.15	127.47	-37.040	-557.75	1,606.33	2,653.37	2,505.73	131.82	20.006		
13,350.00	13,086.67	19,177.00	10,930.61	40.33	127.47	-36.214	-557.75	1,606.33	2,666.70	2,534.87	131.83	20.228		
13,400.00	13,091.30	19,177.00	10,930.61	40.38	127.47	-35.565	-557.75	1,606.33	2,677.51	2,545.66	131.86	20.306		
13,428.24	13,092.00	19,177.00	10,930.61	40.39	127.47	-35.273	-557.75	1,606.33	2,682.48	2,550.64	131.84	20.347		
13,500.00 13,600.00	13,092.00 13,092.00	19,177.00 19,177.00	10,930.61 10,930.61	40.40 40.43	127.47 127.47	-35.273 -35.273	-557.75 -557.75	1,606.33 1,606.33	2,694.97 2,715.44	2,563.21 2,583.90	131.76 131.54	20.454 20.643		
13,000.00	10,002.00	10,177.00	10,000.01	40.43	141.41	-00.210	-331.13	1,000.00	4,110.44	۷,505.90	131.04	20.040		
13,700.00	13,092.00	19,177.00	10,930.61	40.46	127.47	-35.273	-557.75	1,606.33	2,739.42	2,608.17	131.25	20.872		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:
Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

													Offset Site Error:	0.00 usft
Survey Progr Refer	ram: 17 rence	5-MWD+HRG Off	M set	Semi N	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,800.00	13,092.00	19,177.00	10,930.61	40.50	127.47	-35.273	-557.75	1,606.33	2,766.80	2,635.93	130.88	21.140		
13,900.00	13,092.00	19,177.00	10,930.61	40.53	127.47	-35.273	-557.75	1,606.33	2,797.50	2,667.06	130.43	21.448		
14,000.00	13,092.00	19,177.00	10,930.61	40.58	127.47	-35.273	-557.75	1,606.33	2,831.39	2,701.47	129.92	21.793		
14,100.00	13,092.00	19,177.00	10,930.61	40.63	127.47	-35.273	-557.75	1,606.33	2,868.37	2,739.03	129.35	22.176		
14,200.00	13,092.00	19,177.00	10,930.61	40.69	127.47	-35.273	-557.75	1,606.33	2,908.32	2,779.61	128.71	22.595		
14,300.00	13,092.00	19,177.00	10,930.61	40.76	127.47	-35.273	-557.75	1,606.33	2,951.12	2,823.09	128.03	23.050		
14,400.00	13,092.00	19,177.00	10,930.61	40.85	127.47	-35.273	-557.75	1,606.33	2,996.65	2,869.34	127.31	23.538		
14,500.00	13,092.00	19,177.00	10,930.61	40.95	127.47	-35.273	-557.75	1,606.33	3,044.78	2,918.24	126.55	24.061		
14,600.00	13,092.00	19,177.00	10,930.61	41.10	127.47	-35.273	-557.75	1,606.33	3,095.40	2,969.65	125.75	24.615		
14,700.00	13,092.00	19,177.00	10,930.61	41.29	127.47	-35.273	-557.75	1,606.33	3,148.38	3,023.44	124.93	25.201		
14,800.00	13,092.00	19,177.00	10,930.61	41.57	127.47	-35.273	-557.75	1,606.33	3,203.60	3,079.51	124.09	25.816		
14,900.00	13,092.00	19,177.00	10,930.61	41.99	127.47	-35.273	-557.75	1,606.33	3,260.96	3,137.72	123.24	26.461		
15,000.00	13,092.00	19,177.00	10,930.61	42.60	127.47	-35.273	-557.75	1,606.33	3,320.34	3,197.97	122.37	27.134		
15,100.00	13,092.00	19,177.00	10,930.61	43.42	127.47	-35.273	-557.75	1,606.33	3,381.63	3,260.13	121.50	27.833		
15,200.00	13,092.00	19,177.00	10,930.61	44.43	127.47	-35.273	-557.75	1,606.33	3,444.74	3,324.12	120.62	28.559		
15,300.00	13,092.00	19,177.00	10,930.61	45.56	127.47	-35.273	-557.75	1,606.33	3,509.56	3,389.81	119.75	29.309		
15,400.00	13,092.00	19,177.00	10,930.61	46.76	127.47	-35.273	-557.75	1,606.33	3,576.00	3,457.13	118.87	30.082		
15,500.00	13,092.00	19,177.00	10,930.61	48.01	127.47	-35.273	-557.75	1,606.33	3,643.98	3,525.97	118.01	30.879		
15,600.00	13,092.00	19,177.00	10,930.61	49.30	127.47	-35.273	-557.75	1,606.33	3,713.40	3,596.25	117.15	31.697		
15,700.00	13,092.00	19,177.00	10,930.61	50.61	127.47	-35.273	-557.75	1,606.33	3,784.20	3,667.88	116.31	32.535		
15,800.00	13,092.00	19,177.00	10,930.61	51.93	127.47	-35.273	-557.75	1,606.33	3,856.28	3,740.80	115.48	33.394		
15,900.00	13,092.00	19,177.00	10,930.61	53.27	127.47	-35.273	-557.75	1,606.33	3,929.59	3,814.93	114.66	34.271		
16,000.00	13,092.00	19,177.00	10,930.61	54.61	127.47	-35.273	-557.75	1,606.33	4,004.06	3,890.20	113.86	35.166		
16,100.00	13,092.00	19,177.00	10,930.61	55.97	127.47	-35.273	-557.75	1,606.33	4,079.62	3,966.54	113.08	36.079		
16,200.00	13,092.00	19,177.00	10,930.61	57.33	127.47	-35.273	-557.75	1,606.33	4,156.21	4,043.90	112.31	37.007		
16,300.00	13,092.00	19,177.00	10,930.61	58.69	127.47	-35.273	-557.75	1,606.33	4,233.77	4,122.22	111.56	37.951		
16,400.00	13,092.00	19,177.00	10,930.61	60.06	127.47	-35.273	-557.75	1,606.33	4,312.27	4,201.44	110.83	38.910		
16,500.00	13,092.00	19,177.00	10,930.61	61.44	127.47	-35.273	-557.75	1,606.33	4,391.63	4,281.52	110.11	39.883		
16,600.00	13,092.00	19,177.00	10,930.61	62.81	127.47	-35.273	-557.75	1,606.33	4,471.82	4,362.40	109.42	40.868		
16,700.00	13,092.00	19,177.00	10,930.61	64.20	127.47	-35.273	-557.75	1,606.33	4,552.80	4,444.05	108.75	41.867		
16,800.00	13,092.00	19,177.00	10,930.61	65.58	127.47	-35.273	-557.75	1,606.33	4,634.52	4,526.43	108.09	42.877		
16,900.00	13,092.00	19,177.00	10,930.61	66.97	127.47	-35.273	-557.75	1,606.33	4,716.94	4,609.49	107.45	43.898		
17,000.00	13,092.00	19,177.00	10,930.61	68.36	127.47	-35.273	-557.75	1,606.33	4,800.04	4,693.20	106.84	44.929		
17,100.00	13,092.00	19,177.00	10,930.61	69.75	127.47	-35.273	-557.75	1,606.33	4,883.76	4,777.53	106.24	45.971		
17,200.00	13,092.00	19,177.00	10,930.61	71.14	127.47	-35.273	-557.75	1,606.33	4,968.09	4,862.43	105.66	47.022		
17,300.00	13,092.00	19,177.00	10,930.61	72.54	127.47	-35.273	-557.75	1,606.33	5,052.99	4,947.90	105.09	48.081		
17,400.00	13,092.00	19,177.00	10,930.61	73.94	127.47	-35.273	-557.75	1,606.33	5,138.43	5,033.89	104.55	49.149		
17,500.00	13,092.00	19,177.00	10,930.61	75.34	127.47	-35.273	-557.75	1,606.33	5,224.39	5,120.37	104.02	50.225		
17,600.00	13,092.00	19,177.00	10,930.61	76.74	127.47	-35.273	-557.75	1,606.33	5,310.84	5,207.33	103.51	51.307		
17,700.00	13,092.00	19,177.00	10,930.61	78.14	127.47	-35.273	-557.75	1,606.33	5,397.76	5,294.75	103.02	52.397		
17,800.00	13,092.00	19,177.00	10,930.61	79.55	127.47	-35.273	-557.75	1,606.33	5,485.13	5,382.59	102.54	53.492		
17,900.00	13,092.00	19,177.00	10,930.61	80.95	127.47	-35.273	-557.75	1,606.33	5,572.92	5,470.84	102.08	54.594		
18,000.00	13,092.00	19,177.00	10,930.61	82.36	127.47	-35.273	-557.75	1,606.33	5,661.11	5,559.48	101.63	55.701		
18,100.00	13,092.00	19,177.00	10,930.61	83.76	127.47	-35.273	-557.75	1,606.33	5,749.70	5,648.49	101.20	56.813		
18,200.00 18,300.00	13,092.00 13,092.00	19,177.00 19,177.00	10,930.61 10,930.61	85.17 86.58	127.47 127.47	-35.273 -35.273	-557.75 -557.75	1,606.33 1,606.33	5,838.65 5,927.95	5,737.86 5,827.56	100.79 100.39	57.929 59.050		
18,400.00 18,500.00	13,092.00 13,092.00	19,177.00 19,177.00	10,930.61 10,930.61	87.99 89.40	127.47 127.47	-35.273 -35.273	-557.75 -557.75	1,606.33 1,606.33	6,017.59 6,107.55	5,917.59 6,007.92	100.00 99.63	60.175 61.303		
18,600.00	13,092.00	19,177.00	10,930.61	90.81	127.47 127.47	-35.273 -35.273	-557.75 -557.75	1,606.33	6,107.55	6,007.92	99.63	62.434		
18,700.00	13,092.00	19,177.00	10,930.61	90.81	127.47	-35.273 -35.273	-557.75 -557.75	1,606.33	6,288.38	6,189.46	98.92	63.568		
18,800.00	13,092.00	19,177.00	10,930.61	93.64	127.47	-35.273	-557.75 -557.75	1,606.33	6,379.22	6,280.63	98.59	64.705		
18,900.00	13,092.00	19,177.00	10,930.61	95.06	127.47	-35.273	-557.75	1,606.33	6,470.34	6,372.07	98.27	65.844		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

urvey Prog	ram: 17	5-MWD+HRG	M							Rule Assi	anod:		Offset Well Error:	1.00 us
Refe	rence	Off	set		lajor Axis		Offset Wellb	ore Centre		ance				1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,000.00	13,092.00	19,177.00	10,930.61	96.47	127.47	-35.273	-557.75	1,606.33	6,561.71	6,463.75	97.96	66.985		
19,100.00	13,092.00	19,177.00	10,930.61	97.89	127.47	-35.273	-557.75	1,606.33	6,653.33	6,555.67	97.66	68.128		
19,200.00	13,092.00	19,177.00	10,930.61	99.30	127.47	-35.273	-557.75	1,606.33	6,745.19	6,647.82	97.37	69.272		
19,300.00	13,092.00	19,177.00	10,930.61	100.72	127.47	-35.273	-557.75	1,606.33	6,837.28	6,740.19	97.10	70.418		
19,400.00	13,092.00	19,177.00	10,930.61	102.14	127.47	-35.273	-557.75	1,606.33	6,929.59	6,832.76	96.83	71.564		
19,500.00	13,092.00	19,177.00	10,930.61	103.55	127.47	-35.273	-557.75	1,606.33	7,022.11	6,925.53	96.58	72.711		
19,600.00	13,092.00	19,177.00	10,930.61	104.97	127.47	-35.273	-557.75	1,606.33	7,114.83	7,018.50	96.33	73.859		
19,700.00	13,092.00	19,177.00	10,930.61	106.39	127.47	-35.273	-557.75	1,606.33	7,207.74	7,111.65	96.09	75.007		
19,800.00	13,092.00	19,177.00	10,930.61	107.81	127.47	-35.273	-557.75	1,606.33	7,300.85	7,204.98	95.87	76.155		
19,900.00	13,092.00	19,177.00	10,930.61	109.23	127.47	-35.273	-557.75	1,606.33	7,394.13	7,298.48	95.65	77.303		
20,000.00	13,092.00	19,177.00	10,930.61	110.65	127.47	-35.273	-557.75	1,606.33	7,487.58	7,392.14	95.44	78.451		
20,100.00	13,092.00	19,177.00	10,930.61	112.07	127.47	-35.273	-557.75	1,606.33	7,581.21	7,485.96	95.24	79.598		
20,200.00	13,092.00	19,177.00	10,930.61	113.49	127.47	-35.273	-557.75	1,606.33	7,674.99	7,579.94	95.05	80.744		
20,300.00	13,092.00	19,177.00	10,930.61	114.91	127.47	-35.273	-557.75	1,606.33	7,768.93	7,674.06	94.87	81.890		
20,400.00	13,092.00	19,177.00	10,930.61	116.34	127.47	-35.273	-557.75	1,606.33	7,863.02	7,768.32	94.70	83.035		
20,500.00	13,092.00	19,177.00	10,930.61	117.76	127.47	-35.273	-557.75	1,606.33	7,957.25	7,862.72	94.53	84.179		
20,600.00	13,092.00	19,177.00	10,930.61	119.18	127.47	-35.273	-557.75	1,606.33	8,051.62	7,957.26	94.37	85.321		
20,700.00	13,092.00	19,177.00	10,930.61	120.60	127.47	-35.273	-557.75	1,606.33	8,146.13	8,051.91	94.22	86.462		
20,800.00	13,092.00	19,177.00	10,930.61	122.03	127.47	-35.273	-557.75	1,606.33	8,240.77	8,146.69	94.07	87.602		
20,900.00	13,092.00	19,177.00	10,930.61	123.45	127.47	-35.273	-557.75	1,606.33	8,335.53	8,241.59	93.93	88.740		
21,000.00	13,092.00	19,177.00	10,930.61	124.87	127.47	-35.273	-557.75	1,606.33	8,430.41	8,336.61	93.80	89.876		
21,100.00	13,092.00	19,177.00	10,930.61	126.30	127.47	-35.273	-557.75	1,606.33	8,525.41	8,431.73	93.68	91.010		
21,200.00	13,092.00	19,177.00	10,930.61	127.72	127.47	-35.273	-557.75	1,606.33	8,620.52	8,526.96	93.56	92.143		
21,300.00	13,092.00	19,177.00	10,930.61	129.15	127.47	-35.273	-557.75	1,606.33	8,715.74	8,622.30	93.44	93.273		
21,400.00	13,092.00	19,177.00	10,930.61	130.57	127.47	-35.273	-557.75	1,606.33	8,811.07	8,717.73	93.34	94.401		
21,500.00	13,092.00	19,177.00	10,930.61	132.00	127.47	-35.273	-557.75	1,606.33	8,906.50	8,813.26	93.24	95.526		
21,600.00	13,092.00	19,177.00	10,930.61	133.42	127.47	-35.273	-557.75	1,606.33	9,002.03	8,908.89	93.14	96.650		
21,700.00	13,092.00	19,177.00	10,930.61	134.85	127.47	-35.273	-557.75	1,606.33	9,097.65	9,004.60	93.05	97.770		
21,800.00	13,092.00	19,177.00	10,930.61	136.27	127.47	-35.273	-557.75	1,606.33	9,193.37	9,100.40	92.97	98.888		
21,900.00	13,092.00	19,177.00	10,930.61	137.70	127.47	-35.273	-557.75	1,606.33	9,289.18	9,196.29	92.89	100.004		
22,000.00	13,092.00	19,177.00	10,930.61	139.12	127.47	-35.273	-557.75	1,606.33	9,385.08	9,292.26	92.81	101.117		
22,100.00	13,092.00	19,177.00	10,930.61	140.55	127.47	-35.273	-557.75	1,606.33	9,481.06	9,388.31	92.75	102.226		
22,200.00	13,092.00	19,177.00	10,930.61	141.98	127.47	-35.273	-557.75	1,606.33	9,577.12	9,484.44	92.68	103.333		
22,300.00	13,092.00	19,177.00	10,930.61	143.40	127.47	-35.273	-557.75	1,606.33	9,673.26	9,580.64	92.62	104.437		
22,400.00	13,092.00	19,177.00	10,930.61	144.83	127.47	-35.273	-557.75	1,606.33	9,769.48	9,676.91	92.57	105.538		
22,500.00	13,092.00	19,177.00	10,930.61	146.26	127.47	-35.273	-557.75	1,606.33	9,865.78	9,773.26	92.52	106.636		
22,600.00	13,092.00	19,177.00	10,930.61	147.69	127.47	-35.273	-557.75	1,606.33	9,962.15	9,869.67	92.47	107.730		
22,700.00	13,092.00	19,177.00	10,930.61	149.11	127.47	-35.273	-557.75	1,606.33	10,058.59	9,966.15	92.43	108.822		
22,728.24	13,092.00	19,177.00	10,930.61	149.52	127.47	-35.273	-557.75	1,606.33	10,085.84	9,993.41	92.42	109.130		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

													Offset Site Error:	0.00 usf
urvey Progr Refe	ram: 18 rence	8-MWD+HDG Off		Semi M	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	62.87	9.87	1.00	1.00	-0.343	7,906.64	-47.30	7,906.79					
100.00	100.00	181.49	128.49	1.08	1.04	-0.346	7,906.35	-47.80	7,906.54	7,904.42	2.12	3,725.091		
200.00	200.00	275.59	222.59	1.60	1.17	-0.351	7,906.03	-48.48	7,906.21	7,903.45	2.77	2,857.692		
300.00	300.00	368.22	315.21	2.01	1.37	-0.357	7,905.80	-49.29	7,905.97 7,905.83	7,902.59	3.38	2,339.782 1,993.128		
400.00 500.00	400.00 500.00	460.73 556.53	407.72 503.52	2.35 2.65	1.61 1.90	-0.363 -0.369	7,905.67 7,905.61	-50.11 -50.92	7,905.83	7,901.86 7,901.22	3.97 4.55	1,737.761		
600.00	600.00	658.21	605.19	2.93	2.21	-0.375	7,905.54	-51.80	7,905.72	7,900.58	5.14	1,538.040		
700.00	700.00	755.66	702.64	3.18	2.53	-0.382	7,905.48	-52.69	7,905.65	7,899.95	5.71	1,384.972		
747.87	747.87	800.90	747.87	3.29	2.68	-0.385	7,905.47	-53.12	7,905.65	7,899.68	5.97	1,324.198		
800.00	800.00	850.16	797.13	3.41	2.84	-0.389	7,905.47	-53.61	7,905.66	7,899.40	6.26	1,263.407		
900.00	900.00	950.46	897.43	3.64	3.18	-0.396	7,905.51	-54.64	7,905.70	7,898.89	6.82	1,159.504		
1,000.00	1,000.00	1,053.86	1,000.82	3.85	3.54	-0.404	7,905.52	-55.70	7,905.71	7,898.33	7.38	1,070.852		
1,020.62	1,020.62	1,075.17	1,022.13	3.89	3.61	-0.405	7,905.51	-55.92	7,905.71	7,898.21	7.50	1,054.452		
1,100.00	1,100.00	1,139.86	1,086.82	4.05	3.83	-0.411	7,905.58	-56.64	7,905.80	7,897.92	7.88	1,003.194		
1,200.00	1,200.00	1,239.62	1,186.56	4.24	4.18	-0.421	7,905.74	-58.05	7,905.96	7,897.55	8.42	939.019		
1,300.00	1,300.00	1,337.26	1,284.20	4.43	4.50	-0.426	7,905.92	-58.84	7,906.15	7,897.22	8.93	885.331		
1,400.00	1,400.00	1,425.00	1,371.94	4.61	4.80	-0.423	7,906.11	-58.39	7,906.37	7,896.97	9.40	840.836		
1,500.00	1,500.00	1,494.26	1,441.19	4.78	5.02	-0.417	7,906.45	-57.51	7,906.88	7,897.07	9.80	806.597		
1,600.00	1,599.98	1,557.11	1,504.03	4.98	5.23	-170.388	7,907.07	-56.56	7,909.57	7,899.38	10.20	775.739		
1,620.70	1,620.67	1,570.11	1,517.03	4.99	5.27	-170.384	7,907.24	-56.35	7,910.62	7,900.37	10.25	771.694		
1,700.00	1,699.89	1,614.00	1,560.91	5.07	5.41	-170.381	7,907.89	-55.58	7,915.10	7,904.62	10.48	755.356		
1,800.00	1,799.81	1,711.15	1,658.02	5.23	5.74	-170.373	7,909.57	-53.80	7,920.97	7,910.01	10.96	722.843		
1,900.00	1,899.72	1,803.00	1,749.85	5.41	6.04	-170.365	7,911.29	-52.08	7,926.98	7,915.54	11.44	692.819		
2,000.00	1,999.63	1,852.37	1,799.19	5.60	6.21	-170.359	7,912.40	-51.00	7,933.35	7,921.55	11.80	672.470		
2,100.00	2,099.54	1,903.44	1,850.22	5.80	6.38	-170.352	7,913.85	-49.57	7,940.33	7,928.16	12.17	652.446		
2,200.00	2,199.45	1,993.00	1,939.66	6.02	6.69	-170.332	7,917.17	-46.26	7,948.11	7,935.42	12.69	626.549		
2,300.00	2,299.36	2,018.59	1,965.20	6.24	6.78	-170.325	7,918.25	-45.17	7,956.11	7,943.12	12.99	612.444		
2,400.00	2,399.27	2,123.82	2,070.23	6.47	7.14	-170.296	7,922.66	-40.39	7,964.42	7,950.84	13.58	586.400		
2,500.00	2,499.18	2,220.23	2,166.44	6.72	7.47	-170.267	7,926.65	-35.65	7,972.69	7,958.54	14.15	563.389		
2,600.00	2,599.10	2,305.70	2,251.71	6.96	7.77	-170.238	7,930.31	-31.11	7,981.09	7,966.40	14.69	543.270		
2,700.00	2,699.01	2,390.39	2,336.18	7.22	8.07	-170.208	7,934.09	-26.27	7,989.68	7,974.45	15.23	524.449		
2,800.00	2,798.92	2,472.66	2,418.21	7.48	8.36	-170.176	7,937.93	-21.33	7,998.47	7,982.70	15.78	506.976		
2,900.00	2,898.83	2,561.00	2,506.27	7.74	8.67	-170.141	7,942.25	-15.80	8,007.49	7,991.14	16.35	489.876		
3,000.00	2,998.74	2,713.92	2,658.69	8.01	9.21	-170.076	7,949.32	-5.65	8,016.27	7,999.12	17.16	467.280		
3,100.00	3,098.65	2,882.07	2,826.33	8.28	9.81	-170.003	7,955.50	5.80	8,023.99	8,005.96	18.02	445.161		
3,200.00	3,198.56	2,954.68	2,898.76	8.56	10.07	-169.974	7,958.09	10.27	8,031.70	8,013.14	18.55	432.886		
3,300.00	3,298.47	3,033.00	2,976.90	8.84	10.35	-169.947	7,961.15	14.64	8,039.74	8,020.63	19.11	420.784		
3,400.00	3,398.39	3,106.28	3,050.04	9.13	10.61	-169.927	7,964.23	17.93	8,048.08	8,028.44	19.64	409.711		
3,500.00	3,498.30	3,185.86	3,129.51	9.41	10.89	-169.915	7,967.77	20.22	8,056.67	8,036.47	20.21	398.735		
3,600.00	3,598.21	3,258.15	3,201.71	9.70	11.15	-169.912	7,971.18	21.28	8,065.54	8,044.79	20.74	388.823		
3,700.00	3,698.12	3,324.01	3,267.47	9.99	11.39	-169.908	7,974.56	22.26	8,074.80	8,053.54	21.26	379.820		
3,800.00	3,798.03	3,565.18	3,508.33	10.29	12.25	-169.892	7,985.77	26.34	8,083.87	8,061.45	22.42	360.589		
3,900.00	3,897.94	3,630.84	3,573.93	10.58	12.48	-169.886	7,988.26	27.59	8,091.80	8,068.86	22.94	352.746		
4,000.00	3,997.85	3,979.53	3,922.47	10.88	13.72	-169.880	7,996.34	31.05	8,097.89	8,073.41	24.48	330.782		
4,100.00 4,200.00	4,097.76 4,197.68	4,073.00 4,144.01	4,015.93 4,086.93	11.18 11.48	14.05 14.30	-169.885 -169.888	7,997.39 7,998.34	31.12 31.19	8,103.15 8,108.59	8,078.05 8,082.94	25.11 25.65	322.767 316.105		
4,300.00	4,297.59	4,238.45	4,181.36	11.78	14.63	-169.893	7,999.66	31.13	8,114.14	8,087.85	26.28	308.722		
4,400.00	4,397.50	4,236.45	4,161.36	12.08	14.03	-169.899	8,000.97	30.93	8,119.78	8,092.89	26.28	301.959		
4,500.00	4,497.41	20,630.00	12,553.55	12.06	125.62	-131.889	-200.46	281.06	8,060.70	7,984.51	76.19	105.794		
4,600.00	4,597.32	20,630.00	12,553.55	12.59	125.62	-131.889	-200.46	281.06	7,960.78	7,884.43	76.19	103.794		
4,700.00	4,697.23	20,630.00	12,553.55	13.00	125.62	-131.889	-200.46	281.06	7,860.87	7,784.36	76.51	102.746		
4,800.00	4,797.14	20,630.00	12,553.55	13.31	125.62	-131.889	-200.46	281.06	7,760.95	7,684.28	76.67	101.226		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	sigii.		4 00111	03H - OH /									Offset Site Error:	0.00 usf
Survey Progr	ram: 18 rence	8-MWD+HDG Off		Somi M	laior Axis		Offset Wellb	oro Contro	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,900.00	4,897.05	20,630.00	12,553.55	13.62	125.62	-131.889	-200.46	281.06	7,661.04	7,584.21	76.83	99.709		
5,000.00	4,996.97	20,630.00	12,553.55	13.92	125.62	-131.889	-200.46	281.06	7,561.13	7,484.13	77.00	98.195		
5,100.00	5,096.88	20,630.00	12,553.55	14.23	125.62	-131.889	-200.46	281.06	7,461.23	7,384.06	77.17	96.685		
5,200.00	5,196.79	20,630.00	12,553.55	14.55	125.62	-131.889	-200.46	281.06	7,361.32	7,283.98	77.34	95.178		
5,300.00	5,296.70	20,630.00	12,553.55	14.86	125.62	-131.889	-200.46	281.06	7,261.42	7,183.91	77.52	93.674		
5,400.00	5,396.61	20,660.10	12,553.13	15.17	126.02	-128.330	-230.56	281.29	7,161.35	7,083.42	77.93	91.893		
5,500.00	5,496.52	20,661.25	12,553.12	15.48	126.04	-128.184	-231.70	281.30	7,061.44	6,983.32	78.12	90.391		
5,600.00	5,596.43	20,662.41	12,553.11	15.79	126.06	-128.035	-232.86	281.31	6,961.53	6,883.22	78.31	88.893		
5,700.00	5,696.34	20,663.60	12,553.09	16.11	126.07	-127.882	-234.05	281.32	6,861.63	6,783.12	78.51	87.400		
5,800.00	5,796.26	20,664.80	12,553.08	16.42	126.09	-127.725	-235.26	281.33	6,761.72	6,683.02	78.71	85.911		
5,900.00	5,896.17	20,666.03	12,553.07	16.74	126.10	-127.564	-236.48	281.34	6,661.82	6,582.91	78.91	84.426		
6,000.00	5,996.08	20,667.29	12,553.06	17.05	126.12	-127.400	-237.74	281.35	6,561.92	6,482.81	79.11	82.945		
6,100.00	6,095.99	20,668.56	12,553.05	17.37	126.14	-127.231	-239.01	281.36	6,462.03	6,382.71	79.32	81.469		
6,200.00	6,195.90	20,669.86	12,553.04	17.68	126.16	-127.058	-240.31	281.37	6,362.13	6,282.60	79.53	79.998		
6,300.00	6,295.81	20,671.19	12,553.03	18.00	126.17	-126.880	-241.64	281.39	6,262.24	6,182.50	79.74	78.532		
6,400.00	6,395.72	20,672.54	12,553.02	18.32	126.19	-126.698	-242.99	281.40	6,162.35	6,082.40	79.96	77.071		
6,500.00	6,495.63	20,673.92	12,553.01	18.63	126.21	-126.511	-244.37	281.41	6,062.47	5,982.29	80.18	75.614		
6,600.00	6,595.55	20,675.33	12,553.00	18.95	126.23	-126.319	-245.78	281.42	5,962.58	5,882.19	80.40	74.163		
6,700.00	6,695.46	20,676.76	12,552.99	19.27	126.25	-126.122	-247.21	281.43	5,862.71	5,782.08	80.62	72.717		
6,800.00	6,795.37	20,678.22	12,552.98	19.59	126.27	-125.919	-248.67	281.45	5,762.83	5,681.98	80.85	71.277		
6,900.00	6,895.28	20,679.72	12,552.97	19.91	126.29	-125.711	-250.17	281.46	5,662.96	5,581.87	81.08	69.842		
7,000.00	6,995.19	20,681.24	12,552.97	20.23	126.31	-125.496	-251.69	281.47	5,563.09	5,481.77	81.32	68.412		
7,100.00	7,095.10	20,682.80	12,552.96	20.54	126.33	-125.276	-253.25	281.49	5,463.22	5,381.67	81.55	66.989		
7,200.00	7,195.01	20,684.38	12,552.95	20.86	126.35	-125.049	-254.83	281.50	5,363.36	5,281.57	81.80	65.571		
7,300.00	7,294.92	20,686.01	12,552.95	21.18	126.37	-124.815	-256.46	281.51	5,263.50	5,181.46	82.04	64.158		
7,400.00	7,394.84	20,687.67	12,552.94	21.50	126.40	-124.575	-258.12	281.53	5,163.65	5,081.36	82.29	62.752		
7,500.00	7,494.75	20,689.36	12,552.93	21.82	126.42	-124.327	-259.81	281.54	5,063.80	4,981.27	82.54	61.352		
7,600.00	7,594.66	20,691.09	12,552.93	22.14	126.44	-124.071	-261.54	281.56	4,963.96	4,881.17	82.79	59.958		
7,700.00	7,694.57	20,692.86	12,552.92	22.46	126.47	-123.808	-263.31	281.58	4,864.12	4,781.07	83.05	58.570		
7,800.00	7,794.48	20,694.67	12,552.92	22.78	126.49	-123.536	-265.12	281.59	4,764.29	4,680.98	83.31	57.188		
7,900.00	7,894.39	20,696.52	12,552.92	23.10	126.51	-123.255	-266.97	281.61	4,664.46	4,580.89	83.57	55.813		
8,000.00	7,994.30	20,698.41	12,552.92	23.42	126.54	-122.966	-268.86	281.63	4,564.64	4,480.80	83.84	54.445		
8,100.00	8,094.21	20,724.00	12,552.97	23.75	126.88	-118.777	-294.45	281.87	4,464.95	4,380.65	84.31	52.962		
8,200.00	8,194.13	20,724.00	12,552.97	24.07	126.88	-118.777	-294.45	281.87	4,365.13	4,280.56	84.56	51.619		
8,300.00	8,294.04	20,724.00	12,552.97	24.39	126.88	-118.777	-294.45	281.87	4,265.31	4,180.48	84.83	50.283		
8,400.00	8,393.95	20,724.00	12,552.97	24.71	126.88	-118.777	-294.45	281.87	4,165.49	4,080.40	85.09	48.953		
8,500.00	8,493.86	20,724.00	12,552.97	25.03	126.88	-118.777	-294.45	281.87	4,065.69	3,980.33	85.36	47.630		
8,600.00	8,593.77	20,724.00	12,552.97	25.35	126.88	-118.777	-294.45	281.87	3,965.90	3,880.27	85.63	46.314		
8,700.00	8,693.68	20,724.00	12,552.97	25.67	126.88	-118.777	-294.45	281.87	3,866.12	3,780.21	85.91	45.004		
8,800.00	8,793.59	20,724.00	12,552.97	26.00	126.88	-118.777	-294.45	281.87	3,766.34	3,680.16	86.18	43.701		
8,900.00	8,893.50	20,724.00	12,552.97	26.32	126.88	-118.777	-294.45	281.87	3,666.59	3,580.12	86.47	42.405		
9,000.00	8,993.42	20,724.00	12,552.97	26.64	126.88	-118.777	-294.45	281.87	3,566.84	3,480.09	86.75	41.115		
9,100.00	9,093.33	20,724.00	12,552.97	26.96	126.88	-118.777	-294.45	281.87	3,467.11	3,380.07	87.04	39.833		
9,200.00	9,193.24	20,726.85	12,552.99	27.29	126.92	-118.278	-297.30	281.90	3,367.40	3,280.04	87.36	38.547		
9,300.00	9,293.15	20,733.39	12,553.02	27.61	127.01	-117.105	-303.84	281.97	3,267.69	3,179.98	87.71	37.255		
9,400.00	9,393.06	20,739.75	12,553.05	27.93	127.10	-115.928	-310.20	282.05	3,168.00	3,079.93	88.07	35.972		
9,500.00	9,492.97	20,745.94	12,553.07	28.25	127.18	-114.747	-316.39	282.13	3,068.31	2,979.88	88.43	34.698		
9,600.00	9,592.88	20,751.98	12,553.09	28.58	127.26	-113.565	-322.42	282.21	2,968.64	2,879.85	88.79	33.434		
9,700.00	9,692.79	20,757.85	12,553.10	28.90	127.34	-112.380	-328.30	282.30	2,868.98	2,779.82	89.16	32.178		
9,800.00	9,792.71	20,763.58	12,553.11	29.22	127.42	-111.196	-334.02	282.39	2,769.33	2,679.80	89.53	30.932		
9,900.00	9,892.62	20,769.16	12,553.12	29.55	127.49	-110.013	-339.60	282.48	2,669.70	2,579.80	89.91	29.694		
10,000.00	9,992.53	20,774.60	12,553.12	29.87	127.57	-108.832	-345.04	282.57	2,570.10	2,479.81	90.29	28.465		







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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore OH

Reference Design: Plan 1 08-31-22 Local Co-ordinate Reference:

Well El Campeon Fed Com 513H RKB @ 3200.50usft (TBD) TVD Reference: MD Reference: RKB @ 3200.50usft (TBD)

Grid North Reference:

Minimum Curvature **Survey Calculation Method:** Output errors are at 2.00 sigma

Database: **USA Compass** Offset TVD Reference: Reference Datum

Cattlemen Fed Com - 403H - OH / 68704 - Surveys (H&P 656) Offset Design: Offset Site Error: 0.00 usft 188-MWD+HDGM 1.00 usft Offset
Vertical Offset Well Error: Survey Program: Reference Rule Assigned: Semi Major Axis ence Offset Offset Wellbore Centre Dietano Measured Highside Minimum Separation Warning +N/-S +E/-W Depth Depth Depth Depth Toolface Centres Ellipses Separation Factor (usft) (usft) (usft) (usft) (usft) (usft) (usft) (usft) (°) (usft) (usft) (usft) 12,553.12 282.67 10,092.44 127.64 -107.654 -350.35 2,470.51 27.245 10,100.00 20,779.91 30.19 2,379.84 90.68 10.200.00 10.192.35 20.785.09 30.52 127.71 -106.480 -355.53 282.77 2.370.95 2.279.88 91.07 26.034 -360.58 24.832 10,300.00 10,292.26 20,790.14 12,553.12 30.84 127.78 -105.311 282.87 2,271.42 2,179.95 91.47 10 400 00 10 392 17 20 795 08 12 553 11 31 16 127 84 -104 149 -365 52 282 97 2 171 93 2 080 04 91 88 23 638 10,492.08 12,553.10 10,500.00 20,799.90 31.49 127.91 -102.994 -370.34 283.07 2,072.47 1,980.17 92.30 22.453 10,600.00 10,592.00 20,804.61 12,553.09 31.81 127.97 -101.847 -375.04 283.17 1,973.06 1,880.32 92.74 21.276 10.691.91 20.809.21 12,553.08 128.03 -100.709 -379.64 1.780.52 10,700.00 32.13 283.28 1.873.70 93.18 20.108 10,800.00 10,791.82 20,813.70 12,553.06 32.46 128.09 -99.581 -384.14 283.38 1,774.41 1,680.76 93.64 18.949 10.891.73 20,818.10 12.553.05 32.78 128.15 -98.464 -388.53 283.49 1,675.18 1.581.06 94.12 17.798 10,900.00 11.000.00 10.991.64 20.822.40 12.553.03 33.11 128.21 -97.358 -392.83 283.60 1.576.05 1.481.42 94.63 16.655 1,477.04 1,381.97 11,100.00 11,091.55 20,818.00 12,553.05 -98.489 -388.43 283.49 15.536 33.43 128.15 95.07 20.827.21 33.75 128.28 -96.105 -397.64 283.72 1.378.14 95.70 14.401 11.200.00 11.191.46 12.553.02 1.282.44 11.300.00 11.291.37 20.830.41 12 553 01 34 08 128 32 -95 264 -400 84 283 80 1.279.41 1 183 10 96.31 13 284 11,400.00 11,391.29 20,833.68 12,553.01 34.40 128.36 -94.396 -404.11 283.89 1,180.88 1,083.89 96.99 12.176 11,500.00 11,491.20 20,837.04 12,553.00 34.73 128.41 -93.499 -407.47 283.98 1,082.61 984.86 97.75 11.075 20.840.49 128.46 -92.573 -410.92 11.600.00 11.591.11 12.553.00 35.05 284.08 984.68 886.04 98.64 9.983 20.844.03 11.700.00 11.691.02 12.553.00 35.38 128.50 -91.617 -414.45 284.18 887.19 787.50 99.69 8.899 11,800.00 11,790.93 20,847.66 12,553.00 35.70 128.55 -90.630 -418.08 284.29 790.31 689.31 101.00 7.825 11 900 00 11 890 84 20 851 38 12 553 00 36.03 128 60 -89 611 -421 80 284 40 694 30 591 61 102 69 6 761 11,898.38 284.41 687.10 20,851.67 12,553.00 128.61 -89.533 -422.09 584.27 102.84 6.682 11,907.54 36.05 12,000.00 11,990.80 20,853.89 12,553.01 36.33 128.64 -83.493 -424.31 284.47 599.59 494.61 104.98 5.712 573.18 12.028.24 12.019.04 20.854.05 12.553.01 36.36 128.64 88.015 -424 47 284.48 467 41 105.78 5.419 12,100.00 12,090.80 20,854.16 12,553.01 36.36 128.64 88.043 -424.57 284.48 507.01 398.77 108.24 4.684 12,200.00 12.190.80 20.854.30 12.553.01 36.36 128.64 88.084 -424.72 284.49 417.87 304.72 113.15 3.693 284.49 12.300.00 12.290.80 20.854.45 12.553.01 36.36 128.65 88.125 -424.87 334.92 214.23 120.69 2.775 12,390.80 2.006 12,400.00 20,854.61 12,553.01 36.37 128.65 88.168 -425.03 284.50 264.07 132.43 131.64 -425.19 12,500.00 12,490.80 20,854.77 12,553.01 36.37 128.65 88.211 284.50 217.47 74.49 142.97 1.521 12 528 24 12 519 04 20 854 81 12 553 01 36.37 128 65 88 224 -425 23 284 50 211 13 66 24 144 89 1.457 Level 3 12,550.00 12,540.79 20,855.25 12,553.01 36.40 128.66 -91.345 -425.67 284.52 208.74 63.05 145.70 1.433 Level 3 12,561.96 12,552.74 20,855.83 12,553.01 36.46 128.66 -91.221 -426.24 284.53 208.40 62.52 145.88 1.429 Level 3, CC, ES, SF 12.600.00 12.590.61 20.859.29 12.553.02 36.63 128.71 -89.927 -429.70 284.64 211.84 66.67 145.17 1.459 Level 3 -438.03 12,650.00 12,639.89 20,867.61 12,553.04 36.95 128.82 -86.195 284.91 226.01 84.25 141.76 1.594 12,700.00 12,688.24 20,880.26 12,553.10 37.29 129.00 -80.345 -450.66 285.34 248.86 112.01 136.85 1.818 12.750.00 12.735.30 20.897.20 12.553.22 37.62 129.23 -72.854 -467.59 285.96 277.52 145.68 131.84 2.105 12,800.00 12,780.72 20,918.40 12,553.42 37.96 129.51 -64.509 -488.77 286.80 309.50 182.02 127.49 2.428 12,850.00 12,824.15 20,943.58 12,553.68 38.29 129.86 -56.243 -513.93 287.82 342.93 218.91 124.02 2.765 12,900.00 12.865.26 20.972.42 12.553.97 38 60 130 25 -48 779 -542 75 288 98 376.45 255 07 121.39 3.101 12,950.00 12,903.73 20,991.00 12,554.16 38.90 130.50 -43.670 -561.31 289.74 409.30 290.03 119.27 3.432 13,000.00 12,939.27 20,991.00 12,554.16 39.18 130.50 -40.647 -561.31 289.74 442.77 325.46 117.31 3.774 13.050.00 12.971.62 20.991.00 12.554.16 39.43 130.50 -37.702-561.31 289.74 476.87 361.25 115.62 4.124 13,100.00 13,000.52 20,991.00 12,554.16 39.65 130.50 -34.902 -561.31 289.74 511.24 397.09 114.15 4.479 -561.31 545.60 13,150.00 13,025.76 20,991.00 39.85 130.50 -32.287 289.74 432.76 112.83 4.835 12,554.16 13.200.00 13 047 14 20 991 00 12 554 16 40.02 130.50 -29 881 -561 31 289 74 579 70 468 07 111 62 5 193 -561.31 13,250.00 13,064.50 20,991.00 12,554.16 40.15 130.50 -27.691 289.74 613.35 502.86 110.49 5.551 13,300.00 13,077.71 20,991.00 12,554.16 40.26 130.50 -25.714 -561.31 289.74 646.39 536.98 109.41 5.908 13.350.00 13.086.67 20.991.00 12.554.16 40.33 130.50 -23.939 -561.31 289.74 678.66 570.31 108.35 6.263 -561.31 13,400.00 13,091.30 20,991.00 12,554.16 40.38 130.50 -22.354 289.74 710.06 602.75 107.31 6.617 20,991.00 130.50 -561.31 727.36 13,428.24 13,092.00 12,554.16 40.39 -21.536 289.74 620.66 106.70 6.817 13.500.00 13.092.00 20.991.00 12.554.16 40.40 130.50 -21.536 -561.31 289.74 773.00 667.85 105.15 7.351 13,600.00 13,092.00 20,991.00 12,554.16 40.43 130.50 -21.536 -561.31 289.74 842.70 739.62 103.08 8.175 13,092.00 20,991.00 13,700.00 12,554.16 40.46 130.50 -21.536 -561.31 289.74 918.01 816.81 101.20 9.071 13,800.00 13,092.00 20,991.00 40.50 130.50 -21.536 -561.31 289.74 997.68 898.13 99.54 10.022 12,554.16







 Company:
 Titus Oil & Gas Production, LLC

 Project:
 Lea County, NM - (NAD83 NME)

 Reference Site:
 El Campeon Fed Com (NAD83)

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g			03H - OH /	00704-0	odiveys (rich							Offset Site Error:	0.00 usf
Survey Progr	ram: 18 rence	8-MWD+HDG Off		Somi N	laior Axis		Offset Wellbe	oro Contro	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,900.00	13,092.00	20,991.00	12,554.16	40.53	130.50	-21.536	-561.31	289.74	1,080.72	982.63	98.10	11.017		
14,000.00	13,092.00	20,991.00	12,554.16	40.58	130.50	-21.536	-561.31	289.74	1,166.44	1,069.59	96.85	12.044		
14,100.00	13,092.00	20,991.00	12,554.16	40.63	130.50	-21.536	-561.31	289.74	1,254.27	1,158.49	95.77	13.096		
14,200.00	13,092.00	20,991.00	12,554.16	40.69	130.50	-21.536	-561.31	289.74	1,343.80	1,248.95	94.85	14.168		
14,300.00	13,092.00	20,991.00	12,554.16	40.76	130.50	-21.536	-561.31	289.74	1,434.71	1,340.66	94.05	15.255		
14,400.00	13,092.00	20,991.00	12,554.16	40.85	130.50	-21.536	-561.31	289.74	1,526.76	1,433.40	93.36	16.353		
14,500.00	13,092.00	20,991.00	12,554.16	40.95	130.50	-21.536	-561.31	289.74	1,619.76	1,526.99	92.76	17.461		
14,600.00	13,092.00	20,991.00	12,554.16	41.10	130.50	-21.536	-561.31	289.74	1,713.54	1,621.30	92.24	18.576		
14,700.00	13,092.00	20,991.00	12,554.16	41.29	130.50	-21.536	-561.31	289.74	1,807.99	1,716.20	91.79	19.696		
14,800.00	13,092.00	20,991.00	12,554.16	41.57	130.50	-21.536	-561.31	289.74	1,903.01	1,811.61	91.40	20.821		
14,900.00	13,092.00	20,991.00	12,554.16	41.99	130.50	-21.536	-561.31	289.74	1,998.51	1,907.46	91.05	21.949		
15,000.00	13,092.00	20,991.00	12,554.16	42.60	130.50	-21.536	-561.31	289.74	2,094.44	2,003.68	90.75	23.079		
15,100.00	13,092.00	20,991.00	12,554.16	43.42	130.50	-21.536	-561.31	289.74	2,190.72	2,100.24	90.49	24.211		
15,200.00	13,092.00	20,991.00	12,554.16	44.43	130.50	-21.536	-561.31	289.74	2,287.33	2,197.08	90.25	25.344		
15,300.00	13,092.00	20,991.00	12,554.16	45.56	130.50	-21.536	-561.31	289.74	2,384.22	2,294.17	90.05	26.477		
15,400.00	13,092.00	20,991.00	12,554.16	46.76	130.50	-21.536	-561.31	289.74	2,481.35	2,391.48	89.87	27.612		
15,500.00	13,092.00	20,991.00	12,554.16	48.01	130.50	-21.536	-561.31	289.74	2,578.70	2,488.99	89.71	28.746		
15,600.00	13,092.00	20,991.00	12,554.16	49.30	130.50	-21.536	-561.31	289.74	2,676.25	2,586.68	89.57	29.880		
15,700.00	13,092.00	20,991.00	12,554.16	50.61	130.50	-21.536	-561.31	289.74	2,773.97	2,684.53	89.44	31.013		
15,800.00	13,092.00	20,991.00	12,554.16	51.93	130.50	-21.536	-561.31	289.74	2,871.85	2,782.51	89.34	32.146		
15,900.00	13,092.00	20,991.00	12,554.16	53.27	130.50	-21.536	-561.31	289.74	2,969.87	2,880.63	89.24	33.278		
16,000.00	13,092.00	20,991.00	12,554.16	54.61	130.50	-21.536	-561.31	289.74	3,068.02	2,978.86	89.16	34.409		
16,100.00	13,092.00	20,991.00	12,554.16	55.97	130.50	-21.536	-561.31	289.74	3,166.28	3,077.19	89.09	35.539		
16,200.00	13,092.00	20,991.00	12,554.16	57.33	130.50	-21.536	-561.31	289.74	3,264.65	3,175.62	89.03	36.668		
16,300.00	13,092.00	20,991.00	12,554.16	58.69	130.50	-21.536	-561.31	289.74	3,363.12	3,274.14	88.98	37.795		
16,400.00	13,092.00	20,991.00	12,554.16	60.06	130.50	-21.536	-561.31	289.74	3,461.67	3,372.73	88.94	38.920		
16,500.00	13,092.00	20,991.00	12,554.16	61.44	130.50	-21.536	-561.31	289.74	3,560.31	3,471.40	88.91	40.044		
16,600.00	13,092.00	20,991.00	12,554.16	62.81	130.50	-21.536	-561.31	289.74	3,659.02	3,570.13	88.88	41.167		
16,700.00	13,092.00	20,991.00	12,554.16	64.20	130.50	-21.536	-561.31	289.74	3,757.79	3,668.93	88.86	42.287		
16,800.00	13,092.00	20,991.00	12,554.16	65.58	130.50	-21.536	-561.31	289.74	3,856.63	3,767.78	88.85	43.406		
16,900.00	13,092.00	20,991.00	12,554.16	66.97	130.50	-21.536	-561.31	289.74	3,955.53	3,866.69	88.84	44.523		
17,000.00	13,092.00	20,991.00	12,554.16	68.36	130.50	-21.536	-561.31	289.74	4,054.48	3,965.64	88.84	45.638		
17,100.00	13,092.00	20,991.00	12,554.16	69.75	130.50	-21.536	-561.31	289.74	4,153.49	4,064.64	88.84	46.750		
17,200.00	13,092.00	20,991.00	12,554.16	71.14	130.50	-21.536	-561.31	289.74	4,252.53	4,163.68	88.85	47.861		
17,300.00	13,092.00	20,991.00	12,554.16	72.54	130.50	-21.536	-561.31	289.74	4,351.63	4,262.76	88.86	48.970		
17,400.00	13,092.00	20,991.00	12,554.16	73.94	130.50	-21.536	-561.31	289.74	4,450.76	4,361.88	88.88	50.076		
17,500.00	13,092.00	20,991.00	12,554.16	75.34	130.50	-21.536	-561.31	289.74	4,549.93	4,461.03	88.90	51.180		
17,600.00	13,092.00	20,991.00	12,554.16	76.74	130.50	-21.536	-561.31	289.74	4,649.14	4,560.21	88.92	52.282		
17,700.00	13,092.00	20,991.00	12,554.16	78.14	130.50	-21.536	-561.31	289.74	4,748.38	4,659.42	88.95	53.381		
17,800.00	13,092.00	20,991.00	12,554.16	79.55	130.50	-21.536	-561.31	289.74	4,847.65	4,758.66	88.98	54.478		
17,900.00	13,092.00	20,991.00	12,554.16	80.95	130.50	-21.536	-561.31	289.74	4,946.95	4,857.93	89.02	55.572		
18,000.00	13,092.00	20,991.00	12,554.16	82.36	130.50	-21.536	-561.31	289.74	5,046.28	4,957.22	89.06	56.664		
18,100.00	13,092.00	20,991.00	12,554.16	83.76	130.50	-21.536	-561.31	289.74	5,145.63	5,056.54	89.10	57.754		
18,200.00	13,092.00	20,991.00	12,554.16	85.17	130.50	-21.536	-561.31	289.74	5,245.01	5,155.87	89.14	58.840		
18,300.00 18,400.00	13,092.00 13,092.00	20,991.00	12,554.16 12,554.16	86.58 87.99	130.50 130.50	-21.536 -21.536	-561.31 -561.31	289.74 289.74	5,344.41 5,443.84	5,255.23 5,354.60	89.19 89.23	59.925 61.006		
18,500.00 18,600.00	13,092.00 13,092.00	20,991.00	12,554.16 12,554.16	89.40 90.81	130.50 130.50	-21.536 -21.536	-561.31 -561.31	289.74 289.74	5,543.28 5,642.74	5,454.00 5,553.41	89.29 89.34	62.085 63.161		
18,700.00	13,092.00	20,991.00	12,554.16	90.81	130.50	-21.536	-561.31	289.74	5,742.23	5,652.83	89.34 89.39	64.235		
18,800.00	13,092.00	20,991.00	12,554.16	93.64	130.50	-21.536	-561.31	289.74	5,742.23	5,752.27	89.45	65.305		
18,900.00	13,092.00	20,991.00	12,554.16	95.04	130.50	-21.536	-561.31	289.74	5,941.25	5,851.73	89.51	66.373		
19,000.00	13,092.00	20,991.00	12,554.16	96.47	130.50	-21.536	-561.31	289.74	6,040.78	5,951.20	89.58	67.438		







 Company:
 Titus Oil & Gas Production, LLC

 Project:
 Lea County, NM - (NAD83 NME)

 Reference Site:
 El Campeon Fed Com (NAD83)

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

urvey Prog Refe	ram: 18	8-MWD+HDG Off		Sami N	lajor Axis		Offset Wellb	ore Centre	Diet	Rule Assi tance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,100.00	13,092.00	20,991.00	12,554.16	97.89	130.50	-21.536	-561.31	289.74	6,140.33	6,050.69	89.64	68.500		
19,200.00	13,092.00	20,991.00	12,554.16	99.30	130.50	-21.536	-561.31	289.74	6,239.89	6,150.18	89.71	69.559		
19,300.00	13,092.00	20,991.00	12,554.16	100.72	130.50	-21.536	-561.31	289.74	6,339.47	6,249.69	89.78	70.615		
19,400.00	13,092.00	20,991.00	12,554.16	102.14	130.50	-21.536	-561.31	289.74	6,439.06	6,349.21	89.85	71.668		
19,500.00	13,092.00	20,991.00	12,554.16	103.55	130.50	-21.536	-561.31	289.74	6,538.66	6,448.74	89.92	72.718		
19,600.00	13,092.00	20,991.00	12,554.16	104.97	130.50	-21.536	-561.31	289.74	6,638.27	6,548.28	89.99	73.766		
10,000.00	10,002.00	20,001.00	12,001.10	101.01	100.00	21.000	001.01	200	0,000.27	0,010.20	00.00	70.700		
19,700.00	13,092.00	20,991.00	12,554.16	106.39	130.50	-21.536	-561.31	289.74	6,737.90	6,647.83	90.07	74.810		
19,800.00	13,092.00	20,991.00	12,554.16	107.81	130.50	-21.536	-561.31	289.74	6,837.53	6,747.39	90.14	75.851		
19,900.00	13,092.00	20,991.00	12,554.16	109.23	130.50	-21.536	-561.31	289.74	6,937.18	6,846.96	90.22	76.889		
20,000.00	13,092.00	20,991.00	12,554.16	110.65	130.50	-21.536	-561.31	289.74	7,036.84	6,946.53	90.30	77.924		
20,100.00	13,092.00	20,991.00	12,554.16	112.07	130.50	-21.536	-561.31	289.74	7,136.50	7,046.12	90.39	78.955		
20,200.00	13,092.00	20,991.00	12,554.16	113.49	130.50	-21.536	-561.31	289.74	7,236.18	7,145.71	90.47	79.984		
20,300.00	13,092.00	20,991.00	12,554.16	114.91	130.50	-21.536	-561.31	289.74	7,335.86	7,245.31	90.56	81.009		
20,400.00	13,092.00	20,991.00	12,554.16	116.34	130.50	-21.536	-561.31	289.74	7,435.56	7,344.92	90.64	82.032		
20,500.00	13,092.00	20,991.00	12,554.16	117.76	130.50	-21.536	-561.31	289.74	7,535.26	7,444.53	90.73	83.051		
20,600.00	13,092.00	20,991.00	12,554.16	119.18	130.50	-21.536	-561.31	289.74	7,634.97	7,544.15	90.82	84.067		
20,700.00	13,092.00	20,991.00	12,554.16	120.60	130.50	-21.536	-561.31	289.74	7,734.68	7,643.77	90.91	85.079		
20,800.00	13,092.00	20,991.00	12,554.16	122.03	130.50	-21.536	-561.31	289.74	7,834.41	7,743.40	91.00	86.089		
20,900.00	13,092.00	20,991.00	12,554.16	123.45	130.50	-21.536	-561.31	289.74	7,934.14	7,843.04	91.10	87.095		
21,000.00	13,092.00	20,991.00	12,554.16	124.87	130.50	-21.536	-561.31	289.74	8,033.88	7,942.68	91.19	88.098		
21,100.00	13,092.00	20,991.00	12,554.16	126.30	130.50	-21.536	-561.31	289.74	8,133.62	8,042.33	91.29	89.097		
21,200.00	13,092.00	20,991.00	12,554.16	127.72	130.50	-21.536	-561.31	289.74	8,233.37	8,141.98	91.39	90.093		
21,300.00	13,092.00	20,991.00	12,554.16	129.15	130.50	-21.536	-561.31	289.74	8,333.13	8,241.64	91.49	91.086		
21,400.00	13,092.00	20,991.00	12,554.16	130.57	130.50	-21.536	-561.31	289.74	8,432.89	8,341.30	91.59	92.076		
21,500.00	13,092.00	20,991.00	12,554.16	132.00	130.50	-21.536	-561.31	289.74	8,532.66	8,440.97	91.69	93.062		
21,600.00	13,092.00	20,991.00	12,554.16	133.42	130.50	-21.536	-561.31	289.74	8,632.43	8,540.64	91.79	94.045		
21,700.00	13,092.00	20,991.00	12,554.16	134.85	130.50	-21.536	-561.31	289.74	8,732.21	8,640.31	91.89	95.024		
21,800.00	13,092.00	20,991.00	12,554.16	136.27	130.50	-21.536	-561.31	289.74	8,831.99	8,739.99	92.00	96.000		
21,900.00	13,092.00	20,991.00	12,554.16	137.70	130.50	-21.536	-561.31	289.74	8,931.78	8,839.67	92.11	96.973		
22,000.00	13,092.00	20,991.00	12,554.16	139.12	130.50	-21.536	-561.31	289.74	9,031.57	8,939.36	92.21	97.942		
22,100.00	13,092.00	20,991.00	12,554.16	140.55	130.50	-21.536	-561.31	289.74	9,131.37	9,039.05	92.32	98.908		
22,200.00	13,092.00	20,991.00	12,554.16	141.98	130.50	-21.536	-561.31	289.74	9,231.17	9,138.74	92.43	99.871		
22,300.00	13,092.00	20,991.00	12,554.16	143.40	130.50	-21.536	-561.31	289.74	9,330.97	9,238.43	92.54	100.830		
22,400.00	13,092.00	20,991.00	12,554.16	144.83	130.50	-21.536	-561.31	289.74	9,430.78	9,338.13	92.65	101.785		
22,500.00	13,092.00	20,991.00	12,554.16	146.26	130.50	-21.536	-561.31	289.74	9,530.60	9,437.83	92.77	102.738		
22,600.00	13,092.00	20,991.00	12,554.16	147.69	130.50	-21.536	-561.31	289.74	9,630.42	9,537.54	92.88	103.686		
22,700.00	13,092.00	20,991.00	12,554.16	149.11	130.50	-21.536	-561.31	289.74	9,730.24	9,637.24	93.00	104.632		
22,728.24	13,092.00	20,991.00	12,554.16	149.52	130.50	-21.536	-561.31	289.74	9,758.43	9,665.40	93.03	104.898		







Well El Campeon Fed Com 513H

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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD) Grid North Reference:

Survey Calculation Method: Minimum Curvature Output errors are at 2.00 sigma **USA Compass** Database:

Offset TVD Reference: Reference Datum

	nce Vertical	4-MWD+HDGI	М											
Measured V	Vertical	Off								Rule Assi	gned:		Offset Well Error:	1.00 usft
		Measured	set Vertical	Semi N Reference	lajor Axis Offset	Highside	Offset Wellbo	ore Centre	Dist Between	tance Between	Minimum	Separation	Warning	
	Depth	Depth	Depth	Reference	Oliset	Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor	vvarning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.00	0.00	55.16	0.16	1.00	1.00	-9.797	7,890.15	-1,362.40	8,006.92					
100.00	100.00	154.00	99.00	1.08	1.03	-9.803	7,890.01	-1,363.21	8,006.91	8,004.80	2.11	3,794.734		
200.00	200.00	255.29	200.28	1.60	1.16	-9.811	7,889.84	-1,364.31	8,006.93	8,004.17	2.76	2,900.228		
300.00	300.00	363.65	308.64	2.01	1.40	-9.816	7,889.64	-1,365.09	8,006.87	8,003.46	3.41	2,348.022		
400.00	400.00	474.35	419.33	2.35	1.70	-9.820	7,889.36	-1,365.60	8,006.70	8,002.65	4.05	1,974.957		
500.00	500.00	574.00	518.98	2.65	2.00	-9.824	7,888.96	-1,366.12	8,006.40	8,001.74	4.66	1,719.933		
600.00	600.00	670.08	615.06	2.93	2.31	-9.829	7,888.59	-1,366.69	8,006.12	8,000.89	5.23	1,530.128		
700.00	700.00	754.00	698.98	3.18	2.58	-9.833	7,888.40	-1,367.25	8,006.01	8,000.26	5.76	1,390.431		
725.44	725.44	780.47	725.44	3.24	2.67	-9.834	7,888.37	-1,367.44	8,006.01	8,000.10	5.91	1,355.789		
800.00	800.00	849.10	794.07	3.41	2.90	-9.838	7,888.31	-1,367.89	8,006.04	7,999.73	6.31	1,268.909		
900.00	900.00	934.00	878.98	3.64	3.18	-9.841	7,888.33	-1,368.40	8,006.16	7,999.35	6.82	1,174.324		
	1,000.00	1,028.40	973.37	3.85	3.50	-9.844	7,888.49	-1,368.85	8,006.42	7,999.07	7.34	1,090.184		
	1,100.00	1,119.00	1,063.97	4.05	3.80	-9.846	7,888.82	-1,369.11	8,006.83	7,998.98	7.85	1,019.857		
	1,200.00	1,279.57	1,224.54	4.24	4.35	-9.848	7,888.91	-1,369.46	8,006.93	7,998.34	8.59	932.231		
	1,213.05	1,301.27	1,246.24	4.27	4.42	-9.848	7,888.82	-1,369.51	8,006.89	7,998.20	8.69	921.687		
1,300.00	1,300.00	1,322.75	1,267.73	4.43	4.49	-9.847	7,889.01	-1,369.28	8,007.03	7,998.11	8.92	897.785		
1,400.00	1,400.00	1,372.62	1,317.59	4.61	4.66	-9.841	7,889.49	-1,368.60	8,007.74	7,998.48	9.27	864.277		
	1,500.00	1,454.00	1,398.92	4.78	4.93	-9.824	7,891.14	-1,366.41	8,009.21	7,999.50	9.71	824.643		
1,600.00	1,599.98	1,480.53	1,425.42	4.98	5.02	-179.802	7,891.87	-1,365.48	8,012.78	8,002.79	9.99	801.949		
1,620.70	1,620.67	1,495.50	1,440.37	4.99	5.07	-179.798	7,892.30	-1,364.95	8,014.03	8,003.98	10.05	797.104		
1,700.00	1,699.89	1,552.82	1,497.63	5.07	5.26	-179.782	7,894.04	-1,362.93	8,019.26	8,008.93	10.33	776.433		
	1,799.81	1,643.00	1,587.70	5.23	5.56	-179.756	7,897.09	-1,359.75	8,026.19	8,015.41	10.78	744.389		
	1,899.72	1,730.62	1,675.21	5.41	5.85	-179.731	7,900.16	-1,356.73	8,033.25	8,022.00	11.25	713.750		
	1,999.63	1,831.00	1,775.49	5.60	6.19	-179.704	7,903.47	-1,353.45	8,040.17	8,028.38	11.79	682.228		
	2,099.54 2,199.45	1,897.88 1,956.45	1,842.27	5.80 6.02	6.42 6.62	-179.683 -179.658	7,905.89 7,908.46	-1,350.85 -1,347.78	8,047.31 8,054.97	8,035.09 8,042.34	12.22 12.63	658.729 637.785		
2,200.00	2,199.40	1,930.43	1,900.71	0.02	0.02	-179.036	7,900.40	-1,547.70	0,054.97	0,042.34	12.03	037.763		
2,300.00	2,299.36	2,019.00	1,963.04	6.24	6.84	-179.626	7,911.68	-1,343.68	8,063.14	8,050.07	13.07	617.106		
2,400.00	2,399.27	2,111.77	2,055.41	6.47	7.16	-179.572	7,916.83	-1,336.85	8,071.60	8,057.98	13.62	592.556		
2,500.00	2,499.18	2,208.00	2,151.21	6.72	7.50	-179.514	7,922.21	-1,329.49	8,080.07	8,065.87	14.20	569.106		
2,600.00	2,599.10	2,297.24	2,240.03	6.96	7.82	-179.459	7,927.31	-1,322.45	8,088.62	8,073.86	14.76	548.000		
2,700.00	2,699.01	2,383.37	2,325.73	7.22	8.13	-179.404	7,932.40	-1,315.50	8,097.35	8,082.03	15.32	528.619		
0.000.00	0.700.00	0.400.44	0.404.04	7.40	0.40	170.010	7.000.00	4.007.00	0.400.40	0.000.05	45.00	500.040		
	2,798.92	2,482.41	2,424.24	7.48	8.48	-179.340	7,938.38	-1,307.30	8,106.18	8,090.25	15.93	508.816		
	2,898.83	2,583.63	2,524.91	7.74	8.85	-179.273	7,944.51	-1,298.68	8,115.00	8,098.44	16.56	490.070		
	2,998.74	2,836.82 3,098.08	2,776.84	8.01 8.28	9.77	-179.109 -178.996	7,957.58	-1,277.11 -1,261.86	8,123.07 8 128 67	8,105.32	17.75	457.573		
	3,098.65 3,198.56	3,098.08	3,037.51 3,161.68	8.28 8.56	10.70 11.14	-178.996 -178.993	7,964.26 7,964.97	-1,261.86	8,128.67 8,133.38	8,109.71 8,113.70	18.96 19.68	428.628 413.330		
0,200.00	5,.55.55	0,222.20	5,.51.00	0.00		5.555	.,504.01	.,201.40	0,.00.00	5,.75.75	10.00			
3,300.00	3,298.47	3,322.13	3,261.55	8.84	11.48	-178.994	7,965.42	-1,261.53	8,138.04	8,117.74	20.31	400.756		
3,400.00	3,398.39	3,411.34	3,350.76	9.13	11.80	-178.993	7,965.89	-1,261.43	8,142.76	8,121.86	20.90	389.560		
3,500.00	3,498.30	3,498.37	3,437.79	9.41	12.10	-178.989	7,966.56	-1,260.88	8,147.64	8,126.14	21.49	379.074		
3,600.00	3,598.21	3,592.44	3,531.85	9.70	12.43	-178.981	7,967.48	-1,259.84	8,152.64	8,130.53	22.11	368.686		
3,700.00	3,698.12	3,690.15	3,629.54	9.99	12.77	-178.971	7,968.52	-1,258.47	8,157.68	8,134.93	22.75	358.619		
3 900 00	2 700 02	2 0 4 7 0 7	2 707 25	40.00	12.22	170 056	7 000 70	1 250 42	0 160 47	0 120 00	22.50	245.070		
	3,798.03	3,847.97	3,787.35	10.29	13.32	-178.956	7,969.72	-1,256.42	8,162.47	8,138.88 8,142.32	23.59	345.970		
	3,897.94	3,961.43 4,044.10	3,900.80	10.58 10.88	13.72 14.01	-178.952 -178.948	7,969.76 7,969.91	-1,255.69 -1,255.09	8,166.60 8,170.88	8,142.32	24.28 24.87	336.295 328.556		
	3,997.85 4,097.76	4,134.43	3,983.46 4,073.80	11.18	14.01	-178.943	7,970.28	-1,255.09	8,175.36	8,149.87	25.48	320.806		
	4,197.68	4,235.90	4,075.26	11.48	14.68	-178.937	7,970.28	-1,254.32	8,179.85	8,153.71	26.14	312.913		
7,200.00	2, 107.00	7,200.00	7,110.20	11.40	1-4.00	-110.001	1,310.10	-1,200.41	0,170.00	0,100.71	20.14	012.010		
4,300.00	4,297.59	4,336.33	4,275.69	11.78	15.03	-178.932	7,971.09	-1,252.71	8,184.33	8,157.54	26.80	305.428		
	4,397.50	4,435.89	4,375.25	12.08	15.38	-178.928	7,971.45	-1,252.17	8,188.81	8,161.36	27.45	298.317		
4,500.00	4,497.41	4,584.19	4,523.54	12.39	15.90	-178.922	7,971.67	-1,251.23	8,193.10	8,164.83	28.28	289.759		
4,600.00	4,597.32	20,579.00	12,681.74	12.69	124.74	114.874	-162.62	-1,044.12	8,154.53	8,077.37	77.15	105.695		
4,700.00	4,697.23	20,579.00	12,681.74	13.00	124.74	114.874	-162.62	-1,044.12	8,055.56	7,978.22	77.35	104.149		
1.005	. 70	00 5== =:	10.05: =:		40 : = :	444		404: :-	7.05	7.0		100.555		
4,800.00	4,797.14	20,579.00	12,681.74	13.31	124.74	114.874	-162.62	-1,044.12	7,956.63	7,879.08	77.55	102.606		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g			52211-0117	00033 - 0	Surveys (H&F	023)						Offset Site Error:	0.00 usf
Survey Prog	ram: 15	4-MWD+HDG	M set	Somi N	laior Axis		Offset Wellb	oro Contro	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,900.00	4,897.05	20,579.00	12,681.74	13.62	124.74	114.874	-162.62	-1,044.12	7,857.72	7,779.97	77.75	101.066		
5,000.00	4,996.97	20,579.00	12,681.74	13.92	124.74	114.874	-162.62	-1,044.12	7,758.84	7,680.88	77.95	99.530		
5,100.00	5,096.88	20,579.00	12,681.74	14.23	124.74	114.874	-162.62	-1,044.12	7,659.98	7,581.82	78.17	97.997		
5,200.00	5,196.79	20,579.00	12,681.74	14.55	124.74	114.874	-162.62	-1,044.12	7,561.16	7,482.78	78.38	96.467		
5,300.00	5,296.70	20,579.00	12,681.74	14.86	124.74	114.874	-162.62	-1,044.12	7,462.37	7,383.77	78.60	94.941		
5,400.00	5,396.61	20,579.00	12,681.74	15.17	124.74	114.874	-162.62	-1,044.12	7,363.61	7,284.79	78.82	93.419		
5,500.00	5,496.52	20,579.00	12,681.74	15.48	124.74	114.874	-162.62	-1,044.12	7,264.89	7,185.84	79.05	91.901		
5,600.00	5,596.43	20,579.00	12,681.74	15.79	124.74	114.874	-162.62	-1,044.12	7,166.20	7,086.92	79.28	90.387		
5,700.00	5,696.34	20,579.00	12,681.74	16.11	124.74	114.874	-162.62	-1,044.12	7,067.55	6,988.03	79.52	88.877		
5,800.00	5,796.26	20,579.00	12,681.74	16.42	124.74	114.874	-162.62	-1,044.12	6,968.93	6,889.17	79.76	87.371		
5,900.00	5,896.17	20,579.00	12,681.74	16.74	124.74	114.874	-162.62	-1,044.12	6,870.36	6,790.35	80.01	85.870		
6,000.00	5,996.08	20,579.00	12,681.74	17.05	124.74	114.874	-162.62	-1,044.12	6,771.83	6,691.57	80.26	84.373		
6,100.00	6,095.99	20,579.00	12,681.74	17.37	124.74	114.874	-162.62	-1,044.12	6,673.34	6,592.82	80.52	82.881		
6,200.00	6,195.90	20,579.00	12,681.74	17.68	124.74	114.874	-162.62	-1,044.12	6,574.90	6,494.12	80.78	81.393		
6,300.00	6,295.81	20,579.00	12,681.74	18.00	124.74	114.874	-162.62	-1,044.12	6,476.50	6,395.46	81.05	79.911		
6,400.00	6,395.72	20,579.00	12,681.74	18.32	124.74	114.874	-162.62	-1,044.12	6,378.16	6,296.84	81.32	78.433		
6,500.00	6,495.63	20,579.00	12,681.74	18.63	124.74	114.874	-162.62	-1,044.12	6,279.86	6,198.27	81.60	76.960		
6,600.00	6,595.55	20,579.00	12,681.74	18.95	124.74	114.874	-162.62	-1,044.12	6,181.63	6,099.74	81.88	75.493		
6,700.00	6,695.46	20,579.00	12,681.74	19.27	124.74	114.874	-162.62	-1,044.12	6,083.45	6,001.27	82.17	74.031		
6,800.00	6,795.37	20,579.00	12,681.74	19.59	124.74	114.874	-162.62	-1,044.12	5,985.33	5,902.85	82.47	72.575		
6,900.00	6,895.28	20,616.30	12,681.09	19.91	125.24	113.066	-199.86	-1,046.16	5,886.76	5,803.67	83.09	70.848		
7,000.00	6,995.19	20,617.16	12,681.09	20.23	125.25	113.025	-200.71	-1,046.20	5,788.75	5,705.34	83.41	69.402		
7,100.00	7,095.10	20,618.03	12,681.09	20.54	125.26	112.982	-201.59	-1,046.24	5,690.80	5,607.06	83.74	67.962		
7,200.00	7,195.01	20,618.94	12,681.08	20.86	125.27	112.938	-202.49	-1,046.28	5,592.92	5,508.86	84.07	66.528		
7,300.00	7,294.92	20,619.88	12,681.08	21.18	125.28	112.893	-203.43	-1,046.33	5,495.13	5,410.72	84.41	65.099		
7,400.00	7,394.84	20,620.84	12,681.08	21.50	125.30	112.845	-204.40	-1,046.37	5,397.41	5,312.65	84.76	63.677		
7,500.00	7,494.75	20,621.84	12,681.08	21.82	125.31	112.797	-205.39	-1,046.41	5,299.78	5,214.65	85.12	62.262		
7,600.00	7,594.66	20,622.88	12,681.08	22.14	125.32	112.746	-206.43	-1,046.46	5,202.23	5,116.74	85.49	60.852		
7,700.00	7,694.57	20,623.95	12,681.08	22.46	125.34	112.694	-207.50	-1,046.50	5,104.78	5,018.91	85.87	59.449		
7,800.00	7,794.48	20,625.06	12,681.08	22.78	125.35	112.640	-208.60	-1,046.55	5,007.43	4,921.17	86.26	58.053		
7,900.00	7,894.39	20,626.21	12,681.08	23.10	125.37	112.584	-209.75	-1,046.60	4,910.18	4,823.53	86.66	56.663		
8,000.00	7,994.30	20,627.40	12,681.08	23.42	125.38	112.526	-210.94	-1,046.65	4,813.05	4,725.99	87.07	55.281		
8,100.00	8,094.21	20,628.63	12,681.08	23.75	125.40	112.466	-212.18	-1,046.70	4,716.04	4,628.55	87.49	53.905		
8,200.00	8,194.13	20,629.92	12,681.09	24.07	125.42	112.403	-213.46	-1,046.75	4,619.15	4,531.23	87.92	52.537		
8,300.00	8,294.04	20,631.25	12,681.09	24.39	125.43	112.338	-214.79	-1,046.80	4,522.39	4,434.02	88.37	51.175		
8,400.00	8,393.95	20,632.64	12,681.10	24.71	125.45	112.271	-216.18	-1,046.86	4,425.78	4,336.95	88.83	49.821		
8,500.00	8,493.86	20,634.08	12,681.11	25.03	125.47	112.200	-217.62	-1,046.91	4,329.32	4,240.01	89.31	48.475		
8,600.00	8,593.77	20,635.58	12,681.12	25.35	125.49	112.127	-219.12	-1,046.97	4,233.03	4,143.22	89.80	47.136		
8,700.00	8,693.68	20,637.15	12,681.13	25.67	125.51	112.050	-220.68	-1,047.03	4,136.90	4,046.59	90.32	45.805		
8,800.00	8,793.59	20,638.78	12,681.15	26.00	125.53	111.970	-222.32	-1,047.09	4,040.97	3,950.12	90.84	44.482		
8,900.00	8,893.50	20,640.49	12,681.17	26.32	125.56	111.887	-224.02	-1,047.15	3,945.23	3,853.84	91.39	43.168		
9,000.00	8,993.42	20,642.27	12,681.19	26.64	125.58	111.800	-225.80	-1,047.21	3,849.71	3,757.75	91.96	41.862		
9,100.00	9,093.33	20,674.00	12,681.90	26.96	126.00	110.244	-257.51	-1,048.08	3,754.76	3,661.93	92.83	40.449		
9,200.00	9,193.24	20,674.00	12,681.90	27.29	126.00	110.244	-257.51	-1,048.08	3,659.67	3,566.24	93.43	39.171		
9,300.00	9,293.15	20,674.00	12,681.90	27.61	126.00	110.244	-257.51 -257.51	-1,048.08 -1,048.08	3,564.85	3,470.80	94.05	37.902 36.643		
9,400.00	9,393.06	20,674.00	12,681.90	27.93	126.00	110.244	-257.51	-1,048.08	3,470.33	3,375.62	94.71	36.643		
9,500.00	9,492.97	20,674.00	12,681.90	28.25	126.00	110.244	-257.51	-1,048.08	3,376.12	3,280.73	95.39	35.393		
9,600.00	9,592.88	20,674.00	12,681.90	28.58	126.00	110.244	-257.51	-1,048.08	3,282.25	3,186.15	96.11	34.152		
9,700.00	9,692.79	20,674.00	12,681.90	28.90	126.00	110.244	-257.51	-1,048.08	3,188.76	3,091.90	96.86	32.922		
9,800.00	9,792.71	20,674.00	12,681.90	29.22	126.00	110.244	-257.51	-1,048.08	3,095.67	2,998.02	97.65	31.703		
9,900.00	9,892.62	20,674.00	12,681.90	29.55	126.00	110.244	-257.51	-1,048.08	3,003.03	2,904.55	98.47	30.495		
10,000.00	9,992.53	20,674.00	12,681.90	29.87	126.00	110.244	-257.51	-1,048.08	2,910.87	2,811.52	99.35	29.299		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Survey Prog	ram: 15	4-MWD+HDG	M							Rule Assi	anod:		Offset Well Error:	1.00 ust
	ram: 10 rence		set	Semi M	lajor Axis		Offset Wellb	ore Centre	Dist	ance	gnea:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,100.00	10,092.44	20,674.00	12,681.90	30.19	126.00	110.244	-257.51	-1,048.08	2,819.25	2,718.97	100.27	28.115		
10,200.00	10,192.35	20,674.00	12,681.90	30.52	126.00	110.244	-257.51	-1,048.08	2,728.21	2,626.96	101.25	26.945		
10,300.00	10,292.26	20,680.12	12,682.10	30.84	126.08	109.943	-263.63	-1,048.20	2,637.83	2,535.48	102.35	25.773		
10,400.00	10,392.17	20,691.64	12,682.46	31.16	126.24	109.375	-275.14	-1,048.43	2,548.13	2,444.56	103.57	24.603		
10,500.00	10,492.08	20,702.58	12,682.78	31.49	126.38	108.833	-286.07	-1,048.66	2,459.19	2,354.33	104.85	23.453		
10,600.00	10,592.00	20,712.99	12,683.07	31.81	126.52	108.317	-296.48	-1,048.87	2,371.10	2,264.89	106.21	22.324		
10,700.00	10,691.91	20,722.90	12,683.32	32.13	126.65	107.824	-306.39	-1,049.07	2,283.96	2,176.31	107.65	21.216		
10,800.00	10,791.82	20,732.36	12,683.55	32.46	126.78	107.354	-315.83	-1,049.27	2,197.89	2,088.71	109.18	20.130		
10,900.00	10,891.73	20,741.38	12,683.75	32.78	126.90	106.903	-324.85	-1,049.45	2,113.02	2,002.21	110.81	19.069		
11,000.00	10,991.64	20,750.00	12,683.94	33.11	127.02	106.472	-333.47	-1,049.63	2,029.50	1,916.96	112.54	18.034		
11,100.00	11,091.55	20,758.25	12,684.10	33.43	127.13	106.060	-341.71	-1,049.80	1,947.51	1,833.13	114.38	17.027		
11,200.00	11,191.46	20,766.14	12,684.25	33.75	127.23	105.664	-349.60	-1,049.97	1,867.25	1,750.91	116.33	16.051		
11,300.00	11,291.37	20,773.71	12,684.38	34.08	127.33	105.284	-357.17	-1,050.13	1,788.95	1,670.53	118.41	15.108		
11,400.00	11,391.29	20,780.09	12,684.49	34.40	127.42	104.963	-363.55	-1,050.26	1,712.88	1,592.28	120.60	14.203		
11,500.00	11,491.20	20,786.76	12,684.60	34.73	127.51	104.628	-370.22	-1,050.40	1,639.37	1,516.45	122.92	13.337		
11,600.00	11,591.11	20,793.29	12,684.70	35.05	127.60	104.300	-376.74	-1,050.53	1,568.76	1,443.41	125.35	12.515		
11,700.00	11,691.02	20,799.68	12,684.79	35.38	127.68	103.978	-383.13	-1,050.66	1,501.48	1,373.60	127.88	11.741		
11,800.00	11,790.93	20,805.93	12,684.88	35.70	127.77	103.663	-389.38	-1,050.79	1,437.98	1,307.50	130.48	11.021		
11,900.00	11,890.84	20,812.05	12,684.97	36.03	127.85	103.355	-395.50	-1,050.91	1,378.79	1,245.68	133.11	10.358		
11,907.54	11,898.38	20,812.51	12,684.97	36.05	127.85	103.332	-395.96	-1,050.92	1,374.52	1,241.20	133.31	10.311		
12,000.00	11,990.80	20,816.45	12,685.02	36.33	127.91	101.962	-399.90	-1,051.00	1,324.21	1,188.52	135.69	9.759		
12,028.24	12,019.04	20,817.00	12,685.03	36.36	127.91	-88.412	-400.45	-1,051.01	1,309.65	1,173.27	136.38	9.603		
12,100.00	12,090.80	20,818.01	12,685.05	36.36	127.93	-88.464	-401.46	-1,051.03	1,274.65	1,136.60	138.06	9.233		
12,200.00	12,190.80	20,819.39	12,685.06	36.36	127.95	-88.534	-402.84	-1,051.06	1,231.22	1,090.98	140.24	8.779		
12,300.00	12,290.80	20,820.75	12,685.08	36.36	127.96	-88.603	-404.19	-1,051.08	1,194.59	1,052.44	142.15	8.404		
12,400.00	12,390.80	20,822.08	12,685.10	36.37	127.98	-88.670	-405.52	-1,051.11	1,165.41	1,021.71	143.70	8.110		
12,500.00	12,490.80	20,823.38	12,685.11	36.37	128.00	-88.736	-406.82	-1,051.14	1,144.26	999.44	144.81	7.902		
12,528.24	12,519.04	20,823.74	12,685.12	36.37	128.00	-88.755	-407.19	-1,051.14	1,139.80	994.76	145.04	7.859		
12,550.00	12,540.79	20,824.45	12,685.13	36.40	128.01	92.059	-407.89	-1,051.16	1,136.85	991.65	145.19	7.830		
12,600.00	12,590.61	20,829.28	12,685.18	36.63	128.08	92.329	-412.72	-1,051.25	1,131.72	986.18	145.55	7.776		
12,650.00	12,639.89	20,838.49	12,685.29	36.95	128.20	92.150	-421.93	-1,051.44	1,128.93	983.06	145.87	7.740		
12,687.26	12,676.03	20,848.13	12,685.39	37.20	128.33	91.738	-431.56	-1,051.62	1,128.31	982.24	146.08	7.724 CC, E	S	
12,700.00	12,688.24	20,851.95	12,685.43	37.29	128.38	91.545	-435.39	-1,051.70	1,128.38	982.24	146.14	7.721		
12,750.00	12,735.30	20,867.85	12,685.57	37.62	128.59	90.629	-451.28	-1,052.01	1,129.97	983.59	146.38	7.720 SF		
12,800.00	12,780.72	20,884.43	12,685.65	37.96	128.82	89.509	-467.86	-1,052.38	1,133.53	986.97	146.56	7.734		
12,850.00	12,824.15	20,903.71	12,685.65	38.29	129.07	88.124	-487.14	-1,052.89	1,138.88	992.15	146.73	7.762		
12,900.00	12,865.26	20,929.24	12,685.53	38.60	129.41	86.373	-512.65	-1,053.66	1,145.74	998.82	146.92	7.798		
12,950.00	12,903.73	20,960.93	12,685.37	38.90	129.84	84.345	-544.32	-1,054.62	1,153.69	1,006.54	147.16	7.840		
13,000.00	12,939.27	20,972.00	12,685.32	39.18	129.98	83.041	-555.39	-1,054.96	1,162.61	1,015.43	147.18	7.899		
13,050.00	12,971.62	20,972.00	12,685.32	39.43	129.98	81.985	-555.39	-1,054.96	1,173.02	1,025.97	147.05	7.977		
13,100.00	13,000.52	20,972.00	12,685.32	39.65	129.98	80.780	-555.39	-1,054.96	1,184.86	1,038.01	146.85	8.069		
13,150.00	13,025.76	20,972.00	12,685.32	39.85	129.98	79.438	-555.39	-1,054.96	1,198.00	1,051.41	146.59	8.172		
13,200.00	13,047.14	20,972.00	12,685.32	40.02	129.98	77.975	-555.39	-1,054.96	1,212.30	1,066.03	146.28	8.288		
13,250.00	13,064.50	20,972.00	12,685.32	40.15	129.98	76.406	-555.39	-1,054.96	1,227.61	1,081.71	145.90	8.414		
13,300.00	13,077.71	20,972.00	12,685.32	40.26	129.98	74.751	-555.39	-1,054.96	1,243.79	1,098.32	145.47	8.550		
13,350.00	13,086.67	20,972.00	12,685.32	40.33	129.98	73.028	-555.39	-1,054.96	1,260.67	1,115.68	144.99	8.695		
13,400.00	13,091.30	20,972.00	12,685.32	40.38	129.98	71.257	-555.39	-1,054.96	1,278.10	1,133.64	144.46	8.847		
13,428.24	13,092.00	20,972.00	12,685.32	40.39	129.98	70.244	-555.39	-1,054.96	1,288.14	1,143.99	144.14	8.937		
13,500.00	13,092.00	20,972.00	12,685.32	40.40	129.98	70.244	-555.39	-1,054.96	1,315.48	1,172.27	143.21	9.186		
13,600.00	13,092.00	20,972.00	12,685.32	40.43	129.98	70.244	-555.39	-1,054.96	1,358.99	1,217.39	141.61	9.597		
13,700.00	13,092.00	20,972.00	12,685.32	40.46	129.98	70.244	-555.39	-1,054.96	1,408.28	1,268.54	139.73	10.078		
13,800.00	13,092.00	20,972.00	12,685.32	40.50	129.98	70.244	-555.39	-1,054.96	1,462.75	1,325.08	137.67	10.625		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g			-22n - UH /	00035 - 8	Surveys (H&F	020)						Offset Site Error:	0.00 usft
Survey Prog	ram: 15 rence	4-MWD+HDG	M set	Somi N	aior Axis		Offset Wellb	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,900.00	13,092.00	20,972.00	12,685.32	40.53	129.98	70.244	-555.39	-1,054.96	1,521.84	1,386.36	135.49	11.232		
14,000.00	13,092.00	20,972.00	12,685.32	40.58	129.98	70.244	-555.39	-1,054.96	1,585.05	1,451.79	133.26	11.895		
14,100.00	13,092.00	20,972.00	12,685.32	40.63	129.98	70.244	-555.39	-1,054.96	1,651.90	1,520.87	131.03	12.607		
14,200.00	13,092.00	20,972.00	12,685.32	40.69	129.98	70.244	-555.39	-1,054.96	1,721.96	1,593.13	128.83	13.366		
14,300.00	13,092.00	20,972.00	12,685.32	40.76	129.98	70.244	-555.39	-1,054.96	1,794.86	1,668.16	126.70	14.166		
14,400.00	13,092.00	20,972.00	12,685.32	40.85	129.98	70.244	-555.39	-1,054.96	1,870.27	1,745.61	124.66	15.003		
14,500.00	13,092.00	20,972.00	12,685.32	40.95	129.98	70.244	-555.39	-1,054.96	1,947.90	1,825.18	122.71	15.873		
14,600.00	13,092.00	20,972.00	12,685.32	41.10	129.98	70.244	-555.39	-1,054.96	2,027.48	1,906.61	120.87	16.774		
14,700.00	13,092.00	20,972.00	12,685.32	41.29	129.98	70.244	-555.39	-1,054.96	2,108.81	1,989.67	119.14	17.701		
14,800.00	13,092.00	20,972.00	12,685.32	41.57	129.98	70.244	-555.39	-1,054.96	2,191.68	2,074.17	117.51	18.652		
14,900.00	13,092.00	20,972.00	12,685.32	41.99	129.98	70.244	-555.39	-1,054.96	2,275.92	2,159.95	115.98	19.624		
15,000.00	13,092.00	20,972.00	12,685.32	42.60	129.98	70.244	-555.39	-1,054.96	2,361.40	2,246.85	114.55	20.614		
15,100.00	13,092.00	20,972.00	12,685.32	43.42	129.98	70.244	-555.39	-1,054.96	2,447.98	2,334.76	113.22	21.621		
15,200.00	13,092.00	20,972.00	12,685.32	44.43	129.98	70.244	-555.39	-1,054.96	2,535.54	2,423.56	111.98	22.642		
15,300.00	13,092.00	20,972.00	12,685.32	45.56	129.98	70.244	-555.39	-1,054.96	2,624.00	2,513.17	110.83	23.677		
15,400.00	13,092.00	20,972.00	12,685.32	46.76	129.98	70.244	-555.39	-1,054.96	2,713.25	2,603.50	109.75	24.722		
15,500.00	13,092.00	20,972.00	12,685.32	48.01	129.98	70.244	-555.39	-1,054.96	2,803.23	2,694.48	108.75	25.776		
15,600.00	13,092.00	20,972.00	12,685.32	49.30	129.98	70.244	-555.39	-1,054.96	2,893.87	2,786.05	107.82	26.839		
15,700.00	13,092.00	20,972.00	12,685.32	50.61	129.98	70.244	-555.39	-1,054.96	2,985.11	2,878.15	106.96	27.909		
15,800.00	13,092.00	20,972.00	12,685.32	51.93	129.98	70.244	-555.39	-1,054.96	3,076.89	2,970.74	106.15	28.986		
15,900.00	13,092.00	20,972.00	12,685.32	53.27	129.98	70.244	-555.39	-1,054.96	3,169.17	3,063.77	105.40	30.067		
16,000.00	13,092.00	20,972.00	12,685.32	54.61	129.98	70.244	-555.39	-1,054.96	3,261.91	3,157.20	104.71	31.153		
16,100.00	13,092.00	20,972.00	12,685.32	55.97	129.98	70.244	-555.39	-1,054.96	3,355.06	3,251.00	104.06	32.242		
16,200.00	13,092.00	20,972.00	12,685.32	57.33	129.98	70.244	-555.39	-1,054.96	3,448.59	3,345.14	103.46	33.334		
16,300.00	13,092.00	20,972.00	12,685.32	58.69	129.98	70.244	-555.39	-1,054.96	3,542.48	3,439.59	102.89	34.428		
16,400.00	13,092.00	20,972.00	12,685.32	60.06	129.98	70.244	-555.39	-1,054.96	3,636.70	3,534.33	102.37	35.525		
16,500.00	13,092.00	20,972.00	12,685.32	61.44	129.98	70.244	-555.39	-1,054.96	3,731.21	3,629.33	101.88	36.622		
16,600.00	13,092.00	20,972.00	12,685.32	62.81	129.98	70.244	-555.39	-1,054.96	3,826.01	3,724.58	101.43	37.720		
16,700.00	13,092.00	20,972.00	12,685.32	64.20	129.98	70.244	-555.39	-1,054.96	3,921.06	3,820.05	101.01	38.819		
16,800.00	13,092.00	20,972.00	12,685.32	65.58	129.98	70.244	-555.39	-1,054.96	4,016.35	3,915.74	100.61	39.918		
16,900.00	13,092.00	20,972.00	12,685.32	66.97	129.98	70.244	-555.39	-1,054.96	4,111.87	4,011.62	100.25	41.017		
17,000.00	13,092.00	20,972.00	12,685.32	68.36	129.98	70.244	-555.39	-1,054.96	4,207.59	4,107.69	99.91	42.116		
17,100.00	13,092.00	20,972.00	12,685.32	69.75	129.98	70.244	-555.39	-1,054.96	4,303.51	4,203.93	99.59	43.213		
17,200.00	13,092.00	20,972.00	12,685.32	71.14	129.98	70.244	-555.39	-1,054.96	4,399.62	4,300.32	99.29	44.310		
17,300.00	13,092.00	20,972.00	12,685.32	72.54	129.98	70.244	-555.39	-1,054.96	4,495.89	4,396.87	99.02	45.405		
17,400.00	13,092.00	20,972.00	12,685.32	73.94	129.98	70.244	-555.39	-1,054.96	4,592.32	4,493.56	98.76	46.500		
17,500.00	13,092.00	20,972.00	12,685.32	75.34	129.98	70.244	-555.39	-1,054.96	4,688.90	4,590.38	98.52	47.592		
17,600.00	13,092.00	20,972.00	12,685.32	76.74	129.98	70.244	-555.39	-1,054.96	4,785.62	4,687.32	98.30	48.684		
17,700.00	13,092.00	20,972.00	12,685.32	78.14	129.98	70.244	-555.39	-1,054.96	4,882.47	4,784.38	98.09	49.773		
17,800.00	13,092.00	20,972.00	12,685.32	79.55	129.98	70.244	-555.39	-1,054.96	4,979.45	4,881.54	97.90	50.860		
17,900.00	13,092.00	20,972.00	12,685.32	80.95	129.98	70.244	-555.39	-1,054.96	5,076.54	4,978.82	97.73	51.946		
18,000.00	13,092.00	20,972.00	12,685.32	82.36	129.98	70.244	-555.39	-1,054.96	5,173.75	5,076.18	97.56	53.029		
18,100.00	13,092.00	20,972.00	12,685.32	83.76	129.98	70.244	-555.39	-1,054.96	5,271.06	5,173.65	97.41	54.110		
18,200.00	13,092.00	20,972.00	12,685.32	85.17	129.98	70.244	-555.39	-1,054.96	5,368.47	5,271.19	97.27	55.189		
18,300.00	13,092.00	20,972.00	12,685.32	86.58	129.98	70.244	-555.39	-1,054.96	5,465.97	5,368.82	97.15	56.266		
18,400.00	13,092.00	20,972.00	12,685.32	87.99	129.98	70.244	-555.39	-1,054.96	5,563.56	5,466.53	97.03	57.340		
18,500.00	13,092.00	20,972.00	12,685.32	89.40	129.98	70.244	-555.39	-1,054.96	5,661.24	5,564.32	96.92	58.411		
18,600.00	13,092.00	20,972.00	12,685.32	90.81	129.98	70.244	-555.39	-1,054.96	5,758.99	5,662.17	96.82	59.481		
18,700.00	13,092.00	20,972.00	12,685.32	92.23	129.98	70.244	-555.39	-1,054.96	5,856.82	5,760.09	96.73	60.547		
18,800.00	13,092.00	20,972.00	12,685.32	93.64	129.98	70.244	-555.39	-1,054.96	5,954.72	5,858.07	96.65	61.611		
18,900.00	13,092.00	20,972.00	12,685.32	95.06	129.98	70.244	-555.39	-1,054.96	6,052.69	5,956.12	96.58	62.672		
19,000.00	13,092.00	20,972.00	12,685.32	96.47	129.98	70.244	-555.39	-1,054.96	6,150.73	6,054.22	96.51	63.730		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

ırvey Prog		4-MWD+HDG								Rule Assi	gned:		Offset Well Error:	1.00 us
Refe Measured	erence Vertical	Off Measured	set Vertical	Semi N Reference	fajor Axis Offset	Highside	Offset Wellb	ore Centre	Dist Between	ance Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth			Toolface	+N/-S (usft)	+E/-W (usft)	Centres	Ellipses	Separation	Factor	warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)			(usft)	(usft)	(usft)			
19,100.00	13,092.00	20,972.00	12,685.32	97.89	129.98	70.244	-555.39	-1,054.96	6,248.83	6,152.38	96.45	64.786		
19,200.00	13,092.00	20,972.00	12,685.32	99.30	129.98	70.244	-555.39	-1,054.96	6,346.99	6,250.59	96.40	65.838		
19,300.00	13,092.00	20,972.00	12,685.32	100.72	129.98	70.244	-555.39	-1,054.96	6,445.20	6,348.84	96.36	66.888		
19,400.00	13,092.00	20,972.00	12,685.32	102.14	129.98	70.244	-555.39	-1,054.96	6,543.47	6,447.15	96.32	67.935		
19,500.00 19,600.00	13,092.00 13,092.00	20,972.00 20,972.00	12,685.32 12,685.32	103.55 104.97	129.98 129.98	70.244 70.244	-555.39 -555.39	-1,054.96 -1,054.96	6,641.79 6,740.16	6,545.50 6,643.90	96.29 96.26	68.979 70.020		
19,000.00	13,092.00	20,972.00	12,000.02	104.97	129.90	70.244	-555.59	-1,054.90	0,740.10	0,043.90	90.20	70.020		
19,700.00	13,092.00	20,972.00	12,685.32	106.39	129.98	70.244	-555.39	-1,054.96	6,838.58	6,742.34	96.24	71.058		
19,800.00	13,092.00	20,972.00	12,685.32	107.81	129.98	70.244	-555.39	-1,054.96	6,937.04	6,840.82	96.22	72.093		
19,900.00	13,092.00	20,972.00	12,685.32	109.23	129.98	70.244	-555.39	-1,054.96	7,035.55	6,939.34	96.21	73.125		
20,000.00	13,092.00	20,972.00	12,685.32	110.65	129.98	70.244	-555.39	-1,054.96	7,134.10	7,037.89	96.21	74.154		
20,100.00	13,092.00	20,972.00	12,685.32	112.07	129.98	70.244	-555.39	-1,054.96	7,232.68	7,136.48	96.21	75.180		
20,200.00	13,092.00	20,972.00	12,685.32	113.49	129.98	70.244	-555.39	-1,054.96	7,331.31	7,235.10	96.21	76.203		
20,300.00	13,092.00	20,972.00	12,685.32	114.91	129.98	70.244	-555.39	-1,054.96	7,429.97	7,333.76	96.22	77.222		
20,400.00	13,092.00	20,972.00	12,685.32	116.34	129.98	70.244	-555.39	-1,054.96	7,528.67	7,432.44	96.23	78.239		
20,500.00	13,092.00	20,972.00	12,685.32	117.76	129.98	70.244	-555.39	-1,054.96	7,627.40	7,531.16	96.24	79.252		
20,600.00	13,092.00	20,972.00	12,685.32	119.18	129.98	70.244	-555.39	-1,054.96	7,726.16	7,629.90	96.26	80.263		
20,700.00	13,092.00	20,972.00	12,685.32	120.60	129.98	70.244	-555.39	-1,054.96	7,824.96	7,728.68	96.28	81.270		
20,800.00	13,092.00	20,972.00	12,685.32	122.03	129.98	70.244	-555.39	-1,054.96	7,923.79	7,827.47	96.31	82.274		
20,900.00	13,092.00	20,972.00	12,685.32	123.45	129.98	70.244	-555.39	-1,054.96	8,022.64	7,926.30	96.34	83.274		
21,000.00	13,092.00	20,972.00	12,685.32	124.87	129.98	70.244	-555.39	-1,054.96	8,121.52	8,025.15	96.37	84.272		
21,100.00	13,092.00	20,972.00	12,685.32	126.30	129.98	70.244	-555.39	-1,054.96	8,220.43	8,124.02	96.41	85.266		
21,200.00	13,092.00	20,972.00	12,685.32	127.72	129.98	70.244	-555.39	-1,054.96	8,319.37	8,222.92	96.45	86.257		
21,300.00	13,092.00	20,972.00	12,685.32	129.15	129.98	70.244	-555.39	-1,054.96	8,418.33	8,321.84	96.49	87.245		
21,400.00	13,092.00	20,972.00	12,685.32	130.57	129.98	70.244	-555.39	-1,054.96	8,517.32	8,420.78	96.54	88.229		
21,500.00	13,092.00	20,972.00	12,685.32	132.00	129.98	70.244	-555.39	-1,054.96	8,616.32	8,519.74	96.58	89.211		
21,600.00	13,092.00	20,972.00	12,685.32	133.42	129.98	70.244	-555.39	-1,054.96	8,715.36	8,618.72	96.63	90.189		
21,700.00	13,092.00	20,972.00	12,685.32	134.85	129.98	70.244	-555.39	-1,054.96	8,814.41	8,717.72	96.69	91.164		
21,800.00	13,092.00	20,972.00	12,685.32	136.27	129.98	70.244	-555.39	-1,054.96	8,913.48	8,816.74	96.74	92.135		
21,900.00	13,092.00	20,972.00	12,685.32	137.70	129.98	70.244	-555.39	-1,054.96	9,012.58	8,915.78	96.80	93.103		
22,000.00	13,092.00	20,972.00	12,685.32	139.12	129.98	70.244	-555.39	-1,054.96	9,111.69	9,014.83	96.86	94.068		
22,100.00	13,092.00	20,972.00	12,685.32	140.55	129.98	70.244	-555.39	-1,054.96	9,210.83	9,113.90	96.93	95.030		
22,200.00	13,092.00	20,972.00	12,685.32	141.98	129.98	70.244	-555.39	-1,054.96	9,309.98	9,212.99	96.99	95.988		
22,300.00	13,092.00	20,972.00	12,685.32	143.40	129.98	70.244	-555.39	-1,054.96	9,409.15	9,312.09	97.06	96.943		
22,400.00	13,092.00	20,972.00	12,685.32	144.83	129.98	70.244	-555.39	-1,054.96	9,508.34	9,411.21	97.13	97.895		
22,500.00	13,092.00	20,972.00	12,685.32	146.26	129.98	70.244	-555.39	-1,054.96	9,607.54	9,510.34	97.20	98.843		
22,600.00	13,092.00	20,972.00	12,685.32	147.69	129.98	70.244	-555.39	-1,054.96	9,706.76	9,609.49	97.27	99.788		
22,700.00	13,092.00	20,972.00	12,685.32	149.11	129.98	70.244	-555.39	-1,054.96	9,806.00	9,708.65	97.35	100.730		
22,728.24	13,092.00	20,972.00	12,685.32	149.52	129.98	70.244	-555.39	-1,054.96	9,834.03	9,736.66	97.37	100.995		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

_		4 144/0											Offset Site Error:	0.00 usf
urvey Progr Refe	ram: 15 rence	54-MWD+HDGI Off		Semi M	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	62.94	7.94	1.00	1.00	-10.218	7,889.64	-1,422.12	8,016.79					
100.00	100.00	174.36	119.36	1.08	1.04	-10.218	7,889.44	-1,422.10	8,016.61	8,014.48	2.13	3,766.100		
200.00	200.00	274.01	219.01	1.60	1.20	-10.218	7,889.19	-1,422.11	8,016.37	8,013.57	2.80	2,867.026		
300.00	300.00	380.14	325.14	2.01	1.44	-10.219	7,888.90	-1,422.19	8,016.10	8,012.65	3.45	2,322.882		
400.00 500.00	400.00 500.00	488.92 575.28	433.92 520.27	2.35 2.65	1.74 2.00	-10.222 -10.224	7,888.43 7,888.10	-1,422.50 -1,422.71	8,015.74 8,015.40	8,011.64 8,010.75	4.09 4.65	1,957.636 1,723.129		
300.00	300.00	373.20	320.21	2.03	2.00	-10.224	7,000.10	-1,422.71	0,013.40	6,010.75	4.03	1,723.129		
600.00	600.00	663.00	608.00	2.93	2.27	-10.224	7,887.95	-1,422.68	8,015.23	8,010.03	5.20	1,542.478		
680.14	680.14	735.15	680.14	3.13	2.49	-10.223	7,887.94	-1,422.56	8,015.19	8,009.57	5.62	1,425.594		
700.00	700.00	753.12	698.12	3.18	2.55	-10.223	7,887.95	-1,422.53	8,015.19	8,009.47	5.73	1,399.022		
800.00	800.00	845.00	790.00	3.41	2.84	-10.222	7,888.06	-1,422.36	8,015.28	8,009.02	6.26	1,281.040		
900.00	900.00	959.89	904.88	3.64	3.22	-10.220	7,888.14	-1,422.15	8,015.32	8,008.46	6.86	1,168.983		
1,000.00	1,000.00	1,058.27	1,003.27	3.85	3.55	-10.219	7,888.06	-1,421.97	8,015.21	8,007.81	7.40	1,083.818		
1,013.68	1,013.68	1,068.68	1,013.68	3.87	3.58	-10.219	7,888.06	-1,421.95	8,015.20	8,007.75	7.46	1,074.743		
1,100.00	1,100.00	1,134.39	1,079.39	4.05	3.81	-10.217	7,888.18	-1,421.78	8,015.31	8,007.46	7.85	1,020.698		
1,200.00	1,200.00	1,314.10	1,259.10	4.24	4.41	-10.215	7,887.48	-1,421.27	8,014.73	8,006.08	8.65	926.058		
1,300.00	1,300.00	1,371.35	1,316.34	4.43	4.61	-10.215	7,887.20	-1,421.33	8,014.26	8,005.22	9.03	887.035		
4 000 00	4 000 00	4 000 04	4 000 00	4.50	4.00	10.010	7.007.10	4 404 40	0.044.00	0.005.04	0.40	070.000		
1,338.23	1,338.23	1,393.24	1,338.23	4.50	4.68	-10.216	7,887.16	-1,421.40	8,014.22	8,005.04	9.18	873.206		
1,400.00	1,400.00	1,461.00	1,405.99	4.61	4.91	-10.219	7,887.31	-1,421.79	8,014.44	8,004.92	9.52	841.919		
1,405.99	1,405.99	1,461.00	1,405.99	4.62	4.91	-10.219	7,887.31	-1,421.79	8,014.43	8,004.90	9.53	840.994		
1,500.00 1,600.00	1,500.00	1,461.00 1,529.84	1,405.99	4.78	4.91	-10.219 179.790	7,887.31 7,887.93	-1,421.79 -1,422.61	8,014.99	8,005.29	9.69	826.825 792.535		
1,600.00	1,599.98	1,529.04	1,474.82	4.98	5.14	179.790	7,007.93	-1,422.01	8,017.91	8,007.79	10.12	192.555		
1,620.70	1,620.67	1,539.76	1,484.74	4.99	5.18	179.789	7,888.06	-1,422.77	8,019.04	8,008.88	10.16	789.058		
1,700.00	1,699.89	1,577.74	1,522.71	5.07	5.30	179.785	7,888.68	-1,423.51	8,023.93	8,013.56	10.38	773.379		
1,800.00	1,799.81	1,649.00	1,593.92	5.23	5.54	179.774	7,890.30	-1,425.36	8,030.74	8,019.97	10.77	745.679		
1,900.00	1,899.72	1,695.94	1,640.82	5.41	5.70	179.765	7,891.55	-1,426.85	8,037.98	8,026.88	11.11	723.778		
2,000.00	1,999.63	1,787.82	1,732.61	5.60	6.02	179.745	7,894.00	-1,430.18	8,045.46	8,033.85	11.61	693.020		
2,100.00	2,099.54	1,879.76	1,824.44	5.80	6.33	179.721	7,896.45	-1,434.03	8,053.04	8,040.91	12.13	664.053		
2,200.00	2,199.45	1,971.80	1,916.35	6.02	6.65	179.697	7,898.98	-1,437.93	8,060.71	8,048.05	12.66	636.805		
2,300.00	2,299.36	2,068.05	2,012.48	6.24	6.98	179.672	7,901.71	-1,441.98	8,068.46	8,055.25	13.22	610.552		
2,400.00	2,399.27	2,170.36	2,114.67	6.47	7.34	179.647	7,904.63	-1,446.14	8,076.21	8,062.40	13.80	585.078		
2,500.00	2,499.18	2,257.52	2,201.73	6.72	7.65	179.626	7,907.15	-1,449.56	8,083.97	8,069.63	14.35	563.441		
2,600.00	2,599.10	2,332.92	2,277.03	6.96	7.91	179.609	7,909.54	-1,452.55	8,092.01	8,077.15	14.86	544.648		
2,700.00	2,699.01	2,403.00	2,347.01	7.22	8.16	179.592	7,911.95	-1,455.37	8,100.35	8,084.99	15.35	527.562		
2,800.00	2,798.92	2,489.65	2,433.53	7.48	8.46	179.573	7,915.19	-1,458.77	8,108.94	8,093.02	15.92	509.450		
2,900.00	2,898.83	2,570.59	2,514.35	7.74	8.75	179.556	7,918.44	-1,461.76	8,117.76	8,101.30	16.46	493.051		
3,000.00	2,998.74	2,656.22	2,599.84	8.01	9.05	179.539	7,922.05	-1,464.95	8,126.80	8,109.76	17.03	477.089		
3,100.00	3,098.65	2,743.37	2,686.83	8.28	9.36	179.517	7,925.75	-1,468.81	8,135.98	8,118.37	17.61	461.908		
3,200.00	3,198.56	2,841.38	2,784.63	8.56	9.71	179.489	7,929.94	-1,473.64	8,145.28	8,127.05	18.24	446.619		
3,300.00	3,298.47	2,947.35	2,890.40	8.84	10.09	179.463	7,934.49	-1,478.36	8,154.53	8,135.63	18.89	431.583		
3,400.00	3,398.39	3,146.35	3,089.11	9.13	10.80	179.421	7,942.09	-1,485.92	8,163.25	8,143.35	19.89	410.345		
3,500.00	3,498.30	3,315.61	3,258.20	9.41	11.41	179.386	7,946.76	-1,491.84	8,170.80	8,150.01	20.79	393.070		
3 600 00	3 502 21	3 420 01	3 372 40	0.70	11 92	179 360	7 0/10 21	-1 406 11	8 177 80	8 156 31	21 /19	380 636		
3,600.00 3,700.00	3,598.21 3,698.12	3,429.91 3,532.51	3,372.40 3,474.88	9.70 9.99	11.82 12.18	179.360 179.333	7,949.21 7,951.25	-1,496.11 -1,500.49	8,177.80 8,184.75	8,156.31 8,162.61	21.48 22.14	380.636 369.645		
							7,951.25		8,184.75 8,191.62					
3,800.00	3,798.03 3,897.94	3,644.21 3,764.08	3,586.44 3,706.16	10.29 10.58	12.58 13.01	179.300 179.264	7,953.28 7,955.22	-1,505.70 -1,511.46	8,191.62	8,168.78 8,174.76	22.84 23.56	358.711 347.952		
4,000.00	3,997.85	3,903.34	3,845.33	10.58	13.51	179.204	7,955.22	-1,511.46	8,204.63	8,180.27	24.36	336.832		
,	2,207.00	2,200.01	-,- /0.00	.0.00	. 5.0 1		.,507.00	.,	-,-3	-,	21.00			
4,100.00	4,097.76	4,021.04	3,963.01	11.18	13.93	179.227	7,959.11	-1,517.66	8,210.58	8,185.50	25.08	327.425		
4,200.00	4,197.68	4,132.02	4,073.96	11.48	14.33	179.220	7,960.60	-1,519.05	8,216.34	8,190.57	25.77	318.817		
4,300.00	4,297.59	4,231.41	4,173.33	11.78	14.68	179.213	7,961.89	-1,520.31	8,222.06	8,195.63	26.43	311.132		
4,400.00	4,397.50	4,322.00	4,263.91	12.08	15.00	179.207	7,963.07	-1,521.49	8,227.81	8,200.76	27.05	304.177		
4,500.00	4,497.41	4,400.96	4,342.86	12.39	15.28	179.207	7,964.41	-1,521.87	8,233.76	8,206.14	27.63	298.005		
4,600.00	4,597.32	4,487.60	4,429.48	12.69	15.58	179.213	7,966.28	-1,521.37	8,239.98	8,211.74	28.24	291.811		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma
USA Compass
Reference Datum

	o.g					Surveys (H&F	020)						Offset Site Error:	0.00 usf
Survey Progr	ram: 15 rence	4-MWD+HDG Off		Sami N	laior Axis		Offset Wellb	ore Centre	Diet	Rule Assi tance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,700.00	4,697.23	20,261.59	12,711.02	13.00	118.60	121.983	250.21	-1,684.02	8,202.40	8,126.52	75.88	108.099		
4,800.00	4,797.14	20,263.70	12,711.12	13.31	118.63	121.925	248.10	-1,684.00	8,105.16	8,029.03	76.13	106.463		
4,900.00	4,897.05	20,265.85	12,711.23	13.62	118.65	121.865	245.95	-1,683.98	8,007.99	7,931.60	76.39	104.831		
5,000.00	4,996.97	20,268.05	12,711.35	13.92	118.68	121.804	243.76	-1,683.96	7,910.89	7,834.24	76.65	103.203		
5,100.00	5,096.88	20,305.00	12,713.60	14.23	119.18	120.774	206.88	-1,683.42	7,814.18	7,736.98	77.20	101.225		
5,200.00	5,196.79	20,305.00	12,713.60	14.55	119.18	120.774	206.88	-1,683.42	7,717.18	7,639.72	77.45	99.636		
5,300.00	5,296.70	20,305.00	12,713.60	14.86	119.18	120.774	206.88	-1,683.42	7,620.25	7,542.54	77.72	98.051		
5,400.00	5,396.61	20,305.00	12,713.60	15.17	119.18	120.774	206.88	-1,683.42	7,523.41	7,445.42	77.99	96.470		
5,500.00	5,496.52	20,305.00	12,713.60	15.48	119.18	120.774	206.88	-1,683.42	7,426.65	7,348.39	78.26	94.894		
5,600.00	5,596.43	20,305.00	12,713.60	15.79	119.18	120.774	206.88	-1,683.42	7,329.98	7,251.44	78.54	93.323		
5,700.00	5,696.34	20,305.00	12,713.60	16.11	119.18	120.774	206.88	-1,683.42	7,233.40	7,154.57	78.83	91.757		
5,800.00	5,796.26	20,305.00	12,713.60	16.42	119.18	120.774	206.88	-1,683.42	7,136.91	7,057.78	79.13	90.196		
5,900.00	5,896.17	20,305.00	12,713.60	16.74	119.18	120.774	206.88	-1,683.42	7,040.52	6,961.09	79.43	88.641		
6,000.00	5,996.08	20,305.00	12,713.60	17.05	119.18	120.774	206.88	-1,683.42	6,944.23	6,864.50	79.74	87.090		
6,100.00	6,095.99	20,305.00	12,713.60	17.37	119.18	120.774	206.88	-1,683.42	6,848.05	6,768.00	80.05	85.546		
6,200.00	6,195.90	20,305.00	12,713.60	17.68	119.18	120.774	206.88	-1,683.42	6,751.98	6,671.61	80.37	84.006		
6,300.00	6,295.81	20,305.00	12,713.60	18.00	119.18	120.774	206.88	-1,683.42	6,656.03	6,575.32	80.71	82.473		
6,400.00	6,395.72	20,305.00	12,713.60	18.32	119.18	120.774	206.88	-1,683.42	6,560.20	6,479.15	81.04	80.946		
6,500.00	6,495.63	20,316.59	12,714.40	18.63	119.33	120.448	195.32	-1,683.20	6,464.48	6,383.00	81.48	79.335		
6,600.00	6,595.55	20,328.28	12,715.21	18.95	119.49	120.119	183.66	-1,682.98	6,368.87	6,286.94	81.93	77.734		
6,700.00	6,695.46	20,339.92	12,716.01	19.27	119.64	119.789	172.05	-1,682.78	6,273.38	6,191.00	82.39	76.143		
6,800.00	6,795.37	20,351.51	12,716.81	19.59	119.80	119.459	160.49	-1,682.57	6,178.02	6,095.16	82.86	74.564		
6,900.00	6,895.28	20,363.05	12,717.60	19.91	119.95	119.129	148.98	-1,682.38	6,082.78	5,999.45	83.33	72.995		
7,000.00	6,995.19	21,094.00	12,726.58	20.23	129.79	96.147	-580.79	-1,654.88	5,987.24	5,897.82	89.42	66.954		
7,100.00	7,095.10	21,094.00	12,726.58	20.54	129.79	96.147	-580.79	-1,654.88	5,891.63	5,801.80	89.83	65.585		
7,200.00	7,195.01	21,094.00	12,726.58	20.86	129.79	96.147	-580.79	-1,654.88	5,796.17	5,705.92	90.25	64.223		
7,300.00	7,294.92	21,094.00	12,726.58	21.18	129.79	96.147	-580.79	-1,654.88	5,700.87	5,610.19	90.68	62.866		
7,400.00	7,394.84	21,094.00	12,726.58	21.50	129.79	96.147	-580.79	-1,654.88	5,605.73	5,514.60	91.13	61.517		
7,500.00	7,494.75	21,094.00	12,726.58	21.82	129.79	96.147	-580.79	-1,654.88	5,510.76	5,419.18	91.58	60.174		
7,600.00	7,594.66	21,094.00	12,726.58	22.14	129.79	96.147	-580.79	-1,654.88	5,415.97	5,323.92	92.05	58.838		
7,700.00	7,694.57	21,094.00	12,726.58	22.46	129.79	96.147	-580.79	-1,654.88	5,321.37	5,228.84	92.53	57.509		
7,800.00	7,794.48	21,094.00	12,726.58	22.78	129.79	96.147	-580.79	-1,654.88	5,226.97	5,133.95	93.03	56.187		
7,900.00	7,894.39	21,094.00	12,726.58	23.10	129.79	96.147	-580.79	-1,654.88	5,132.79	5,039.25	93.54	54.873		
8,000.00	7,994.30	21,094.00	12,726.58	23.42	129.79	96.147	-580.79	-1,654.88	5,038.83	4,944.76	94.07	53.566		
8,100.00	8,094.21	21,094.00	12,726.58	23.75	129.79	96.147	-580.79	-1,654.88	4,945.11	4,850.50	94.61	52.267		
8,200.00	8,194.13	21,094.00	12,726.58	24.07	129.79	96.147	-580.79	-1,654.88	4,851.64	4,756.46	95.17	50.977		
8,300.00	8,294.04	21,094.00	12,726.58	24.39	129.79	96.147	-580.79	-1,654.88	4,758.43	4,662.67	95.75	49.694		
8,400.00	8,393.95	21,094.00	12,726.58	24.71	129.79	96.147	-580.79	-1,654.88	4,665.50	4,569.15	96.35	48.421		
8,500.00	8,493.86	21,094.00	12,726.58	25.03	129.79	96.147	-580.79	-1,654.88	4,572.88	4,475.90	96.97	47.156		
8,600.00	8,593.77	21,094.00	12,726.58	25.35	129.79	96.147	-580.79	-1,654.88	4,480.57	4,382.95	97.62	45.900		
8,700.00	8,693.68	21,094.00	12,726.58	25.67	129.79	96.147	-580.79	-1,654.88	4,388.59	4,290.31	98.28	44.654		
8,800.00	8,793.59	21,094.00	12,726.58	26.00	129.79	96.147	-580.79	-1,654.88	4,296.98	4,198.01	98.97	43.418		
8,900.00	8,893.50	21,094.00	12,726.58	26.32	129.79	96.147	-580.79	-1,654.88	4,205.74	4,106.06	99.68	42.192		
9,000.00	8,993.42	21,094.00	12,726.58	26.64	129.79	96.147	-580.79	-1,654.88	4,114.92	4,014.50	100.42	40.976		
9,100.00	9,093.33	21,094.00	12,726.58	26.96	129.79	96.147	-580.79	-1,654.88	4,024.53	3,923.34	101.19	39.772		
9,200.00	9,193.24	21,094.00	12,726.58	27.29	129.79	96.147	-580.79	-1,654.88	3,934.60	3,832.62	101.99	38.579		
9,300.00	9,293.15	21,094.00	12,726.58	27.61	129.79	96.147	-580.79	-1,654.88	3,845.18	3,742.36	102.82	37.398		
9,400.00	9,393.06	21,094.00	12,726.58	27.93	129.79	96.147	-580.79	-1,654.88	3,756.28	3,652.60	103.68	36.229		
9,500.00	9,492.97	21,094.00	12,726.58	28.25	129.79	96.147	-580.79	-1,654.88	3,667.96	3,563.38	104.58	35.073		
9,600.00	9,592.88	21,094.00	12,726.58	28.58	129.79	96.147	-580.79	-1,654.88	3,580.25	3,474.74	105.52	33.931		
9,700.00	9,692.79	21,094.00	12,726.58	28.90	129.79	96.147	-580.79	-1,654.88	3,493.21	3,386.72	106.49	32.803		
9,800.00	9,792.71	21,094.00	12,726.58	29.22	129.79	96.147	-580.79	-1,654.88	3,406.87	3,299.36	107.50	31.690		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	o.g			32H - OH /									Offset Site Error:	0.00 usf
Survey Progr	ram: 15	4-MWD+HDG Off		Somi M	laior Axis		Offset Wellb	ore Centro	Dies	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,900.00	9,892.62	21,094.00	12,726.58	29.55	129.79	96.147	-580.79	-1,654.88	3,321.30	3,212.74	108.56	30.593		
10,000.00	9,992.53	21,094.00	12,726.58	29.87	129.79	96.147	-580.79	-1,654.88	3,236.56	3,126.89	109.67	29.513		
10,100.00	10,092.44	21,093.84	12,726.59	30.19	129.78	96.152	-580.63	-1,654.88	3,152.71	3,041.90	110.82	28.450		
10,200.00	10,192.35	21,092.52	12,726.66	30.52	129.77	96.196	-579.31	-1,654.95	3,069.83	2,957.83	112.00	27.408		
10,300.00	10,292.26	21,091.20	12,726.74	30.84	129.75	96.239	-578.00	-1,655.01	2,988.00	2,874.75	113.25	26.385		
10,400.00	10,392.17	21,089.88	12,726.81	31.16	129.73	96.283	-576.68	-1,655.07	2,907.30	2,792.76	114.54	25.383		
10,500.00	10,492.08	21,088.56	12,726.88	31.49	129.71	96.326	-575.36	-1,655.13	2,827.84	2,711.95	115.88	24.402		
10,600.00	10,592.00	21,087.24	12,726.95	31.81	129.69	96.369	-574.05	-1,655.20	2,749.71	2,632.43	117.29	23.444		
10,700.00	10,691.91	21,085.92	12,727.03	32.13	129.68	96.413	-572.73	-1,655.26	2,673.05	2,554.30	118.74	22.511		
10,800.00	10,791.82	21,084.61	12,727.10	32.46	129.66	96.456	-571.42	-1,655.32	2,597.96	2,477.71	120.25	21.604		
10,900.00	10,891.73	21,083.29	12,727.17	32.78	129.64	96.500	-570.10	-1,655.38	2,524.61	2,402.80	121.82	20.725		
11,000.00	10,991.64	21,081.97	12,727.24	33.11	129.62	96.543	-568.79	-1,655.44	2,453.14	2,329.71	123.43	19.875		
11,100.00	11,091.55	21,080.65	12,727.32	33.43	129.60	96.586	-567.47	-1,655.51	2,383.73	2,258.64	125.09	19.056		
11,200.00	11,191.46	21,079.33	12,727.39	33.75	129.59	96.630	-566.16	-1,655.57	2,316.55	2,189.76	126.79	18.271		
11,300.00	11,291.37	21,078.01	12,727.46	34.08	129.57	96.673	-564.84	-1,655.63	2,251.81	2,123.28	128.52	17.520		
11,400.00	11,391.29	21,076.69	12,727.53	34.40	129.55	96.717	-563.53	-1,655.69	2,189.72	2,059.44	130.28	16.808		
11,500.00	11,491.20	21,075.37	12,727.61	34.73	129.53	96.760	-562.21	-1,655.76	2,130.51	1,998.46	132.05	16.134		
11,600.00	11,591.11	21,074.06	12,727.68	35.05	129.52	96.803	-560.90	-1,655.82	2,074.44	1,940.63	133.81	15.503		
11,700.00	11,691.02	21,072.74	12,727.75	35.38	129.50	96.847	-559.58	-1,655.88	2,021.76	1,886.21	135.55	14.915		
11,800.00	11,790.93	21,071.42	12,727.82	35.70	129.48	96.890	-558.27	-1,655.94	1,972.75	1,835.50	137.25	14.374		
11,900.00	11,890.84	21,070.10	12,727.90	36.03	129.46	96.934	-556.95	-1,656.01	1,927.68	1,788.80	138.88	13.880		
11,907.54	11,898.38	21,070.00	12,727.90	36.05	129.46	96.937	-556.85	-1,656.01	1,924.45	1,785.45	139.00	13.845		
12,000.00	11,990.80	21,067.30	12,728.05	36.33	129.42	96.203	-554.16	-1,656.14	1,886.68	1,746.29	140.39	13.438		
12,028.24	12,019.04	21,065.89	12,728.13	36.36	129.40	-93.997	-552.75	-1,656.20	1,875.84	1,735.06	140.77	13.325		
12,100.00	12,090.80	21,061.95	12,728.34	36.36	129.35	-93.867	-548.82	-1,656.39	1,849.90	1,708.23	141.67	13.058		
12,200.00	12,190.80	21,056.45	12,728.65	36.36	129.28	-93.686	-543.34	-1,656.65	1,817.86	1,675.06	142.80	12.730		
12,300.00	12,290.80	21,050.96	12,728.95	36.36	129.20	-93.505	-537.86	-1,656.91	1,790.81	1,647.05	143.76	12.457		
12,400.00	12,390.80	21,045.46	12,729.25	36.37	129.13	-93.324	-532.38	-1,657.17	1,768.99	1,624.45	144.54	12.239		
12,500.00	12,490.80	21,039.96	12,729.55	36.37	129.05	-93.143	-526.90	-1,657.43	1,752.60	1,607.48	145.12	12.077		
12,528.24	12,519.04	21,038.41	12,729.64	36.37	129.03	-93.092	-525.35	-1,657.50	1,748.98	1,603.74	145.24	12.042		
12,550.00	12,540.79	21,037.63	12,729.68	36.40	129.02	87.737	-524.57	-1,657.54	1,746.48	1,601.14	145.33	12.017		
12,600.00	12,590.61	21,038.96	12,729.61	36.63	129.04	88.181	-525.89	-1,657.48	1,741.62	1,596.02	145.60	11.962		
12,650.00	12,639.89	21,044.63	12,729.30	36.95	129.12	88.354	-531.55	-1,657.21	1,738.04	1,592.15	145.89	11.913		
12,700.00	12,688.24	21,054.61	12,728.75	37.29	129.25	88.262	-541.50	-1,656.74	1,735.73	1,589.51	146.22	11.871		
12,750.00	12,735.30	21,068.82	12,727.97	37.62	129.44	87.922	-555.67	-1,656.07	1,734.63	1,588.05	146.58	11.834		
12,773.14	12,756.55	21,076.79	12,727.53	37.78	129.55	87.687	-563.63	-1,655.69	1,734.52	1,587.75	146.77	11.818 CC		
12,800.00	12,780.72	21,087.14	12,726.96	37.96	129.69	87.356	-573.95	-1,655.20	1,734.67	1,587.68	146.98	11.802 ES		
12,850.00	12,824.15	21,094.00	12,726.58	38.29	129.79	87.040	-580.79	-1,654.88	1,735.77	1,588.42	147.35	11.780		
12,900.00	12,865.26	21,094.00	12,726.58	38.60	129.79	86.810	-580.79	-1,654.88	1,738.07	1,590.38	147.70	11.768		
12,950.00	12,903.73	21,094.00	12,726.58	38.90	129.79	86.461	-580.79	-1,654.88	1,741.56	1,593.52	148.05	11.764 SF		
13,000.00	12,939.27	21,094.00	12,726.58	39.18	129.79	85.995	-580.79	-1,654.88	1,746.21	1,597.81	148.40	11.767		
13,050.00	12,971.62	21,094.00	12,726.58	39.43	129.79	85.417	-580.79	-1,654.88	1,751.97	1,603.21	148.76	11.777		
13,100.00	13,000.52	21,094.00	12,726.58	39.65	129.79	84.731	-580.79	-1,654.88	1,758.79	1,609.68	149.10	11.796		
13,150.00	13,025.76	21,094.00	12,726.58	39.85	129.79	83.944	-580.79	-1,654.88	1,766.60	1,617.16	149.44	11.822		
13,200.00 13,250.00	13,047.14 13,064.50	21,094.00 21,094.00	12,726.58 12,726.58	40.02 40.15	129.79 129.79	83.063 82.096	-580.79 -580.79	-1,654.88 -1,654.88	1,775.33 1,784.91	1,625.58 1,634.86	149.76 150.05	11.855 11.895		
13,300.00	13,077.71	21,094.00	12,726.58	40.26	129.79	81.051	-580.79 -580.79	-1,654.88 -1,654.88	1,795.24	1,644.92	150.32 150.55	11.943		
13,350.00	13,086.67	21,094.00 21,094.00	12,726.58 12,726.58	40.33 40.38	129.79 129.79	79.939 78.770	-580.79 -580.79	-1,654.88 -1,654.88	1,806.24 1,817.81	1,655.68 1,667.05	150.55 150.76	11.997 12.058		
13,400.00 13,428.24	13,091.30 13,092.00	21,094.00	12,726.58	40.38	129.79	78.770 78.090	-580.79 -580.79	-1,654.88	1,817.81	1,673.70	150.76	12.058		
13,428.24	13,092.00	21,094.00	12,726.58	40.39	129.79	78.090 78.090	-580.79 -580.79	-1,654.88	1,843.20	1,692.19	151.01	12.095		
13,600.00	13,092.00	21,094.00	12,726.58	40.43	129.79	78.090	-580.79	-1,654.88	1,873.45	1,722.45	151.00			







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD)

RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: Ca												Offset Site Error:	0.00 usft
Survey Progr Refe	ram: 15 rence	4-MWD+HDG Off		Semi M	ajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,700.00	13,092.00	21,094.00	12,726.58	40.46	129.79	78.090	-580.79	-1,654.88	1,908.48	1,757.73	150.75	12.660		
13,800.00	13,092.00	21,094.00	12,726.58	40.50	129.79	78.090	-580.79	-1,654.88	1,948.01	1,797.75	150.26	12.964		
13,900.00	13,092.00	21,094.00	12,726.58	40.53	129.79	78.090	-580.79	-1,654.88	1,991.78	1,842.22	149.57	13.317		
14,000.00	13,092.00	21,094.00	12,726.58	40.58	129.79	78.090	-580.79	-1,654.88	2,039.52	1,890.83	148.70	13.716		
14,100.00 14,200.00	13,092.00 13,092.00	21,094.00 21,094.00	12,726.58 12,726.58	40.63 40.69	129.79 129.79	78.090 78.090	-580.79 -580.79	-1,654.88 -1,654.88	2,090.96 2,145.83	1,943.28 1,999.28	147.68 146.55	14.159 14.642		
,			,					.,	_,	.,				
14,300.00	13,092.00	21,094.00	12,726.58	40.76	129.79	78.090	-580.79	-1,654.88	2,203.87	2,058.54	145.32	15.165		
14,400.00	13,092.00	21,094.00	12,726.58	40.85	129.79	78.090	-580.79	-1,654.88	2,264.84	2,120.80	144.03	15.724		
14,500.00	13,092.00	21,094.00	12,726.58	40.95	129.79	78.090	-580.79	-1,654.88	2,328.51	2,185.81	142.70	16.318		
14,600.00	13,092.00	21,094.00	12,726.58	41.10	129.79	78.090	-580.79 590.70	-1,654.88	2,394.66	2,253.33	141.33	16.943		
14,700.00	13,092.00	21,094.00	12,726.58	41.29	129.79	78.090	-580.79	-1,654.88	2,463.10	2,323.14	139.96	17.599		
14,800.00	13,092.00	21,094.00	12,726.58	41.57	129.79	78.090	-580.79	-1,654.88	2,533.64	2,395.05	138.59	18.282		
14,900.00	13,092.00	21,094.00	12,726.58	41.99	129.79	78.090	-580.79	-1,654.88	2,606.10	2,468.88	137.22	18.991		
15,000.00	13,092.00	21,094.00	12,726.58	42.60	129.79	78.090	-580.79	-1,654.88	2,680.34	2,544.46	135.88	19.725		
15,100.00	13,092.00	21,094.00	12,726.58	43.42	129.79	78.090	-580.79	-1,654.88	2,756.21	2,621.64	134.57	20.481		
15,200.00	13,092.00	21,094.00	12,726.58	44.43	129.79	78.090	-580.79	-1,654.88	2,833.58	2,700.29	133.29	21.259		
15,300.00	13,092.00	21,094.00	12,726.58	45.56	129.79	78.090	-580.79	-1,654.88	2,912.32	2,780.27	132.05	22.055		
15,400.00	13,092.00	21,094.00	12,726.58	46.76	129.79	78.090	-580.79	-1,654.88	2,992.33	2,861.49	130.84	22.870		
15,500.00	13,092.00	21,094.00	12,726.58	48.01	129.79	78.090	-580.79	-1,654.88	3,073.52	2,943.85	129.67	23.702		
15,600.00	13,092.00	21,094.00	12,726.58	49.30	129.79	78.090	-580.79	-1,654.88	3,155.78	3,027.23	128.55	24.549		
15,700.00	13,092.00	21,094.00	12,726.58	50.61	129.79	78.090	-580.79	-1,654.88	3,239.05	3,111.58	127.47	25.410		
15,800.00	13,092.00	21,094.00	12,726.58	51.93	129.79	78.090	-580.79	-1,654.88	3,323.24	3,196.80	126.43	26.285		
15,900.00	13,092.00	21,094.00	12,726.58	53.27	129.79	78.090	-580.79	-1,654.88	3,408.28	3,282.84	125.43	27.172		
16,000.00	13,092.00	21,094.00	12,726.58	54.61	129.79	78.090	-580.79	-1,654.88	3,494.11	3,369.63	124.48	28.070		
16,100.00	13,092.00	21,094.00	12,726.58	55.97	129.79	78.090	-580.79	-1,654.88	3,580.68	3,457.12	123.56	28.979		
16,200.00	13,092.00	21,094.00	12,726.58	57.33	129.79	78.090	-580.79	-1,654.88	3,667.93	3,545.25	122.69	29.897		
16,300.00	13,092.00	21,094.00	12,726.58	58.69	129.79	78.090	-580.79	-1,654.88	3,755.82	3,633.97	121.85	30.824		
16,400.00	13,092.00	21,094.00	12,726.58	60.06	129.79	78.090	-580.79	-1,654.88	3,844.30	3,723.25	121.05	31.759		
16,500.00	13,092.00	21,094.00	12,726.58	61.44	129.79	78.090	-580.79	-1,654.88	3,933.33	3,813.05	120.28	32.701		
16,600.00	13,092.00	21,094.00	12,726.58	62.81	129.79	78.090	-580.79	-1,654.88	4,022.88	3,903.33	119.55	33.650		
16,700.00	13,092.00	21,094.00	12,726.58	64.20	129.79	78.090	-580.79	-1,654.88	4,112.91	3,994.05	118.85	34.605		
16,800.00	13,092.00	21,094.00	12,726.58	65.58	129.79	78.090	-580.79	-1,654.88	4,203.39	4,085.20	118.19	35.566		
16,900.00	13,092.00	21,094.00	12,726.58	66.97	129.79	78.090	-580.79	-1,654.88	4,294.29	4,176.74	117.55	36.531		
17,000.00	13,092.00	21,094.00	12,726.58	68.36	129.79	78.090	-580.79	-1,654.88	4,385.59	4,268.64	116.94	37.502		
17,100.00	13,092.00	21,094.00	12,726.58	69.75	129.79	78.090	-580.79	-1,654.88	4,477.26	4,360.89	116.36	38.476		
17,200.00	13,092.00	21,094.00	12,726.58	71.14	129.79	78.090	-580.79	-1,654.88	4,569.28	4,453.47	115.81	39.454		
17,300.00	13,092.00	21,094.00	12,726.58	72.54	129.79	78.090	-580.79	-1,654.88	4,661.63	4,546.34	115.28	40.436		
17,400.00	13,092.00	21,094.00	12,726.58	73.94	129.79	78.090	-580.79	-1,654.88	4,754.28	4,639.50	114.78	41.420		
17,500.00	13,092.00	21,094.00	12,726.58	75.34	129.79	78.090	-580.79	-1,654.88	4,847.23	4,732.93	114.30	42.407		
17,600.00	13,092.00	21,094.00	12,726.58	76.74	129.79	78.090	-580.79	-1,654.88	4,940.46	4,826.61	113.84	43.396		
17,700.00	13,092.00	21,094.00	12,726.58	78.14	129.79	78.090	-580.79	-1,654.88	5,033.94	4,920.53	113.41	44.388		
17,800.00	13,092.00	21,094.00	12,726.58	79.55	129.79	78.090	-580.79	-1,654.88	5,127.67	5,014.68	112.99	45.380		
17,900.00	13,092.00	21,094.00	12,726.58	80.95	129.79	78.090	-580.79	-1,654.88	5,221.64	5,109.04	112.60	46.375		
18,000.00	13,092.00	21,094.00	12,726.58	82.36	129.79	78.090	-580.79	-1,654.88	5,315.82	5,203.60	112.22	47.370		
18,100.00	13,092.00	21,094.00	12,726.58	83.76	129.79	78.090	-580.79	-1,654.88	5,410.21	5,298.36	111.86	48.367		
18,200.00	13,092.00	21,094.00	12,726.58	85.17	129.79	78.090	-580.79	-1,654.88	5,504.80	5,393.29	111.51	49.364		
18,300.00	13,092.00	21,094.00	12,726.58	86.58	129.79	78.090	-580.79	-1,654.88	5,599.58	5,488.39	111.19	50.361		
18,400.00	13,092.00	21,094.00	12,726.58	87.99	129.79	78.090	-580.79	-1,654.88	5,694.54	5,583.66	110.88	51.359		
18,500.00	13,092.00	21,094.00	12,726.58	89.40	129.79	78.090	-580.79	-1,654.88	5,789.67	5,679.09	110.58	52.358		
18,600.00	13,092.00	21,094.00	12,726.58	90.81	129.79	78.090	-580.79	-1,654.88	5,884.96	5,774.66	110.30	53.356		
18,700.00	13,092.00	21,094.00	12,726.58	92.23	129.79	78.090	-580.79	-1,654.88	5,980.40	5,870.37	110.03	54.353		
	13,092.00	21,094.00	12,726.58	93.64										







 Company:
 Titus Oil & Gas Production, LLC

 Project:
 Lea County, NM - (NAD83 NME)

 Reference Site:
 El Campeon Fed Com (NAD83)

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

Offset De	oigii.			32H - OH /	00030 - 3	ourveys (FIQF	023)						Offset Site Error:	0.00 us
Survey Prog	ram: 15 rence	4-MWD+HDG Off		Sami N	fajor Axis		Offset Wellb	ore Centre	Die:	Rule Assi tance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
18,900.00	13,092.00	21,094.00	12,726.58	95.06	129.79	78.090	-580.79	-1,654.88	6,171.72	6,062.19	109.53	56.348		
19,000.00	13,092.00	21,094.00	12,726.58	96.47	129.79	78.090	-580.79	-1,654.88	6,267.58	6,158.28	109.30	57.345		
19,100.00	13,092.00	21,094.00	12,726.58	97.89	129.79	78.090	-580.79	-1,654.88	6,363.57	6,254.49	109.08	58.340		
19,200.00	13,092.00	21,094.00	12,726.58	99.30	129.79	78.090	-580.79	-1,654.88	6,459.68	6,350.81	108.87	59.335		
19,300.00	13,092.00	21,094.00	12,726.58	100.72	129.79	78.090	-580.79	-1,654.88	6,555.91	6,447.24	108.67	60.329		
19,400.00	13,092.00	21,094.00	12,726.58	102.14	129.79	78.090	-580.79	-1,654.88	6,652.24	6,543.76	108.48	61.322		
19,500.00	13,092.00	21,094.00	12,726.58	103.55	129.79	78.090	-580.79	-1,654.88	6,748.69	6,640.39	108.30	62.313		
19,600.00	13,092.00	21,094.00	12,726.58	104.97	129.79	78.090	-580.79	-1,654.88	6,845.24	6,737.10	108.13	63.304		
19,700.00	13,092.00	21,094.00	12,726.58	106.39	129.79	78.090	-580.79	-1,654.88	6,941.88	6,833.91	107.97	64.293		
19,800.00	13,092.00	21,094.00	12,726.58	107.81	129.79	78.090	-580.79	-1,654.88	7,038.62	6,930.80	107.82	65.280		
19,900.00	13,092.00	21,094.00	12,726.58	109.23	129.79	78.090	-580.79	-1,654.88	7,135.45	7,027.77	107.68	66.266		
20,000.00	13,092.00	21,094.00	12,726.58	110.65	129.79	78.090	-580.79	-1,654.88	7,232.36	7,124.82	107.54	67.251		
20,100.00	13,092.00	21,094.00	12,726.58	112.07	129.79	78.090	-580.79	-1,654.88	7,329.36	7,221.95	107.42	68.234		
20,200.00	13,092.00	21,094.00	12,726.58	113.49	129.79	78.090	-580.79	-1,654.88	7,426.44	7,319.14	107.30	69.215		
20,300.00	13,092.00	21,094.00	12,726.58	114.91	129.79	78.090	-580.79	-1,654.88	7,523.59	7,416.41	107.18	70.194		
20,400.00	13,092.00	21,094.00	12,726.58	116.34	129.79	78.090	-580.79	-1,654.88	7,620.82	7,513.75	107.08	71.171		
20,500.00	13,092.00	21,094.00	12,726.58	117.76	129.79	78.090	-580.79	-1,654.88	7,718.12	7,611.14	106.98	72.147		
20,600.00	13,092.00	21,094.00	12,726.58	119.18	129.79	78.090	-580.79	-1,654.88	7,815.49	7,708.60	106.89	73.120		
20,700.00	13,092.00	21,094.00	12,726.58	120.60	129.79	78.090	-580.79	-1,654.88	7,912.92	7,806.12	106.80	74.092		
20,800.00	13,092.00	21,094.00	12,726.58	122.03	129.79	78.090	-580.79	-1,654.88	8,010.42	7,903.70	106.72	75.061		
20,900.00	13,092.00	21,094.00	12,726.58	123.45	129.79	78.090	-580.79	-1,654.88	8,107.97	8,001.33	106.64	76.029		
21,000.00	13,092.00	21,094.00	12,726.58	124.87	129.79	78.090	-580.79	-1,654.88	8,205.59	8,099.01	106.57	76.994		
21,100.00	13,092.00	21,094.00	12,726.58	126.30	129.79	78.090	-580.79	-1,654.88	8,303.26	8,196.75	106.51	77.957		
21,200.00	13,092.00	21,094.00	12,726.58	127.72	129.79	78.090	-580.79	-1,654.88	8,400.99	8,294.53	106.45	78.917		
21,300.00	13,092.00	21,094.00	12,726.58	129.15	129.79	78.090	-580.79	-1,654.88	8,498.77	8,392.37	106.40	79.876		
21,400.00	13,092.00	21,094.00	12,726.58	130.57	129.79	78.090	-580.79	-1,654.88	8,596.60	8,490.25	106.35	80.832		
21,500.00	13,092.00	21,094.00	12,726.58	132.00	129.79	78.090	-580.79	-1,654.88	8,694.48	8,588.17	106.31	81.786		
21,600.00	13,092.00	21,094.00	12,726.58	133.42	129.79	78.090	-580.79	-1,654.88	8,792.41	8,686.14	106.27	82.737		
21,700.00	13,092.00	21,094.00	12,726.58	134.85	129.79	78.090	-580.79	-1,654.88	8,890.38	8,784.15	106.23	83.686		
21,800.00	13,092.00	21,094.00	12,726.58	136.27	129.79	78.090	-580.79	-1,654.88	8,988.40	8,882.20	106.21	84.633		
21,900.00	13,092.00	21,094.00	12,726.58	137.70	129.79	78.090	-580.79	-1,654.88	9,086.46	8,980.28	106.18	85.577		
22,000.00	13,092.00	21,094.00	12,726.58	139.12	129.79	78.090	-580.79	-1,654.88	9,184.57	9,078.41	106.16	86.518		
22,100.00	13,092.00	21,094.00	12,726.58	140.55	129.79	78.090	-580.79	-1,654.88	9,282.71	9,176.57	106.14	87.457		
22,200.00	13,092.00	21,094.00	12,726.58	141.98	129.79	78.090	-580.79	-1,654.88	9,380.89	9,274.77	106.13	88.394		
22,300.00	13,092.00	21,094.00	12,726.58	143.40	129.79	78.090	-580.79	-1,654.88	9,479.12	9,373.00	106.12	89.327		
22,400.00	13,092.00	21,094.00	12,726.58	144.83	129.79	78.090	-580.79	-1,654.88	9,577.37	9,471.26	106.11	90.259		
22,500.00	13,092.00	21,094.00	12,726.58	146.26	129.79	78.090	-580.79	-1,654.88	9,675.67	9,569.56	106.11	91.187		
22,600.00	13,092.00	21,094.00	12,726.58	147.69	129.79	78.090	-580.79	-1,654.88	9,774.00	9,667.89	106.11	92.113		
22,700.00	13,092.00	21,094.00	12,726.58	149.11	129.79	78.090	-580.79	-1,654.88	9,872.36	9,766.25	106.11	93.037		
22,728.24	13,092.00	21,094.00	12,726.58	149.52	129.79	78.090	-580.79	-1,654.88	9,900.14	9,794.03	106.11	93.297		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:
Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma USA Compass

Reference Datum

urvey Progr	ram: 18	8-MWD+HDGI	М							Rule Assi	aned:		Offset Well Error:	1.00 usf
Refer	rence	Off	set		laior Axis		Offset Wellb	ore Centre		ance	_			1.00 00
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	54.01	0.01	1.00	1.00	-0.778	7,906.28	-107.31	7,907.01					
100.00	100.00	154.04	100.04	1.08	1.03	-0.775	7,906.28	-106.89	7,907.01	7,904.89	2.11	3,744.003		
131.47	131.47	185.51	131.51	1.21	1.04	-0.773	7,906.29	-106.67	7,907.01	7,904.76	2.25	3,515.754		
200.00	200.00	240.91	186.91	1.60	1.11	-0.770	7,906.34	-106.23	7,907.06	7,904.35	2.71	2,920.538		
300.00	300.00	321.02	267.01	2.01	1.26	-0.765	7,906.58	-105.56	7,907.35	7,904.08	3.27	2,418.838		
400.00	400.00	413.79	359.78	2.35	1.49	-0.759	7,907.04	-104.69	7,907.83	7,904.00	3.84	2,060.569		
500.00	500.00	510.22	456.20	2.65	1.76	-0.751	7,907.56	-103.62	7,908.36	7,903.95	4.41	1,793.250		
600.00	600.00	589.74	535.72	2.93	2.00	-0.743	7,908.11	-102.63	7,909.04	7,904.11	4.92	1,606.334		
700.00	700.00	667.35	613.32	3.18	2.24	-0.736	7,908.86	-101.59	7,909.99	7,904.57	5.42	1,459.371		
800.00	800.00	699.00	644.96	3.41	2.34	-0.733	7,909.23	-101.15	7,911.40	7,905.64	5.76	1,374.255		
900.00	900.00	793.80	739.74	3.64	2.65	-0.730	7,910.77	-100.84	7,913.04	7,906.76	6.28	1,260.010		
1,000.00	1,000.00	882.00	827.90	3.85	2.93	-0.741	7,912.87	-102.39	7,915.41	7,908.63	6.78	1,168.036		
1,100.00	1,100.00	920.77	866.64	4.05	3.06	-0.749	7,913.97	-103.51	7,918.09	7,910.98	7.10	1,114.773		
1,200.00	1,200.00	995.62	941.41	4.24	3.30	-0.767	7,916.26	-105.96	7,921.19	7,913.65	7.54	1,050.556		
1,300.00	1,300.00	1,072.00	1,017.70	4.43	3.55	-0.788	7,918.84	-108.86	7,924.61	7,916.64	7.98	993.435		
1,400.00	1,400.00	1,455.87	1,401.27	4.61	4.86	-0.863	7,925.51	-119.43	7,926.41	7,916.95	9.46	837.973		
1,424.43	1,424.43	1,479.03	1,424.43	4.65	4.93	-0.863	7,925.51	-119.35	7,926.41	7,916.83	9.58	827.325		
1,500.00	1,500.00	1,550.67	1,496.07	4.78	5.18	-0.862	7,925.53	-119.22	7,926.43	7,916.47	9.96	795.999		
1,600.00	1,599.98	1,648.13	1,593.53	4.98	5.51	-170.845	7,925.60	-119.28	7,928.22	7,917.74	10.48	756.367		
1,620.70	1,620.67	1,669.18	1,614.58	4.99	5.59	-170.843	7,925.62	-119.30	7,929.03	7,918.46	10.57	750.358		
1,700.00	1,699.89	1,749.80	1,695.20	5.07	5.86	-170.848	7,925.67	-119.36	7,932.38	7,921.45	10.93	725.686		
1,800.00	1,799.81	1,854.90	1,800.30	5.23	6.23	-170.854	7,925.71	-119.58	7,936.57	7,925.12	11.45	693.166		
1,900.00	1,899.72	1,963.09	1,908.48	5.41	6.60	-170.870	7,925.62	-121.05	7,940.68	7,928.67	12.00	661.683		
2,000.00	1,999.63	2,037.10	1,982.47	5.60	6.86	-170.886	7,925.59	-122.77	7,944.84	7,932.39	12.45	638.290		
2,100.00	2,099.54	2,101.39	2,046.74	5.80	7.08	-170.902	7,925.84	-124.49	7,949.44	7,936.57	12.87	617.602		
2,200.00	2,199.45	2,177.00	2,122.31	6.02	7.34	-170.921	7,926.51	-126.74	7,954.50	7,941.15	13.35	596.037		
2,300.00	2,299.36	2,285.05	2,230.30	6.24	7.72	-170.949	7,927.56	-129.88	7,959.69	7,945.75	13.95	570.768		
2,400.00	2,399.27	2,366.00	2,311.23	6.47	8.00	-170.967	7,928.13	-131.88	7,964.64	7,950.19	14.46	550.838		
2,500.00	2,499.18	2,441.72	2,386.93	6.72	8.27	-170.985	7,928.87	-133.87	7,969.88	7,954.91	14.96	532.618		
2,600.00	2,599.10	2,496.39	2,441.55	6.96	8.46	-171.000	7,929.76	-135.65	7,975.73	7,960.33	15.40	517.907		
2,700.00	2,699.01	2,555.00	2,500.11	7.22	8.67	-171.019	7,931.06	-137.86	7,982.15	7,966.29	15.86	503.415		
2,800.00	2,798.92	2,647.06	2,592.07	7.48	9.00	-171.048	7,933.37	-141.36	7,988.89	7,972.45	16.44	485.966		
2,900.00	2,898.83	2,744.00	2,688.93	7.74	9.34	-171.075	7,935.82	-144.54	7,995.64	7,978.59	17.05	469.087		
3,000.00	2,998.74	2,840.88	2,785.74	8.01	9.69	-171.099	7,938.32	-147.22	8,002.42	7,984.77	17.66	453.249		
3,100.00	3,098.65	2,934.00	2,878.80	8.28	10.02	-171.118	7,940.78	-149.34	8,009.27	7,991.02	18.26	438.700		
3,200.00	3,198.56	3,013.83	2,958.58	8.56	10.30	-171.135	7,943.02	-151.32	8,016.29	7,997.48	18.81	426.075		
3,300.00	3,298.47	3,092.38	3,037.05	8.84	10.58	-171.158	7,945.42	-153.97	8,023.58	8,004.21	19.37	414.220		
3,400.00	3,398.39	3,183.70	3,128.24	9.13	10.91	-171.188	7,948.40	-157.64	8,031.08	8,011.10	19.98	402.026		
3,500.00	3,498.30	3,283.24	3,227.66	9.41	11.27	-171.218	7,951.67	-161.36	8,038.60	8,017.98	20.62	389.922		
3,600.00	3,598.21	3,364.11	3,308.44	9.70	11.56	-171.241	7,954.39	-164.06	8,046.21	8,025.02	21.19	379.731		
3,700.00	3,698.12	3,437.38	3,381.63	9.99	11.82	-171.258	7,957.11	-166.10	8,054.13	8,032.39	21.74	370.532		
3,800.00	3,798.03	3,517.60	3,461.76	10.29	12.11	-171.274	7,960.35	-167.89	8,062.37	8,040.06	22.31	361.355		
3,900.00	3,897.94	3,643.73	3,587.76	10.58	12.56	-171.302	7,965.33	-171.02	8,070.54	8,047.48	23.06	350.016		
4,000.00	3,997.85	3,747.94	3,691.85	10.88	12.94	-171.328	7,969.18	-174.15	8,078.46	8,054.73	23.73	340.500		
4,100.00	4,097.76	3,848.52	3,792.31	11.18	13.30	-171.352	7,972.94	-177.05	8,086.42	8,062.04	24.38	331.662		
4,200.00	4,197.68	3,955.30	3,898.98	11.48	13.68	-171.378	7,976.86	-180.01	8,094.32	8,069.25	25.06	322.968		
4,300.00	4,297.59	4,140.38	4,083.83	11.78	14.35	-171.435	7,982.62	-187.08	8,101.72	8,075.69	26.03	311.198		
4,400.00	4,397.50	4,256.08	4,199.33	12.08	14.77	-171.484	7,985.33	-193.35	8,108.37	8,081.61	26.75	303.093		
4,500.00	4,497.41	4,361.59	4,304.67	12.39	15.15	-171.527	7,987.73	-198.85	8,114.94	8,087.51	27.43	295.798		
4,600.00	4,597.32	20,816.00	12,700.50	12.69	124.17	140.100	-130.23	-312.75	8,110.10	8,033.76	76.35	106.229		
4,700.00	4,697.23	20,816.00	12,700.50	13.00	124.17	140.100	-130.23	-312.75	8,010.31	7,933.80	76.51	104.702		
4,800.00	4,797.14	20,816.00	12,700.50	13.31	124.17	140.100	-130.23	-312.75	7,910.52	7,833.85	76.67	103.178		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	o.g			133H - OH /	68696 - 8	Surveys (H&F	(556)						Offset Site Error:	0.00 usft
Survey Progr	ram: 18	8-MWD+HDG	M set	Somi B	laior Axis		Offset Wellbe	ore Centro	Dies	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,900.00	4,897.05	20,816.00	12,700.50	13.62	124.17	140.100	-130.23	-312.75	7,810.73	7,733.90	76.83	101.657		
5,000.00	4,996.97	20,816.00	12,700.50	13.92	124.17	140.100	-130.23	-312.75	7,710.95	7,633.95	77.00	100.139		
5,100.00	5,096.88	20,816.00	12,700.50	14.23	124.17	140.100	-130.23	-312.75	7,611.18	7,534.01	77.17	98.624		
5,200.00	5,196.79	20,816.00	12,700.50	14.55	124.17	140.100	-130.23	-312.75	7,511.41	7,434.07	77.35	97.112		
5,300.00	5,296.70	20,816.00	12,700.50	14.86	124.17 124.17	140.100 140.100	-130.23	-312.75	7,411.65	7,334.13	77.52 77.70	95.604		
5,400.00	5,396.61	20,816.00	12,700.50	15.17	124.17	140.100	-130.23	-312.75	7,311.90	7,234.19	77.70	94.100		
5,500.00	5,496.52	20,816.00	12,700.50	15.48	124.17	140.100	-130.23	-312.75	7,212.15	7,134.26	77.89	92.599		
5,600.00	5,596.43	20,816.00	12,700.50	15.79	124.17	140.100	-130.23	-312.75	7,112.41	7,034.34	78.07	91.102		
5,700.00	5,696.34	20,816.00	12,700.50	16.11	124.17	140.100	-130.23	-312.75	7,012.68	6,934.42	78.26	89.609		
5,800.00	5,796.26	20,816.00	12,700.50	16.42	124.17	140.100	-130.23	-312.75	6,912.95	6,834.50	78.45	88.120		
5,900.00	5,896.17	20,816.00	12,700.50	16.74	124.17	140.100	-130.23	-312.75	6,813.23	6,734.59	78.64	86.636		
6,000.00	5,996.08	20,816.00	12,700.50	17.05	124.17	140.100	-130.23	-312.75	6,713.52	6,634.68	78.84	85.155		
6,100.00	6,095.99	20,851.90	12,700.51	17.37	124.65	137.193	-165.93	-308.97	6,613.42	6,534.10	79.32	83.374		
6,200.00	6,195.90	20,853.11	12,700.52	17.68	124.67	137.088	-167.13	-308.87	6,513.70	6,434.16	79.53	81.898		
6,300.00	6,295.81	20,854.35	12,700.53	18.00	124.68	136.981	-168.36	-308.76	6,413.98	6,334.23	79.75	80.427		
6,400.00	6,395.72	20,855.61	12,700.54	18.32	124.70	136.870	-169.62	-308.66	6,314.28	6,234.31	79.97	78.961		
6,500.00	6,495.63	20,856.89	12,700.55	18.63	124.72	136.757	-170.90	-308.56	6,214.58	6,134.39	80.19	77.499		
6,600.00	6,595.55	20,858.20	12,700.57	18.95	124.74	136.641	-172.21	-308.45	6,114.89	6,034.48	80.41	76.043		
6,700.00	6,695.46	20,859.55	12,700.58	19.27	124.75	136.522	-173.54	-308.35	6,015.21	5,934.57	80.64	74.592		
6,800.00	6,795.37	20,860.91	12,700.60	19.59	124.77	136.399	-174.91	-308.24	5,915.54	5,834.67	80.87	73.146		
6,900.00	6,895.28	20,862.31	12,700.61	19.91	124.79	136.274	-176.31	-308.14	5,815.88	5,734.78	81.11	71.706		
7,000.00	6,995.19	20,863.74	12,700.63	20.23	124.81	136.145	-177.73	-308.03	5,716.24	5,634.89	81.35	70.271		
7,100.00	7,095.10	20,865.21	12,700.65	20.54	124.83	136.012	-179.19	-307.93	5,616.60	5,535.01	81.59	68.842		
7,200.00	7,195.01	20,866.70	12,700.67	20.86	124.85	135.876	-180.68	-307.82	5,516.97	5,435.14	81.83	67.418		
7,300.00	7,294.92	20,868.23	12,700.69	21.18	124.87	135.736	-182.21	-307.72	5,417.36	5,335.28	82.08	66.000		
7,400.00	7,394.84	20,869.80	12,700.72	21.50	124.89	135.592	-183.77	-307.61	5,317.76	5,235.42	82.33	64.588		
7,500.00	7,494.75	20,871.40	12,700.74	21.82	124.91	135.443	-185.37	-307.51	5,218.17	5,135.58	82.59	63.182		
7,600.00	7,594.66	20,873.04	12,700.77	22.14	124.94	135.290	-187.00	-307.40	5,118.60	5,035.75	82.85	61.782		
7,700.00	7,694.57	20,874.71	12,700.80	22.46	124.96	135.133	-188.67	-307.30	5,019.04	4,935.93	83.11	60.388		
7,800.00	7,794.48	20,876.43	12,700.83	22.78	124.98	134.971	-190.39	-307.20	4,919.50	4,836.12	83.38	59.001		
7,900.00	7,894.39	20,910.00	12,701.67	23.10	125.43	131.612	-223.92	-305.83	4,820.33	4,736.42	83.91	57.445		
8,000.00	7,994.30	20,910.00	12,701.67	23.42	125.43	131.612	-223.92	-305.83	4,720.79	4,636.61	84.17	56.084		
8,100.00	8,094.21	20,910.00	12,701.67	23.75	125.43	131.612	-223.92	-305.83	4,621.26	4,536.82	84.44	54.729		
8,200.00	8,194.13	20,910.00	12,701.67	24.07	125.43	131.612	-223.92	-305.83	4,521.76	4,437.05	84.71	53.381		
8,300.00	8,294.04	20,910.00	12,701.67	24.39	125.43	131.612	-223.92	-305.83	4,422.28	4,337.30	84.98	52.039		
8,400.00	8,393.95	20,910.00	12,701.67	24.71	125.43	131.612	-223.92	-305.83	4,322.82	4,237.56	85.26	50.703		
8,500.00	8,493.86	20,910.00	12,701.67	25.03	125.43	131.612	-223.92	-305.83	4,223.39	4,137.85	85.54	49.374		
8,600.00	8,593.77	20,910.00	12,701.67	25.35	125.43	131.612	-223.92	-305.83	4,223.39	4,038.16	85.82	48.051		
8,700.00	8,693.68	20,910.00	12,701.67	25.67	125.43	131.612	-223.92	-305.83	4,024.61	3,938.49	86.11	46.735		
8,800.00	8,793.59	20,910.00	12,701.67	26.00	125.43	131.612	-223.92	-305.83	3,925.27	3,838.86	86.41	45.426		
8,900.00	8,893.50	20,910.00	12,701.67	26.32	125.43	131.612	-223.92	-305.83	3,825.96	3,739.25	86.71	44.124		
9,000.00	8,993.42	20,910.00	12,701.67	26.64	125.43	131.612	-223.92	-305.83	3,726.68	3,639.67	87.01	42.828		
9,100.00	9,093.33	20,910.00	12,701.67	26.96	125.43	131.612	-223.92	-305.83	3,627.45	3,540.13	87.33	41.540		
9,200.00	9,193.24	20,910.00	12,701.67	27.29	125.43	131.612	-223.92	-305.83	3,528.26	3,440.62	87.64	40.258		
9,300.00	9,293.15	20,910.00	12,701.67	27.61	125.43	131.612	-223.92	-305.83	3,429.12	3,341.16	87.96	38.983		
9,400.00	9,393.06	20,910.00	12,701.67	27.93	125.43	131.612	-223.92	-305.83	3,330.03	3,241.74	88.29	37.716		
9,500.00	9,492.97	20,910.00	12,701.67	28.25	125.43	131.612	-223.92	-305.83	3,231.00	3,142.37	88.63	36.455		
9,600.00	9,592.88	20,910.00	12,701.67	28.58	125.43	131.612	-223.92	-305.83	3,132.03	3,043.06	88.97	35.202		
9,700.00	9,692.79	20,910.00	12,701.67	28.90	125.43	131.612	-223.92	-305.83	3,033.12	2,943.80	89.32	33.956		
9,800.00	9,792.71	20,910.00	12,701.67	29.22	125.43	131.612	-223.92	-305.83	2,934.29	2,844.61	89.69	32.718		
9,900.00	9,892.62	20,910.00	12,701.67	29.55	125.43	131.612	-223.92	-305.83	2,835.54	2,745.49	90.06	31.487		
10,000.00	9,992.53	20,910.00	12,701.67	29.87	125.43	131.612	-223.92	-305.83	2,736.89	2,646.45	90.44	30.263		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: RKB @ MD Reference: RKB @

North Reference:

Survey Calculation Method: Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De													Offset Site Error:	0.00 ust
urvey Prog	ram: 18 rence	8-MWD+HDG Off		Com: N	ajor Axis		Offset Wellbe	ana Camtua	Die	Rule Assi	gned:	(Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0,100.00	10,092.44	20,935.54	12,702.62	30.19	125.78	128.826	-249.44	-305.42	2,638.07	2,547.01	91.06	28.970		
0,200.00	10,192.35	20,939.52	12,702.78	30.52	125.83	128.375	-253.42	-305.39	2,539.53	2,448.02	91.51	27.753		
0,300.00	10,292.26	20,943.65	12,702.97	30.84	125.89	127.904	-257.53	-305.36	2,441.09	2,349.13	91.97	26.543		
0,400.00	10,392.17	20,947.92	12,703.16	31.16	125.94	127.411	-261.80	-305.33	2,342.78	2,250.33	92.45	25.341		
0,500.00	10,492.08 10,592.00	20,952.34 20,956.93	12,703.37 12,703.59	31.49 31.81	126.00 126.06	126.895 126.354	-266.22 -270.80	-305.32 -305.31	2,244.59 2,146.55	2,151.64 2,053.07	92.96 93.49	24.147 22.961		
10,000.00	10,002.00	20,000.00	12,700.00	01.01	120.00	120.004	270.00	-000.01	2,140.00	2,000.01	50.45	22.001		
10,700.00	10,691.91	20,961.69	12,703.83	32.13	126.13	125.788	-275.56	-305.32	2,048.69	1,954.64	94.05	21.783		
10,800.00	10,791.82	20,966.63	12,704.08	32.46	126.19	125.193	-280.49	-305.34	1,951.01	1,856.37	94.64	20.614		
10,900.00	10,891.73	20,971.76	12,704.36	32.78	126.26	124.568	-285.62	-305.37	1,853.56	1,758.28	95.28	19.453		
11,000.00	10,991.64	20,977.10	12,704.65	33.11	126.34	123.912	-290.94	-305.41	1,756.37	1,660.39	95.97	18.301		
11,100.00	11,091.55	20,982.65	12,704.97	33.43	126.41	123.221	-296.49	-305.47	1,659.47	1,562.75	96.72	17.157		
11,200.00	11,191.46	21,004.00	12,706.31	33.75	126.70	120.497	-317.79	-305.83	1,563.07	1,465.36	97.71	15.998		
11,300.00	11,291.37	21,004.00	12,706.31	34.08	126.70	120.497	-317.79	-305.83	1,466.87	1,368.31	98.56	14.882		
11,400.00	11,391.29	21,004.00	12,706.31	34.40	126.70	120.497	-317.79	-305.83	1,371.22	1,271.69	99.53	13.777		
11,500.00	11,491.20	21,009.60	12,706.68	34.73	126.77	119.766	-323.37	-305.96	1,276.23	1,175.53	100.70	12.674		
11,600.00	11,591.11	21,020.72	12,707.41	35.05	126.92	118.293	-334.48	-306.21	1,181.97	1,079.86	102.11	11.576		
11,700.00	11,691.02	21,031.72	12,708.12	35.38	127.07	116.814	-345.44	-306.47	1,088.62	984.87	103.75	10.493		
11,800.00	11,790.93	21,042.58	12,708.82	35.70	127.22	115.332	-356.28	-306.74	996.46	890.76	105.70	9.427		
11,900.00	11,890.84	21,053.32	12,709.51	36.03	127.36	113.848	-366.99	-307.01	905.83	797.78	108.05	8.383		
11,907.54	11,898.38	21,054.13	12,709.56	36.05	127.37	113.736	-367.80	-307.03	899.07	790.82	108.25	8.306		
12,000.00	11,990.80	21,062.46	12,710.08	36.33	127.48	109.231	-376.11	-307.25	816.99	706.08	110.91	7.366		
12,028.24	12,019.04	21,064.39	12,710.20	36.36	127.51	-82.037	-378.04	-307.30	792.26	680.45	111.81	7.086		
12,100.00	12,090.80	21,068.94	12,710.49	36.36	127.57	-82.705	-382.58	-307.42	730.49	616.11	114.37	6.387		
12,200.00	12,190.80	21,075.21	12,710.88	36.36	127.65	-83.629	-388.83	-307.59	647.79	529.10	118.69	5.458		
12,300.00	12,290.80	21,081.41	12,711.27	36.36	127.74	-84.545	-395.02	-307.76	570.59	446.58	124.02	4.601		
12,400.00	12,390.80	21,087.54	12,711.64	36.37	127.82	-85.453	-401.14	-307.93	501.45	371.12	130.33	3.848		
12,500.00	12,490.80	21,093.60	12,712.02	36.37	127.90	-86.352	-407.18	-308.10	444.12	307.03	137.09	3.240		
12,528.24	12,519.04	21,095.30	12,712.12	36.37	127.92	-86.604	-408.88	-308.15	430.74	291.85	138.90	3.101		
12,550.00	12,540.79	21,097.01	12,712.22	36.40	127.95	94.718	-410.59	-308.20	421.47	281.24	140.23	3.006		
12,600.00	12,590.61	21,104.47	12,712.67	36.63	128.05	95.487	-418.02	-308.41	403.99	261.02	142.96	2.826		
12,650.00	12,639.89	21,116.34	12,713.36	36.95	128.21	94.973	-429.87	-308.74	392.31	247.28	145.03	2.705		
12,700.00	12,688.24	21,132.31	12,714.24	37.29	128.42	93.287	-445.81	-309.16	386.68	240.39	146.29	2.643		
12,722.75	12,709.84	21,140.87	12,714.69	37.44	128.54	92.163	-454.36	-309.38	386.08	239.50	146.58	2.634 CC, ES,	SF	
12,750.00	12,735.30	21,152.15	12,715.26	37.62	128.69	90.549	-465.62	-309.66	386.91	240.20	146.71	2.637	0.	
12,800.00	12,780.72	21,175.61	12,716.35	37.96	129.00	86.916	-489.04	-310.21	392.41	246.01	146.40	2.680		
12,850.00	12,824.15	21,202.27	12,717.48	38.29	129.36	82.616	-515.68	-310.80	402.29	256.75	145.54	2.764		
12,900.00	12,865.26	21,232.41	12,718.76	38.60	129.76	77.852	-545.78	-311.46	415.50	271.17	144.33	2.879		
12,950.00	12,903.73	21,232.41	12,718.87	38.90	129.76	75.871	-545.76 -548.37	-311.52	432.01	288.87	143.14	3.018		
13,000.00	12,939.27	21,235.00	12,718.87	39.18	129.80	73.701	-548.37	-311.52	452.50	310.98	141.53	3.197		
13,050.00	12,971.62	21,235.00	12,718.87	39.43	129.80	71.115	-548.37	-311.52	476.33	336.73	139.61	3.412		
	13,000.52	21,235.00		39.65	129.80	68.181	-548.37	-311.52	502.85	365.35	137.50	3.657		
12 150 00	12 005 70	21,235.00	12,718.87	20.05	120.00	64.076	E40 07	244 50	E24 40	206.46	105.00	2.029		
13,150.00 13,200.00	13,025.76 13,047.14	21,235.00	12,718.87	39.85 40.02	129.80 129.80	64.976 61.590	-548.37 -548.37	-311.52 -311.52	531.48 561.69	396.16 428.56	135.32 133.13	3.928 4.219		
13,250.00	13,064.50	21,235.00	12,718.87	40.02	129.80	58.113	-548.37	-311.52	593.03	462.04	130.98	4.528		
13,300.00	13,004.30	21,235.00	12,718.87	40.13	129.80	54.632	-548.37	-311.52	625.10	496.21	128.90	4.850		
13,350.00	13,086.67	21,235.00	12,718.87	40.33	129.80	51.225	-548.37	-311.52	657.58	530.69	126.89	5.182		
12 400 00	12 004 20	24 225 00	10 710 07	40.20	120.00	47.050	E40 07	244 50	600.40	ECE 04	104.07	5 522		
13,400.00 13,428.24	13,091.30 13,092.00	21,235.00 21,235.00	12,718.87 12,718.87	40.38 40.39	129.80 129.80	47.952 46.182	-548.37 -548.37	-311.52 -311.52	690.18 708.55	565.21 584.65	124.97 123.90	5.523 5.719		
13,500.00	13,092.00	21,235.00	12,718.87	40.39	129.80	46.182	-548.37	-311.52	757.11	635.86	123.90	6.244		
13,600.00	13,092.00	21,235.00	12,718.87	40.40	129.80	46.182	-548.37	-311.52	830.40	712.71	117.69	7.056		
13,700.00	13,092.00	21,235.00	12,718.87	40.43	129.80	46.182	-548.37	-311.52	908.80	794.35	114.46	7.940		
3,800.00	13,092.00	21,235.00	12,718.87	40.50	129.80	46.182	-548.37	-311.52	991.10	879.51	111.59	8.881		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: RKI
MD Reference: RKI

North Reference:

Survey Calculation Method:
Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma USA Compass Reference Datum

Offset De	o.g			-33H - UH /	00090 - 8	Surveys (H&F	000)						Offset Site Error:	0.00 usft
Survey Progr	ram: 18 rence	8-MWD+HDG Off		Semi M	laior Axis		Offset Wellbo	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,900.00	13,092.00	21,235.00	12,718.87	40.53	129.80	46.182	-548.37	-311.52	1,076.40	967.30	109.09	9.867		
14,000.00	13,092.00	21,235.00	12,718.87	40.58	129.80	46.182	-548.37	-311.52	1,164.04	1,057.11	106.93	10.886		
14,100.00	13,092.00	21,235.00	12,718.87	40.63	129.80	46.182	-548.37	-311.52	1,253.53	1,148.47	105.06	11.931		
14,200.00	13,092.00	21,235.00	12,718.87	40.69	129.80	46.182	-548.37	-311.52	1,344.51	1,241.06	103.45	12.997		
14,300.00	13,092.00	21,235.00	12,718.87	40.76	129.80	46.182	-548.37	-311.52	1,436.68	1,334.63	102.05	14.078		
14,400.00	13,092.00	21,235.00	12,718.87	40.85	129.80	46.182	-548.37	-311.52	1,529.84	1,429.00	100.84	15.172		
14,500.00	13,092.00	21,235.00	12,718.87	40.95	129.80	46.182	-548.37	-311.52	1,623.81	1,524.03	99.78	16.274		
14,600.00	13,092.00	21,235.00	12,718.87	41.10	129.80	46.182	-548.37	-311.52	1,718.46	1,619.61	98.85	17.384		
14,700.00	13,092.00	21,235.00	12,718.87	41.29	129.80	46.182	-548.37	-311.52	1,813.69	1,715.65	98.04	18.499		
14,800.00	13,092.00	21,235.00	12,718.87	41.57	129.80	46.182	-548.37	-311.52	1,909.40	1,812.07	97.33	19.618		
14,900.00	13,092.00	21,235.00	12,718.87	41.99	129.80	46.182	-548.37	-311.52	2,005.54	1,908.84	96.70	20.740		
15,000.00	13,092.00	21,235.00	12,718.87	42.60	129.80	46.182	-548.37	-311.52	2,102.03	2,005.89	96.14	21.864		
15,100.00	13,092.00	21,235.00	12,718.87	43.42	129.80	46.182	-548.37	-311.52	2,198.84	2,103.19	95.65	22.989		
15,200.00	13,092.00	21,235.00	12,718.87	44.43	129.80	46.182	-548.37	-311.52	2,295.92	2,200.71	95.20	24.116		
15,300.00	13,092.00	21,235.00	12,718.87	45.56	129.80	46.182	-548.37	-311.52	2,393.24	2,298.43	94.81	25.243		
15,400.00	13,092.00	21,235.00	12,718.87	46.76	129.80	46.182	-548.37	-311.52	2,490.77	2,396.32	94.46	26.369		
15,500.00	13,092.00	21,235.00	12,718.87	48.01	129.80	46.182	-548.37	-311.52	2,588.50	2,494.35	94.14	27.496		
15,600.00	13,092.00	21,235.00	12,718.87	49.30	129.80	46.182	-548.37	-311.52	2,686.38	2,592.53	93.86	28.622		
15,700.00	13,092.00	21,235.00	12,718.87	50.61	129.80	46.182	-548.37	-311.52	2,784.42	2,690.82	93.60	29.747		
15,800.00	13,092.00	21,235.00	12,718.87	51.93	129.80	46.182	-548.37	-311.52	2,882.60	2,789.22	93.38	30.871		
15,900.00	13,092.00	21,235.00	12,718.87	53.27	129.80	46.182	-548.37	-311.52	2,980.89	2,887.72	93.17	31.994		
16,000.00	13,092.00	21,235.00	12,718.87	54.61	129.80	46.182	-548.37	-311.52	3,079.30	2,986.31	92.99	33.116		
16,100.00	13,092.00	21,235.00	12,718.87	55.97	129.80	46.182	-548.37	-311.52	3,177.80	3,084.98	92.82	34.236		
16,200.00	13,092.00	21,235.00	12,718.87	57.33	129.80	46.182	-548.37	-311.52	3,276.40	3,183.73	92.67	35.355		
16,300.00	13,092.00	21,235.00	12,718.87	58.69	129.80	46.182	-548.37	-311.52	3,375.08	3,282.54	92.54	36.472		
16,400.00	13,092.00	21,235.00	12,718.87	60.06	129.80	46.182	-548.37	-311.52	3,473.83	3,381.41	92.42	37.588		
16,500.00	13,092.00	21,235.00	12,718.87	61.44	129.80	46.182	-548.37	-311.52	3,572.65	3,480.34	92.31	38.702		
16,600.00	13,092.00	21,235.00	12,718.87	62.81	129.80	46.182	-548.37	-311.52	3,671.54	3,579.32	92.22	39.814		
16,700.00	13,092.00	21,235.00	12,718.87	64.20	129.80	46.182	-548.37	-311.52	3,770.49	3,678.35	92.13	40.924		
16,800.00	13,092.00	21,235.00	12,718.87	65.58	129.80	46.182	-548.37	-311.52	3,869.49	3,777.42	92.06	42.032		
16,900.00	13,092.00	21,235.00	12,718.87	66.97	129.80	46.182	-548.37	-311.52	3,968.54	3,876.54	92.00	43.138		
17,000.00	13,092.00	21,235.00	12,718.87	68.36	129.80	46.182	-548.37	-311.52	4,067.63	3,975.69	91.94	44.242		
17,100.00	13,092.00	21,235.00	12,718.87	69.75	129.80	46.182	-548.37	-311.52	4,166.77	4,074.88	91.89	45.343		
17,200.00	13,092.00	21,235.00	12,718.87	71.14	129.80	46.182	-548.37	-311.52	4,265.95	4,174.10	91.85	46.443		
17,300.00	13,092.00	21,235.00	12,718.87	72.54	129.80	46.182	-548.37	-311.52	4,365.17	4,273.35	91.82	47.540		
17,400.00	13,092.00	21,235.00	12,718.87	73.94	129.80	46.182	-548.37	-311.52	4,464.42	4,372.63	91.79	48.635		
17,500.00	13,092.00	21,235.00	12,718.87	75.34	129.80	46.182	-548.37	-311.52	4,563.70	4,471.93	91.77	49.728		
17,600.00	13,092.00	21,235.00	12,718.87	76.74	129.80	46.182	-548.37	-311.52	4,663.02	4,571.26	91.76	50.818		
17,700.00	13,092.00	21,235.00	12,718.87	78.14	129.80	46.182	-548.37	-311.52	4,762.36	4,670.61	91.75	51.906		
17,800.00	13,092.00	21,235.00	12,718.87	79.55	129.80	46.182	-548.37	-311.52	4,861.73	4,769.99	91.74	52.992		
17,900.00	13,092.00	21,235.00	12,718.87	80.95	129.80	46.182	-548.37	-311.52	4,961.13	4,869.39	91.75	54.075		
18,000.00	13,092.00	21,235.00	12,718.87	82.36	129.80	46.182	-548.37	-311.52	5,060.55	4,968.80	91.75	55.155		
18,100.00	13,092.00	21,235.00	12,718.87	83.76	129.80	46.182	-548.37	-311.52	5,159.99	5,068.23	91.76	56.233		
18,200.00	13,092.00	21,235.00	12,718.87	85.17	129.80	46.182	-548.37	-311.52	5,259.46	5,167.68	91.77	57.309		
18,300.00	13,092.00	21,235.00	12,718.87	86.58	129.80	46.182	-548.37	-311.52	5,358.94	5,267.15	91.79	58.382		
18,400.00	13,092.00	21,235.00	12,718.87	87.99	129.80	46.182	-548.37	-311.52	5,458.44	5,366.63	91.81	59.452		
18,500.00	13,092.00	21,235.00	12,718.87	89.40	129.80	46.182	-548.37	-311.52	5,557.96	5,466.12	91.84	60.519		
18,600.00	13,092.00	21,235.00	12,718.87	90.81	129.80	46.182	-548.37	-311.52	5,657.50	5,565.63	91.87	61.584		
18,700.00	13,092.00	21,235.00	12,718.87	92.23	129.80	46.182	-548.37	-311.52	5,757.05	5,665.16	91.90	62.646		
18,800.00	13,092.00	21,235.00	12,718.87	93.64	129.80	46.182	-548.37	-311.52	5,856.62	5,764.69	91.93	63.706		
18,900.00	13,092.00	21,235.00	12,718.87	95.06	129.80	46.182	-548.37	-311.52	5,956.20	5,864.23	91.97	64.762		
19,000.00	13,092.00	21,235.00	12,718.87	96.47	129.80	46.182	-548.37	-311.52	6,055.80	5,963.79	92.01	65.816		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	erence	8-MWD+HDG Off	set		lajor Axis		Offset Wellb	ore Centre		Rule Assi tance			Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,100.00	13,092.00	21,235.00	12,718.87	97.89	129.80	46.182	-548.37	-311.52	6,155.41	6,063.36	92.05	66.867		
19,200.00	13,092.00	21,235.00	12,718.87	99.30	129.80	46.182	-548.37	-311.52	6,255.03	6,162.93	92.10	67.915		
19,300.00	13,092.00	21,235.00	12,718.87	100.72	129.80	46.182	-548.37	-311.52	6,354.67	6,262.52	92.15	68.960		
19,400.00	13,092.00	21,235.00	12,718.87	102.14	129.80	46.182	-548.37	-311.52	6,454.31	6,362.11	92.20	70.003		
19,500.00	13,092.00	21,235.00	12,718.87	103.55	129.80	46.182	-548.37	-311.52	6,553.97	6,461.71	92.25	71.042		
19,600.00	13,092.00	21,235.00	12,718.87	104.97	129.80	46.182	-548.37	-311.52	6,653.63	6,561.32	92.31	72.079		
19,700.00	13,092.00	21,235.00	12,718.87	106.39	129.80	46.182	-548.37	-311.52	6,753.31	6,660.94	92.37	73.112		
19,800.00	13,092.00	21,235.00	12,718.87	107.81	129.80	46.182	-548.37	-311.52	6,853.00	6,760.57	92.43	74.143		
19,900.00	13,092.00	21,235.00	12,718.87	109.23	129.80	46.182	-548.37	-311.52	6,952.69	6,860.20	92.49	75.170		
20,000.00	13,092.00	21,235.00	12,718.87	110.65	129.80	46.182	-548.37	-311.52	7,052.39	6,959.84	92.56	76.195		
20,100.00	13,092.00	21,235.00	12,718.87	112.07	129.80	46.182	-548.37	-311.52	7,152.11	7,059.48	92.62	77.216		
20,200.00	13,092.00	21,235.00	12,718.87	113.49	129.80	46.182	-548.37	-311.52	7,251.83	7,159.13	92.69	78.235		
20,300.00	13,092.00	21,235.00	12,718.87	114.91	129.80	46.182	-548.37	-311.52	7,351.55	7,258.79	92.76	79.250		
20,400.00	13,092.00	21,235.00	12,718.87	116.34	129.80	46.182	-548.37	-311.52	7,451.29	7,358.45	92.84	80.262		
20,500.00	13,092.00	21,235.00	12,718.87	117.76	129.80	46.182	-548.37	-311.52	7,551.03	7,458.12	92.91	81.271		
20,600.00	13,092.00	21,235.00	12,718.87	119.18	129.80	46.182	-548.37	-311.52	7,650.78	7,557.79	92.99	82.277		
20,700.00	13,092.00	21,235.00	12,718.87	120.60	129.80	46.182	-548.37	-311.52	7,750.53	7,657.47	93.07	83.280		
20,800.00	13,092.00	21,235.00	12,718.87	122.03	129.80	46.182	-548.37	-311.52	7,850.29	7,757.15	93.15	84.280		
20,900.00	13,092.00	21,235.00	12,718.87	123.45	129.80	46.182	-548.37	-311.52	7,950.06	7,856.83	93.23	85.276		
21,000.00	13,092.00	21,235.00	12,718.87	124.87	129.80	46.182	-548.37	-311.52	8,049.83	7,956.52	93.31	86.270		
21,100.00	13,092.00	21,235.00	12,718.87	126.30	129.80	46.182	-548.37	-311.52	8,149.61	8,056.22	93.39	87.260		
21,200.00	13,092.00	21,235.00	12,718.87	127.72	129.80	46.182	-548.37	-311.52	8,249.40	8,155.91	93.48	88.247		
21,300.00	13,092.00	21,235.00	12,718.87	129.15	129.80	46.182	-548.37	-311.52	8,349.18	8,255.62	93.57	89.230		
21,400.00	13,092.00	21,235.00	12,718.87	130.57	129.80	46.182	-548.37	-311.52	8,448.98	8,355.32	93.66	90.211		
21,500.00	13,092.00	21,235.00	12,718.87	132.00	129.80	46.182	-548.37	-311.52	8,548.78	8,455.03	93.75	91.188		
21,600.00	13,092.00	21,235.00	12,718.87	133.42	129.80	46.182	-548.37	-311.52	8,648.58	8,554.74	93.84	92.162		
21,700.00	13,092.00	21,235.00	12,718.87	134.85	129.80	46.182	-548.37	-311.52	8,748.39	8,654.45	93.93	93.133		
21,800.00	13,092.00	21,235.00	12,718.87	136.27	129.80	46.182	-548.37	-311.52	8,848.20	8,754.17	94.03	94.100		
21,900.00	13,092.00	21,235.00	12,718.87	137.70	129.80	46.182	-548.37	-311.52	8,948.02	8,853.89	94.13	95.064		
22,000.00	13,092.00	21,235.00	12,718.87	139.12	129.80	46.182	-548.37	-311.52	9,047.84	8,953.61	94.22	96.025		
22,100.00	13,092.00	21,235.00	12,718.87	140.55	129.80	46.182	-548.37	-311.52	9,147.66	9,053.34	94.32	96.983		
22,200.00	13,092.00	21,235.00	12,718.87	141.98	129.80	46.182	-548.37	-311.52	9,247.49	9,153.07	94.42	97.937		
22,300.00	13,092.00	21,235.00	12,718.87	143.40	129.80	46.182	-548.37	-311.52	9,347.32	9,252.80	94.52	98.888		
22,400.00	13,092.00	21,235.00	12,718.87	144.83	129.80	46.182	-548.37	-311.52	9,447.16	9,352.53	94.63	99.836		
22,500.00	13,092.00	21,235.00	12,718.87	146.26	129.80	46.182	-548.37	-311.52	9,547.00	9,452.26	94.73	100.780		
22,600.00	13,092.00	21,235.00	12,718.87	147.69	129.80	46.182	-548.37	-311.52	9,646.84	9,552.00	94.84	101.721		
22,700.00	13,092.00	21,235.00	12,718.87	149.11	129.80	46.182	-548.37	-311.52	9,746.68	9,651.74	94.94	102.658		
22,728.24	13,092.00	21,235.00	12,718.87	149.52	129.80	46.182	-548.37	-311.52	9,774.88	9,679.91	94.97	102.923		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	J. J			512H - OH /		odivoyo (i idi	020)						Offset Site Error:	0.00 usft
Survey Progr	ram: 12 rence	4-MWD+HDGI		Sami M	laior Axis		Offset Wellb	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	64.18	9.18	1.00	1.00	-10.008	7,889.88	-1,392.27	8,011.78					
100.00	100.00	249.35	194.35	1.08	1.18	-10.015	7,888.67	-1,393.09	8,011.29	8,009.03	2.26	3,540.773		
200.00	200.00	382.03	327.01	1.60	1.48	-10.018	7,886.74	-1,393.15	8,009.85	8,006.77	3.08	2,598.337		
300.00	300.00	500.20	445.16	2.01	1.82	-10.021	7,884.69	-1,393.24	8,008.15	8,004.32	3.83	2,092.202 1,804.524		
400.00 500.00	400.00 500.00	586.85 683.90	531.79 628.84	2.35 2.65	2.09 2.40	-10.023 -10.025	7,883.18 7,881.61	-1,393.31 -1,393.33	8,006.45 8,004.85	8,002.01 7,999.80	4.44 5.05	1,585.390		
600.00	600.00	816.14	761.06	2.93	2.84	-10.028	7,879.19	-1,393.24	8,003.04	7,997.28	5.76	1,389.620		
700.00	700.00	914.94	859.83	3.18	3.17	-10.028	7,877.17	-1,393.24	8,000.99	7,994.65	6.34	1,261.257		
800.00	800.00	1,004.40	949.28	3.41	3.48	-10.028	7,875.49	-1,392.60	7,999.06	7,992.18	6.88	1,162.043		
900.00	900.00	1,099.48	1,044.34	3.64	3.81	-10.026	7,873.82	-1,392.07	7,997.23	7,989.80	7.43	1,076.041		
1,000.00	1,000.00	1,218.59	1,163.43	3.85	4.22	-10.026	7,871.65	-1,391.64	7,995.39	7,987.34	8.06	992.555		
1,100.00	1,100.00	1,271.00	1,215.83	4.05	4.40	-10.026	7,870.54	-1,391.43	7,993.43	7,984.99	8.44	947.133		
1,200.00	1,200.00	1,271.00	1,215.83	4.24	4.40	-10.026	7,870.54	-1,391.43	7,992.61	7,983.97	8.63	925.814		
1,288.47	1,288.47	1,343.65	1,288.46	4.41	4.65	-10.022	7,869.81	-1,390.83	7,991.77	7,982.73	9.04	884.011		
1,300.00	1,300.00	1,346.95	1,291.76	4.43	4.66	-10.022	7,869.82	-1,390.79	7,991.77	7,982.70	9.07	880.845		
1,400.00	1,400.00	1,375.54	1,320.36	4.61	4.75	-10.019	7,870.05	-1,390.37	7,992.32	7,982.97	9.35	854.972		
1,500.00	1,500.00	1,456.00	1,400.76	4.78	5.02	-10.004	7,872.19	-1,388.70	7,994.35	7,984.56	9.79	816.425		
1,600.00	1,599.98	1,456.00	1,400.76	4.98	5.02	-179.991	7,872.19	-1,388.70	7,997.96	7,987.98	9.98	801.197		
1,620.70	1,620.67	1,456.00	1,400.76	4.99	5.02	-179.991	7,872.19	-1,388.70	7,999.30	7,989.31	10.00	800.326		
1,700.00	1,699.89	1,471.47	1,416.21	5.07	5.07	-179.987	7,872.81	-1,388.31	8,005.19	7,995.07	10.13	790.331		
1,800.00	1,799.81	1,556.71	1,501.36	5.23	5.35	-179.968	7,876.32	-1,386.24	8,013.03	8,002.47	10.56	758.686		
1,900.00	1,899.72	1,644.00	1,588.55	5.41	5.63	-179.949	7,880.05	-1,384.24	8,021.05	8,010.03	11.02	727.635		
2,000.00	1,999.63	1,758.77	1,703.19	5.60	6.02	-179.926	7,884.90	-1,381.84	8,029.06	8,017.47	11.60	692.351		
2,100.00	2,099.54	1,833.00	1,777.35	5.80	6.26	-179.913	7,887.88	-1,380.43	8,036.95	8,024.90	12.05	667.200		
2,200.00	2,199.45	1,907.55	1,851.82	6.02	6.51	-179.901	7,891.06	-1,379.23	8,045.15	8,032.64	12.51	643.131		
2,300.00	2,299.36	1,961.94	1,906.14	6.24	6.70	-179.893	7,893.72	-1,378.57	8,053.95	8,041.04	12.91	623.695		
2,400.00	2,399.27	2,021.00	1,965.11	6.47	6.90	-179.885	7,896.92	-1,378.05	8,063.32	8,049.98	13.34	604.378		
2,500.00	2,499.18	2,097.18	2,041.16	6.72	7.16	-179.875	7,901.35	-1,377.43	8,073.09	8,059.25	13.84	583.353		
2,600.00	2,599.10	2,180.57	2,124.39	6.96	7.44	-179.863	7,906.39	-1,376.54	8,083.06	8,068.70	14.37	562.569		
2,700.00 2,800.00	2,699.01 2,798.92	2,288.58 2,410.11	2,232.19 2,353.48	7.22 7.48	7.82 8.24	-179.845 -179.822	7,913.07 7,920.36	-1,375.10 -1,373.13	8,093.14 8,102.97	8,078.14 8,087.30	14.99 15.67	539.801 517.015		
2,900.00	2,898.83	2,509.87	2,453.04	7.74	8.59	-179.802	7,926.25	-1,371.27	8,112.68	8,096.40	16.28	498.222		
3,000.00	2,998.74	2,609.76	2,552.74	8.01	8.94	-179.781	7,932.16	-1,369.24	8,122.37	8,105.47	16.90	480.630		
3,100.00	3,098.65	2,704.20	2,647.00	8.28	9.27	-179.762	7,937.76	-1,367.49	8,132.09	8,114.59	17.50	464.653		
3,200.00 3,300.00	3,198.56 3,298.47	2,817.49 2,987.35	2,760.08 2,929.68	8.56 8.84	9.67 10.27	-179.742 -179.714	7,944.43 7,953.39	-1,365.76 -1,363.26	8,141.85 8,151.00	8,123.67 8,131.95	18.18 19.06	447.954 427.693		
				0.46							40.50			
3,400.00	3,398.39	3,058.27	3,000.50	9.13	10.52	-179.704 -179.693	7,957.01	-1,362.40 -1,361.58	8,159.99 8 160 18	8,140.40	19.59	416.585		
3,500.00 3,600.00	3,498.30 3,598.21	3,152.00 3,292.55	3,094.11 3,234.48	9.41 9.70	10.85 11.35	-179.693 -179.677	7,961.89 7,968.90	-1,361.58 -1,360.40	8,169.18 8,178.19	8,148.98 8,157.20	20.20 20.99	404.364 389.619		
3,700.00	3,698.12	3,429.81	3,371.58	9.70	11.84	-179.677	7,966.90	-1,358.54	8,186.57	8.164.80	20.99	376.054		
3,800.00	3,798.03	3,530.00	3,471.65	10.29	12.19	-179.635	7,979.38	-1,356.15	8,194.63	8,172.22	22.42	365.547		
3,900.00	3,897.94	3,591.96	3,533.53	10.58	12.42	-179.623	7,982.17	-1,354.80	8,202.97	8,180.04	22.93	357.777		
4,000.00	3,997.85	3,643.16	3,584.66	10.58	12.42	-179.623	7,984.72	-1,354.80	8,211.91	8,188.51	23.40	350.940		
4,100.00	4,097.76	3,718.00	3,659.40	11.18	12.86	-179.614	7,988.81	-1,354.60	8,221.51	8,197.55	23.96	343.143		
4,200.00	4,197.68	3,767.10	3,708.41	11.48	13.04	-179.614	7,991.68	-1,355.09	8,231.48	8,207.06	24.43	337.003		
4,300.00	4,297.59	3,858.60	3,799.74	11.78	13.37	-179.611	7,997.16	-1,355.52	8,241.67	8,216.62	25.05	329.028		
4,400.00	4,397.50	3,956.53	3,897.49	12.08	13.72	-179.603	8,003.22	-1,355.36	8,251.94	8,226.24	25.70	321.121		
4,500.00	4,497.41	4,061.74	4,002.50	12.39	14.09	-179.593	8,009.70	-1,355.08	8,262.17	8,235.79	26.38	313.257		
4,600.00	4,597.32	4,204.13	4,144.64	12.69	14.60	-179.580	8,018.13	-1,354.57	8,272.17	8,244.97	27.19	304.211		
4,700.00	4,697.23	4,486.02	4,426.20	13.00	15.61	-179.549	8,031.40	-1,352.19	8,281.11	8,252.58	28.52	290.336		
4,800.00	4,797.14	4,650.38	4,590.44	13.31	16.20	-179.525	8,036.71	-1,349.49	8,288.25	8,258.83	29.42	281.723		
4,900.00	4,897.05	20,895.60	13,017.78	13.62	122.97	118.804	16.54	-1,360.86	8,239.50	8,161.33	78.18	105.397		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

Depth (usft) (5,000.00 4 5,100.00 5 5,200.00 5 5,300.00 5 5,500.00 5 5,600.00 5 5,600.00 5 5,900.00 5 5,900.00 5 5,000.		4-MWD+HDGI Off Measured Depth (usft) 20,897.62 20,899.68 20,901.78 20,903.91 20,906.08 20,908.30 20,910.55 20,912.85 20,915.19 20,917.57	Vertical Depth (usft) 13,017.81 13,017.84 13,017.87 13,017.90 13,017.98 13,018.01 13,018.05	Semi N Reference (usft) 13.92 14.23 14.55 14.86 15.17 15.48	lajor Axis Offset (usft) 123.00 123.02 123.05 123.08 123.11 123.14	Highside Toolface (°) 118.731 118.657 118.582 118.505 118.427 118.348	Offset Wellb +N/-S (usft) 14.51 12.46 10.36 8.23 6.06	+E/-W (usft) -1,360.93 -1,360.99	Dist Between Centres (usft) 8,141.25	Rule Assi tance Between Ellipses (usft)	gned: Minimum Separation (usft)	Separation Factor	Offset Well Error: Warning	1.00 usft
Measured Volume 1	/ertical Depth (usft) 4,996.97 5,096.88 5,196.79 5,296.70 5,396.61 5,496.52 5,596.43 5,696.34 5,796.26 5,896.17	Measured Depth (usft) 20,897.62 20,899.68 20,901.78 20,906.08 20,908.30 20,912.85 20,915.19	Vertical Depth (usft) 13,017.81 13,017.84 13,017.87 13,017.90 13,017.99 13,017.98 13,018.01 13,018.05	(usft) 13.92 14.23 14.55 14.86 15.17 15.48	Offset (usft) 123.00 123.02 123.05 123.08 123.11	Toolface (°) 118.731 118.657 118.582 118.505 118.427	+N/-S (usft) 14.51 12.46 10.36 8.23	+E/-W (usft) -1,360.93 -1,360.99	Between Centres (usft)	Between Ellipses (usft)	Separation		Warning	
5,100.00 5 5,200.00 5 5,300.00 5 5,500.00 5 5,500.00 5 5,600.00 5 5,700.00 5 5,900.00 5 6,000.00 5	5,096.88 5,196.79 5,296.70 5,396.61 5,496.52 5,596.43 5,696.34 5,796.26 5,896.17	20,899.68 20,901.78 20,903.91 20,906.08 20,908.30 20,910.55 20,912.85 20,915.19	13,017.84 13,017.87 13,017.90 13,017.94 13,017.98 13,018.01 13,018.05	14.23 14.55 14.86 15.17 15.48	123.02 123.05 123.08 123.11	118.657 118.582 118.505 118.427	12.46 10.36 8.23	-1,360.99	8,141.25	0.000.04				
5,200.00 5 5,300.00 5 5,400.00 5 5,500.00 5 5,700.00 5 5,800.00 5 5,900.00 5	5,196.79 5,296.70 5,396.61 5,496.52 5,596.43 5,696.34 5,796.26 5,896.17	20,901.78 20,903.91 20,906.08 20,908.30 20,910.55 20,912.85 20,915.19	13,017.87 13,017.90 13,017.94 13,017.98 13,018.01 13,018.05	14.55 14.86 15.17 15.48	123.05 123.08 123.11	118.582 118.505 118.427	10.36 8.23			8,062.84	78.41	103.829		
5,300.00 5,400.00 5,500.00 5,700.00 5,800.00 5,900.00 5,900.00 5	5,296.70 5,396.61 5,496.52 5,596.43 5,696.34 5,796.26 5,896.17	20,903.91 20,906.08 20,908.30 20,910.55 20,912.85 20,915.19	13,017.90 13,017.94 13,017.98 13,018.01 13,018.05	14.86 15.17 15.48	123.08 123.11	118.505 118.427	8.23		8,043.04	7,964.40	78.65	102.265		
5,400.00 5,500.00 5,700.00 5,800.00 5,900.00 5,000.00 5	5,396.61 5,496.52 5,596.43 5,696.34 5,796.26 5,896.17	20,906.08 20,908.30 20,910.55 20,912.85 20,915.19	13,017.94 13,017.98 13,018.01 13,018.05	15.17 15.48	123.11	118.427		-1,361.06	7,944.88	7,865.99	78.89	100.705		
5,500.00 5 5,600.00 5 5,700.00 5 5,800.00 5 5,900.00 5 6,000.00 5	5,496.52 5,596.43 5,696.34 5,796.26 5,896.17	20,908.30 20,910.55 20,912.85 20,915.19	13,017.98 13,018.01 13,018.05	15.48			6 06	-1,361.12	7,846.76	7,767.62	79.14	99.149		
5,600.00 5 5,700.00 5 5,800.00 5 5,900.00 5	5,596.43 5,696.34 5,796.26 5,896.17	20,910.55 20,912.85 20,915.19	13,018.01 13,018.05		123.14	118.348		-1,361.19	7,748.69	7,669.29	79.39	97.597		
5,700.00 5 5,800.00 5 5,900.00 5 6,000.00 5	5,696.34 5,796.26 5,896.17	20,912.85 20,915.19	13,018.05	15.79			3.85	-1,361.26	7,650.66	7,571.01	79.65	96.049		
5,800.00 5 5,900.00 5 6,000.00 5	5,796.26 5,896.17	20,915.19			123.17	118.266	1.60	-1,361.32	7,552.69	7,472.77	79.92	94.506		
5,900.00 5 6,000.00 5	5,896.17			16.11	123.20	118.184	-0.70	-1,361.39	7,454.77	7,374.58	80.19	92.967		
6,000.00 5		20,917.57	13,018.10	16.42	123.23	118.099	-3.04	-1,361.46	7,356.90	7,276.43	80.46	91.433		
	5,996.08		13,018.14	16.74	123.26	118.013	-5.42	-1,361.53	7,259.08	7,178.34	80.74	89.904		
6,100.00 6		20,920.01	13,018.19	17.05	123.29	117.925	-7.85	-1,361.60	7,161.33	7,080.30	81.03	88.379		
	6,095.99	20,922.49	13,018.24	17.37	123.32	117.836	-10.33	-1,361.67	7,063.64	6,982.31	81.32	86.860		
	6,195.90	20,925.02	13,018.29	17.68	123.36	117.744	-12.86	-1,361.74	6,966.01	6,884.39	81.62	85.346		
	6,295.81	20,927.60	13,018.34	18.00	123.39	117.651	-15.44	-1,361.81	6,868.44	6,786.52	81.93	83.837		
	6,395.72	20,956.00	13,019.04	18.32	123.77	116.617	-43.83	-1,362.52	6,771.06	6,688.61	82.45	82.122		
6,500.00 6	6,495.63	20,956.00	13,019.04	18.63	123.77	116.617	-43.83	-1,362.52	6,673.62	6,590.87	82.75	80.649		
6,600.00 6	6,595.55	20,956.00	13,019.04	18.95	123.77	116.617	-43.83	-1,362.52	6,576.25	6,493.19	83.05	79.182		
6,700.00 6	6,695.46	20,956.00	13,019.04	19.27	123.77	116.617	-43.83	-1,362.52	6,478.96	6,395.59	83.36	77.721		
6,800.00 6	6,795.37	20,956.00	13,019.04	19.59	123.77	116.617	-43.83	-1,362.52	6,381.75	6,298.07	83.68	76.265		
6,900.00 6	6,895.28	20,956.00	13,019.04	19.91	123.77	116.617	-43.83	-1,362.52	6,284.63	6,200.63	84.00	74.814		
7,000.00 6	6,995.19	20,956.00	13,019.04	20.23	123.77	116.617	-43.83	-1,362.52	6,187.61	6,103.27	84.33	73.370		
7,100.00 7	7,095.10	20,956.00	13,019.04	20.54	123.77	116.617	-43.83	-1,362.52	6,090.67	6,006.00	84.67	71.931		
7,200.00 7	7,195.01	20,956.00	13,019.04	20.86	123.77	116.617	-43.83	-1,362.52	5,993.85	5,908.82	85.02	70.498		
	7,294.92	20,956.00	13,019.04	21.18	123.77	116.617	-43.83	-1,362.52	5,897.12	5,811.74	85.38	69.071		
	7,394.84 7,494.75	20,956.00 20,956.00	13,019.04 13,019.04	21.50 21.82	123.77 123.77	116.617 116.617	-43.83 -43.83	-1,362.52 -1,362.52	5,800.51 5,704.01	5,714.77 5,617.90	85.74 86.12	67.651 66.237		
7,500.00 7	7,494.73	20,930.00	13,019.04	21.02	123.77	110.017	-43.03	-1,302.32	3,704.01	3,017.90	00.12	00.237		
	7,594.66	20,956.00	13,019.04	22.14	123.77	116.617	-43.83	-1,362.52	5,607.64	5,521.14	86.50	64.830		
	7,694.57	20,975.24	13,019.60	22.46	124.02	115.912	-63.05	-1,362.95	5,511.35	5,424.29	87.06	63.308		
	7,794.48	20,980.01	13,019.75	22.78	124.09	115.737	-67.82	-1,363.06	5,415.21	5,327.71	87.50	61.887		
	7,894.39	20,984.85	13,019.90	23.10	124.15	115.558	-72.66	-1,363.16	5,319.21	5,231.25	87.96	60.475		
8,000.00 7	7,994.30	20,989.76	13,020.05	23.42	124.22	115.377	-77.57	-1,363.27	5,223.35	5,134.92	88.43	59.070		
8,100.00 8	8,094.21	20,994.74	13,020.21	23.75	124.28	115.193	-82.54	-1,363.38	5,127.64	5,038.74	88.91	57.674		
8,200.00 8	8,194.13	20,999.79	13,020.37	24.07	124.35	115.006	-87.58	-1,363.49	5,032.10	4,942.69	89.40	56.286		
	8,294.04	21,004.91	13,020.54	24.39	124.42	114.816	-92.70	-1,363.60	4,936.72	4,846.81	89.91	54.906		
	8,393.95	21,010.11	13,020.71	24.71	124.49	114.624	-97.89	-1,363.71	4,841.52	4,751.08	90.44	53.535		
8,500.00 8	8,493.86	21,015.37	13,020.89	25.03	124.56	114.428	-103.16	-1,363.82	4,746.51	4,655.53	90.98	52.173		
8,600.00 8	8,593.77	21,020.72	13,021.08	25.35	124.63	114.228	-108.50	-1,363.93	4,651.70	4,560.17	91.53	50.820		
8,700.00 8	8,693.68	21,026.15	13,021.27	25.67	124.70	114.026	-113.92	-1,364.04	4,557.10	4,465.00	92.11	49.476		
8,800.00	8,793.59	21,031.65	13,021.46	26.00	124.78	113.820	-119.42	-1,364.16	4,462.73	4,370.03	92.70	48.142		
	8,893.50	21,037.24	13,021.66	26.32	124.85	113.611	-125.00	-1,364.27	4,368.60	4,275.29	93.31	46.817		
9,000.00 8	8,993.42	21,051.00	13,022.18	26.64	125.03	113.095	-138.75	-1,364.55	4,274.74	4,180.72	94.02	45.467		
	9,093.33	21,051.00	13,022.18	26.96	125.03	113.095	-138.75	-1,364.55	4,181.13	4,086.51	94.62	44.188		
	9,193.24	21,149.20	13,024.54	27.29	126.34	109.354	-236.89	-1,366.84	4,087.74	3,991.60	96.14	42.519		
	9,293.15	21,156.55	13,024.61	27.61	126.44	109.070	-244.24	-1,367.04	3,994.59	3,897.72	96.86	41.240		
	9,393.06 9,492.97	21,163.73 21,121.60	13,024.69 13,023.91	27.93 28.25	126.53 125.97	108.793 110.414	-251.42 -209.31	-1,367.23 -1,366.19	3,901.76 3,809.29	3,804.16 3,711.36	97.61 97.93	39.974 38.898		
						110.414								
	9,592.88	21,177.59	13,024.81	28.58	126.72	108.256	-265.27	-1,367.60	3,717.21	3,618.03	99.18	37.478		
	9,692.79	21,184.28	13,024.87	28.90	126.81	107.997	-271.96	-1,367.79	3,625.54	3,525.52	100.02	36.250		
	9,792.71	21,190.82	13,024.92	29.22	126.89	107.743	-278.50	-1,367.97	3,534.30	3,433.42	100.88	35.034		
	9,892.62 9,992.53	21,197.21 21,203.46	13,024.96 13,025.01	29.55 29.87	126.98 127.06	107.495 107.252	-284.88 -291.13	-1,368.14 -1,368.32	3,443.55 3,353.31	3,341.76 3,250.59	101.78 102.72	33.833 32.645		
	0,092.44	21,203.40	13,025.04	30.19	127.00	107.232	-297.13	-1,368.49	3,263.63	3,159.93	102.72	31.472		





Database:



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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

Offset De	sign: C	attlemen Fe	d Com - 5	512H - OH /	68637 - 9	Surveys (H&I	P 625)						Offset Site Error:	0.00 usft
Survey Progi		24-MWD+HDG								Rule Assi	gned:		Offset Well Error:	1.00 usft
Refe Measured	rence Vertical	Off Measured	set Vertical	Semi I Reference	Major Axis Offset	Highside	Offset Wellb		Dist Between	tance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
10,200.00	10,192.35		13,025.08	30.52	127.22	106.781	-303.22	-1,368.65	3,174.55	3,069.84	104.72	30.315		
10,300.00	10,292.26		13,025.11	30.84	127.30	106.553	-309.07	-1,368.82	3,086.14	2,980.36	105.79	29.173		
10,400.00	10,392.17		13,025.13	31.16	127.38	106.329	-314.79	-1,368.98	2,998.45	2,891.55	106.91	28.048		
10,500.00	10,492.08		13,025.16	31.49	127.45	106.111	-320.40	-1,369.14	2,911.55	2,803.47	108.08	26.940		
10,600.00	10,592.00	21,238.23	13,025.18	31.81	127.52	105.896	-325.89	-1,369.29	2,825.50	2,716.19	109.30	25.850		
10,700.00	10,691.91	21,244.54	13,025.19	32.13	127.61	105.649	-332.20	-1,369.47	2,740.38	2,629.79	110.60	24.778		
10,800.00	10,791.82	21,250.78	13,025.21	32.46	127.69	105.405	-338.43	-1,369.65	2,656.30	2,544.34	111.96	23.726		
10,900.00	10,891.73		13,025.22	32.78	127.77	105.170	-344.44	-1,369.82	2,573.34	2,459.96	113.38	22.696		
11,000.00	10,991.64	21,262.58	13,025.22	33.11	127.85	104.944	-350.22	-1,369.98	2,491.63	2,376.75	114.88	21.690		
11,100.00	11,091.55	21,268.16	13,025.22	33.43	127.92	104.725	-355.81	-1,370.14	2,411.28	2,294.84	116.44	20.708		
11,200.00	11,191.46	21,273.55	13,025.21	33.75	127.99	104.514	-361.19	-1,370.30	2,332.45	2,214.37	118.08	19.753		
11,300.00	11,291.37	21,278.76	13,025.21	34.08	128.06	104.310	-366.40	-1,370.44	2,255.28	2,135.49	119.79	18.827		
11,400.00	11,391.29		13,025.19	34.40	128.13	104.112	-371.43	-1,370.59	2,179.96	2,058.39	121.58	17.930		
11,500.00	11,491.20		13,025.18	34.73	128.20	103.922	-376.29	-1,370.72	2,106.69	1,983.25	123.44	17.067		
11,600.00	11,591.11		13,025.16	35.05	128.26	103.737	-380.99	-1,370.86	2,035.69	1,910.32	125.37	16.238		
11,700.00	11,691.02		13,025.14	35.38	128.32	103.558	-385.54	-1,370.99	1,967.20	1,839.84	127.35	15.447		
11,800.00	11,790.93	21,302.32	13,025.12	35.70	128.38	103.385	-389.95	-1,371.11	1,901.49	1,772.10	129.39	14.696		
11,900.00	11,790.93		13,025.12	36.03	128.43	103.363	-394.22	-1,371.11	1,838.87	1,772.10	131.47	13.987		
11,900.00	11,898.38		13,025.10	36.05	128.44	103.217	-394.54	-1,371.23	1,834.28	1,707.40	131.62	13.936		
12,000.00	11,990.80		13,025.10	36.33	128.47	103.203	-396.67	-1,371.30	1,779.39	1,645.87	133.52	13.327		
12,000.00	12,019.04		13,025.09	36.36	128.47	-88.613	-396.63	-1,371.30	1,763.15	1,629.07	134.08	13.150		
12,020.21	12,010.01	21,000.00	10,020.00	00.00	120.11	00.010	000.00	1,011.00	1,7 00.10	1,020.01	101.00	10.100		
12,100.00	12,090.80	21,308.52	13,025.09	36.36	128.46	-88.593	-396.15	-1,371.29	1,723.21	1,587.75	135.46	12.721		
12,200.00	12,190.80	21,307.86	13,025.09	36.36	128.45	-88.567	-395.49	-1,371.27	1,671.11	1,533.76	137.34	12.167		
12,300.00	12,290.80	21,307.22	13,025.10	36.36	128.44	-88.542	-394.85	-1,371.25	1,623.49	1,484.35	139.15	11.668		
12,400.00	12,390.80	21,306.60	13,025.10	36.37	128.43	-88.517	-394.23	-1,371.23	1,580.78	1,439.96	140.82	11.226		
12,500.00	12,490.80	21,305.99	13,025.10	36.37	128.43	-88.493	-393.62	-1,371.22	1,543.38	1,401.05	142.32	10.844		
12,528.24	12,519.04	21,305.83	13,025.11	36.37	128.42	-88.487	-393.46	-1,371.21	1,533.83	1,391.12	142.71	10.748		
12,550.00	12,540.79		13,025.10	36.40	128.43	92.794	-393.77	-1,371.22	1,526.80	1,383.80	143.00	10.677		
12,600.00	12,590.61		13,025.08	36.63	128.48	94.196	-397.81	-1,371.33	1,511.88	1,368.17	143.71	10.520		
12,650.00	12,639.89		13,025.02	36.95	128.60	95.219	-406.36	-1,371.58	1,498.76	1,354.31	144.45	10.376		
12,700.00	12,688.24	21,331.64	13,024.92	37.29	128.77	95.876	-419.26	-1,371.94	1,487.51	1,342.32	145.19	10.245		
12,750.00	12,735.30	21,349.75	13,024.78	37.62	129.01	96.153	-437.36	-1,372.44	1,478.16	1,332.20	145.96	10.127		
			13,024.76		129.01			-1,372.44			146.74	10.127		
12,800.00 12,850.00	12,780.72 12,824.15		13,024.66	37.96 38.29	129.32	96.089 95.726	-460.31 -487.96	-1,373.03 -1,373.67	1,470.65 1,464.87	1,323.91 1,317.34	146.74	9.929		
12,900.00	12,865.26		13,024.62	38.60	130.09	95.726	-467.96 -518.70	-1,373.67	1,460.67	1,317.34	148.33	9.929		
12,950.00	12,903.73		13,024.89	38.90	130.09	94.464	-550.71	-1,374.93	1,457.92	1,308.78	149.14	9.776		
	,	,	-,					,-:::==	,	, 				
13,000.00	12,939.27	21,477.00	13,024.85	39.18	130.71	94.199	-564.58	-1,375.21	1,456.60	1,306.79	149.81	9.723		
13,009.11	12,945.41		13,024.85	39.22	130.71	94.203	-564.58	-1,375.21	1,456.56	1,306.66	149.91	9.716 CC, E	S	
13,050.00	12,971.62	,	13,024.85	39.43	130.71	94.135	-564.58	-1,375.21	1,457.24	1,306.91	150.33	9.693		
13,100.00	13,000.52		13,024.85	39.65	130.71	93.868	-564.58	-1,375.21	1,459.92	1,309.10	150.81	9.680 SF		
13,150.00	13,025.76	21,477.00	13,024.85	39.85	130.71	93.400	-564.58	-1,375.21	1,464.58	1,313.35	151.23	9.684		
13,200.00	13,047.14	21,477.00	13,024.85	40.02	130.71	92.734	-564.58	-1,375.21	1,471.19	1,319.61	151.58	9.706		
13,250.00	13,064.50		13,024.85	40.15	130.71	91.875	-564.58	-1,375.21	1,479.66	1,327.81	151.85	9.744		
13,300.00	13,077.71		13,024.85	40.26	130.71	90.829	-564.58	-1,375.21	1,489.91	1,337.87	152.03	9.800		
13,350.00	13,086.67		13,024.85	40.33	130.71	89.604	-564.58	-1,375.21	1,501.80	1,349.68	152.13	9.872		
13,400.00	13,091.30	21,477.00	13,024.85	40.38	130.71	88.210	-564.58	-1,375.21	1,515.23	1,363.10	152.13	9.960		
13,428.24	13,092.00	21,477.00	13,024.85	40.39	130.71	87.353	-564.58	-1,375.21	1,523.43	1,371.35	152.08	10.017		
13,500.00	13,092.00		13,024.85	40.40	130.71	87.353	-564.58	-1,375.21	1,546.34	1,394.49	151.85	10.017		
13,600.00	13,092.00		13,024.85	40.43	130.71	87.353	-564.58	-1,375.21	1,583.14	1,431.92	151.83	10.163		
13,700.00	13,092.00		13,024.85	40.46	130.71	87.353	-564.58	-1,375.21	1,625.26	1,475.00	150.26	10.816		
13,800.00	13,092.00		13,024.85	40.50	130.71	87.353	-564.58	-1,375.21	1,672.32	1,523.27	149.05	11.220		
13,900.00	13,092.00	21,477.00	13,024.85	40.53	130.71	87.353	-564.58	-1,375.21	1,723.89	1,576.27	147.63	11.677		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: RK
MD Reference: RK
North Reference: Gri

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	0.5			512H - OH /									Offset Site Error:	0.00 usf
Survey Prog	ram: 12 rence	4-MWD+HDG	M set	Semi M	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,000.00	13,092.00	21,477.00	13,024.85	40.58	130.71	87.353	-564.58	-1,375.21	1,779.60	1,633.55	146.05	12.185		
14,100.00	13,092.00	21,477.00	13,024.85	40.63	130.71	87.353	-564.58	-1,375.21	1,839.06	1,694.70	144.36	12.740		
14,200.00	13,092.00	21,477.00	13,024.85	40.69	130.71	87.353	-564.58	-1,375.21	1,901.92	1,759.32	142.60	13.337		
14,300.00	13,092.00	21,477.00	13,024.85	40.76	130.71	87.353	-564.58	-1,375.21	1,967.85	1,827.04	140.81	13.975		
14,400.00	13,092.00	21,477.00	13,024.85	40.85	130.71	87.353	-564.58	-1,375.21	2,036.57	1,897.55	139.01	14.650		
14,500.00	13,092.00	21,477.00	13,024.85	40.95	130.71	87.353	-564.58	-1,375.21	2,107.79	1,970.55	137.23	15.359		
14,600.00	13,092.00	21,477.00	13,024.85	41.10	130.71	87.353	-564.58	-1,375.21	2,181.27	2,045.78	135.49	16.099		
14,700.00	13,092.00	21,477.00	13,024.85	41.29	130.71	87.353	-564.58	-1,375.21	2,256.79	2,123.00	133.79	16.868		
14,800.00	13,092.00	21,477.00	13,024.85	41.57	130.71	87.353	-564.58	-1,375.21	2,334.15	2,202.00	132.15	17.663		
14,900.00	13,092.00	21,477.00	13,024.85	41.99	130.71	87.353	-564.58	-1,375.21	2,413.17	2,282.61	130.57	18.482		
15,000.00	13,092.00	21,477.00	13,024.85	42.60	130.71	87.353	-564.58	-1,375.21	2,493.71	2,364.65	129.05	19.323		
15,100.00	13,092.00	21,477.00	13,024.85	43.42	130.71	87.353	-564.58	-1,375.21	2,575.60	2,448.00	127.60	20.184		
15,200.00	13,092.00	21,477.00	13,024.85	44.43	130.71	87.353	-564.58	-1,375.21	2,658.74	2,532.51	126.23	21.063		
15,300.00	13,092.00	21,477.00	13,024.85	45.56	130.71	87.353	-564.58	-1,375.21	2,743.00	2,618.09	124.91	21.959		
15,400.00	13,092.00	21,477.00	13,024.85	46.76	130.71	87.353	-564.58	-1,375.21	2,828.29	2,704.62	123.67	22.870		
15,500.00	13,092.00	21,477.00	13,024.85	48.01	130.71	87.353	-564.58	-1,375.21	2,914.51	2,792.02	122.49	23.794		
15,600.00	13,092.00	21,477.00	13,024.85	49.30	130.71	87.353	-564.58	-1,375.21	3,001.59	2,880.22	121.37	24.730		
15,700.00	13,092.00	21,477.00	13,024.85	50.61	130.71	87.353	-564.58	-1,375.21	3,089.45	2,969.13	120.32	25.678		
15,800.00	13,092.00	21,477.00	13,024.85	51.93	130.71	87.353	-564.58	-1,375.21	3,178.03	3,058.71	119.32	26.635		
15,900.00	13,092.00	21,477.00	13,024.85	53.27	130.71	87.353	-564.58	-1,375.21	3,267.26	3,148.89	118.37	27.602		
16,000.00	13,092.00	21,477.00	13,024.85	54.61	130.71	87.353	-564.58	-1,375.21	3,357.11	3,239.63	117.48	28.576		
16,100.00	13,092.00	21,477.00	13,024.85	55.97	130.71	87.353	-564.58	-1,375.21	3,447.51	3,330.88	116.64	29.558		
16,200.00	13,092.00	21,477.00	13,024.85	57.33	130.71	87.353	-564.58	-1,375.21	3,538.43	3,422.59	115.84	30.546		
16,300.00	13,092.00	21,477.00	13,024.85	58.69	130.71	87.353	-564.58	-1,375.21	3,629.83	3,514.74	115.09	31.540		
16,400.00	13,092.00	21,477.00	13,024.85	60.06	130.71	87.353	-564.58	-1,375.21	3,721.67	3,607.29	114.38	32.538		
16,500.00	13,092.00	21,477.00	13,024.85	61.44	130.71	87.353	-564.58	-1,375.21	3,813.92	3,700.21	113.71	33.541		
16,600.00	13,092.00	21,477.00	13,024.85	62.81	130.71	87.353	-564.58	-1,375.21	3,906.55	3,793.48	113.07	34.548		
16,700.00	13,092.00	21,477.00	13,024.85	64.20	130.71	87.353	-564.58	-1,375.21	3,999.54	3,887.06	112.48	35.559		
16,800.00	13,092.00	21,477.00	13,024.85	65.58	130.71	87.353	-564.58	-1,375.21	4,092.85	3,980.94	111.91	36.572		
16,900.00	13,092.00	21,477.00	13,024.85	66.97	130.71	87.353	-564.58	-1,375.21	4,186.48	4,075.10	111.38	37.588		
17,000.00	13,092.00	21,477.00	13,024.85	68.36	130.71	87.353	-564.58	-1,375.21	4,280.40	4,169.52	110.88	38.605		
17,100.00	13,092.00	21,477.00	13,024.85	69.75	130.71	87.353	-564.58	-1,375.21	4,374.58	4,264.18	110.40	39.625		
17,200.00	13,092.00	21,477.00	13,024.85	71.14	130.71	87.353	-564.58	-1,375.21	4,469.02	4,359.06	109.95	40.646		
17,300.00	13,092.00	21,477.00	13,024.85	72.54	130.71	87.353	-564.58	-1,375.21	4,563.69	4,454.16	109.53	41.667		
17,400.00	13,092.00	21,477.00	13,024.85	73.94	130.71	87.353	-564.58	-1,375.21	4,658.59	4,549.46	109.13	42.690		
17,500.00	13,092.00	21,477.00	13,024.85	75.34	130.71	87.353	-564.58	-1,375.21	4,753.69	4,644.94	108.75	43.713		
17,600.00	13,092.00	21,477.00	13,024.85	76.74	130.71	87.353	-564.58	-1,375.21	4,848.99	4,740.60	108.39	44.737		
17,700.00	13,092.00	21,477.00	13,024.85	78.14	130.71	87.353	-564.58	-1,375.21	4,944.48	4,836.43	108.05	45.760		
17,800.00	13,092.00	21,477.00	13,024.85	79.55	130.71	87.353	-564.58	-1,375.21	5,040.15	4,932.41	107.73	46.783		
17,900.00	13,092.00	21,477.00	13,024.85	80.95	130.71	87.353	-564.58	-1,375.21	5,135.97	5,028.54	107.43	47.806		
18,000.00	13,092.00	21,477.00	13,024.85	82.36	130.71	87.353	-564.58	-1,375.21	5,231.96	5,124.81	107.15	48.829		
18,100.00	13,092.00	21,477.00	13,024.85	83.76	130.71	87.353	-564.58	-1,375.21	5,328.09	5,221.21	106.88	49.851		
18,200.00	13,092.00	21,477.00	13,024.85	85.17	130.71	87.353	-564.58	-1,375.21	5,424.36	5,317.73	106.63	50.872		
18,300.00	13,092.00	21,477.00	13,024.85	86.58	130.71	87.353	-564.58	-1,375.21	5,520.77	5,414.38	106.39	51.892		
18,400.00	13,092.00	21,477.00	13,024.85	87.99	130.71	87.353	-564.58	-1,375.21	5,617.30	5,511.13	106.17	52.910		
18,500.00	13,092.00	21,477.00	13,024.85	89.40	130.71	87.353	-564.58	-1,375.21	5,713.95	5,607.99	105.95	53.928		
18,600.00	13,092.00	21,477.00	13,024.85	90.81	130.71	87.353	-564.58	-1,375.21	5,810.71	5,704.95	105.76	54.945		
18,700.00	13,092.00	21,477.00	13,024.85	92.23	130.71	87.353	-564.58	-1,375.21	5,907.58	5,802.01	105.57	55.960		
18,800.00	13,092.00	21,477.00	13,024.85	93.64	130.71	87.353	-564.58	-1,375.21	6,004.55	5,899.16	105.39	56.973		
18,900.00	13,092.00	21,477.00	13,024.85	95.06	130.71	87.353	-564.58	-1,375.21	6,101.63	5,996.40	105.23	57.985		
19,000.00	13,092.00	21,477.00	13,024.85	96.47	130.71	87.353	-564.58	-1,375.21	6,198.79	6,093.72	105.07	58.995		
19,100.00	13,092.00	21,477.00	13,024.85	97.89	130.71	87.353	-564.58	-1,375.21	6,296.04	6,191.12	104.93	60.004		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

urvey Prog Refe	ram: 12	4-MWD+HDG Of f		Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,200.00	13,092.00	21,477.00	13,024.85	99.30	130.71	87.353	-564.58	-1,375.21	6,393.38	6,288.59	104.79	61.010		
19,300.00	13,092.00	21,477.00	13,024.85	100.72	130.71	87.353	-564.58	-1,375.21	6,490.80	6,386.13	104.67	62.015		
19,400.00	13,092.00	21,477.00	13,024.85	102.14	130.71	87.353	-564.58	-1,375.21	6,588.30	6,483.75	104.55	63.017		
19,500.00	13,092.00	21,477.00	13,024.85	103.55	130.71	87.353	-564.58	-1,375.21	6,685.87	6,581.43	104.44	64.018		
19,600.00	13,092.00	21,477.00	13,024.85	104.97	130.71	87.353	-564.58	-1,375.21	6,783.51	6,679.17	104.33	65.017		
19,700.00	13,092.00	21,477.00	13,024.85	106.39	130.71	87.353	-564.58	-1,375.21	6,881.22	6,776.97	104.24	66.013		
19,800.00	13,092.00	21,477.00	13,024.85	107.81	130.71	87.353	-564.58	-1,375.21	6,978.99	6,874.84	104.15	67.007		
19,900.00	13,092.00	21,477.00	13,024.85	109.23	130.71	87.353	-564.58	-1,375.21	7,076.82	6,972.75	104.07	67.999		
20,000.00	13,092.00	21,477.00	13,024.85	110.65	130.71	87.353	-564.58	-1,375.21	7,174.72	7,070.72	104.00	68.989		
20,100.00	13,092.00	21,477.00	13,024.85	112.07	130.71	87.353	-564.58	-1,375.21	7,272.67	7,168.74	103.93	69.976		
20,200.00	13,092.00	21,477.00	13,024.85	113.49	130.71	87.353	-564.58	-1,375.21	7,370.68	7,266.81	103.87	70.962		
20,300.00	13,092.00	21,477.00	13,024.85	114.91	130.71	87.353	-564.58	-1,375.21	7,468.74	7,364.93	103.81	71.944		
20,400.00	13,092.00	21,477.00	13,024.85	116.34	130.71	87.353	-564.58	-1,375.21	7,566.85	7,463.09	103.76	72.924		
20,500.00	13,092.00	21,477.00	13,024.85	117.76	130.71	87.353	-564.58	-1,375.21	7,665.01	7,561.29	103.72	73.902		
20,600.00	13,092.00	21,477.00	13,024.85	119.18	130.71	87.353	-564.58	-1,375.21	7,763.22	7,659.54	103.68	74.877		
20,700.00	13,092.00	21,477.00	13,024.85	120.60	130.71	87.353	-564.58	-1,375.21	7,861.47	7,757.83	103.64	75.850		
20,800.00	13,092.00	21,477.00	13,024.85	122.03	130.71	87.353	-564.58	-1,375.21	7,959.77	7,856.15	103.62	76.820		
20,900.00	13,092.00	21,477.00	13,024.85	123.45	130.71	87.353	-564.58	-1,375.21	8,058.10	7,954.51	103.59	77.788		
21,000.00	13,092.00	21,477.00	13,024.85	124.87	130.71	87.353	-564.58	-1,375.21	8,156.48	8,052.91	103.57	78.753		
21,100.00	13,092.00	21,477.00	13,024.85	126.30	130.71	87.353	-564.58	-1,375.21	8,254.90	8,151.35	103.55	79.715		
21,200.00	13,092.00	21,477.00	13,024.85	127.72	130.71	87.353	-564.58	-1,375.21	8,353.35	8,249.81	103.54	80.675		
21,300.00	13,092.00	21,477.00	13,024.85	129.15	130.71	87.353	-564.58	-1,375.21	8,451.85	8,348.31	103.54	81.632		
21,400.00	13,092.00	21,477.00	13,024.85	130.57	130.71	87.353	-564.58	-1,375.21	8,550.37	8,446.84	103.53	82.587		
21,500.00	13,092.00	21,477.00	13,024.85	132.00	130.71	87.353	-564.58	-1,375.21	8,648.93	8,545.40	103.53	83.538		
21,600.00	13,092.00	21,477.00	13,024.85	133.42	130.71	87.353	-564.58	-1,375.21	8,747.52	8,643.99	103.54	84.487		
21,700.00	13,092.00	21,477.00	13,024.85	134.85	130.71	87.353	-564.58	-1,375.21	8,846.15	8,742.60	103.54	85.433		
21,800.00	13,092.00	21,477.00	13,024.85	136.27	130.71	87.353	-564.58	-1,375.21	8,944.80	8,841.25	103.56	86.377		
21,900.00	13,092.00	21,477.00	13,024.85	137.70	130.71	87.353	-564.58	-1,375.21	9,043.49	8,939.92	103.57	87.317		
22,000.00	13,092.00	21,477.00	13,024.85	139.12	130.71	87.353	-564.58	-1,375.21	9,142.20	9,038.61	103.59	88.255		
22,100.00	13,092.00	21,477.00	13,024.85	140.55	130.71	87.353	-564.58	-1,375.21	9,240.94	9,137.33	103.61	89.190		
22,200.00	13,092.00	21,477.00	13,024.85	141.98	130.71	87.353	-564.58	-1,375.21	9,339.71	9,236.07	103.63	90.123		
22,300.00	13,092.00	21,477.00	13,024.85	143.40	130.71	87.353	-564.58	-1,375.21	9,438.50	9,334.84	103.66	91.052		
22,400.00	13,092.00	21,477.00	13,024.85	144.83	130.71	87.353	-564.58	-1,375.21	9,537.32	9,433.63	103.69	91.979		
22,500.00	13,092.00	21,477.00	13,024.85	146.26	130.71	87.353	-564.58	-1,375.21	9,636.16	9,532.44	103.72	92.902		
22,600.00	13,092.00	21,477.00	13,024.85	147.69	130.71	87.353	-564.58	-1,375.21	9,735.03	9,631.27	103.76	93.823		
22,700.00	13,092.00	21,477.00	13,024.85	149.11	130.71	87.353	-564.58	-1,375.21	9,833.92	9,730.12	103.80	94.741		
			13,024.85											







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	J.g			513H - OH /	00700-0	ourveys (ricer							Offset Site Error:	0.00 usft
urvey Progr	ram: 18 rence	8-MWD+HDGI Off		Somi N	laior Axis		Offset Wellbe	oro Contro	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	39.12	-13.88	1.00	1.00	-0.561	7,906.51	-77.39	7,906.90					
100.00	100.00	112.93	59.92	1.08	1.02	-0.565	7,906.76	-77.95	7,907.24	7,905.14	2.10	3,766.621		
200.00	200.00	188.00	134.99	1.60	1.04	-0.573	7,907.25	-79.07	7,907.92	7,905.28	2.64	2,995.483		
300.00	300.00	259.72	206.69	2.01	1.14	-0.583	7,907.97	-80.48	7,908.93	7,905.78	3.15	2,510.672		
400.00	400.00	339.00	285.94	2.35	1.30	-0.595	7,909.03	-82.20	7,910.28	7,906.63	3.65	2,164.609		
500.00	500.00	1,235.00	1,180.46	2.65	4.09	-0.565	7,882.56	-77.73	7,912.26	7,905.54	6.72	1,177.824		
600.00	600.00	1,235.00	1,180.46	2.93	4.09	-0.565	7,882.56	-77.73	7,904.28	7,897.29	6.99	1,130.356		
700.00	700.00	1,317.18	1,262.32	3.18	4.38	-0.548	7,875.70	-75.32	7,896.10	7,888.58	7.53	1,049.089		
800.00	800.00	1,346.32	1,291.38	3.41	4.48	-0.543	7,873.76	-74.56	7,889.43	7,881.57	7.86	1,003.336		
900.00	900.00	1,425.00	1,369.94	3.64	4.76	-0.529	7,869.83	-72.72	7,884.18	7,875.82	8.36	943.416		
1,000.00	1,000.00	1,425.00	1,369.94	3.85	4.76	-0.529	7,869.83	-72.72	7,878.85	7,870.28	8.57	919.323		
1,100.00	1,100.00	1,425.00	1,369.94	4.05	4.76	-0.529	7,869.83	-72.72	7,874.79	7,866.02	8.77	897.549		
1,200.00	1,200.00	1,425.00	1,369.94	4.24	4.76	-0.529	7,869.83	-72.72	7,872.00	7,863.03	8.97	877.749		
1,300.00	1,300.00	1,425.00	1,369.94	4.43	4.76	-0.529	7,869.83	-72.72	7,870.47	7,861.32	9.16	859.655		
1,400.00	1,400.00	1,506.07	1,450.98	4.61	5.04	-0.520	7,868.03	-71.43	7,868.52	7,858.91	9.61	818.751		
1,467.57	1,467.57	1,522.66	1,467.57	4.73	5.09	-0.519	7,867.98	-71.27	7,868.30	7,858.51	9.78	804.162		
1,500.00	1,500.00	1,530.62	1,475.53	4.78	5.12	-0.518	7,867.99	-71.20	7,868.35	7,858.48	9.87	797.363		
1,600.00	1,599.98	1,614.00	1,558.89	4.98	5.40	-170.498	7,869.61	-71.01	7,871.76	7,861.42	10.34	761.298		
1,620.70	1,620.67	1,614.00	1,558.89	4.99	5.40	-170.495	7,869.61	-71.01	7,872.68	7,862.33	10.35	760.503		
1,700.00	1,699.89	1,614.00	1,558.89	5.07	5.40	-170.495	7,869.61	-71.01	7,876.99	7,866.56	10.44	754.851		
1,800.00	1,799.81	1,614.00	1,558.89	5.23	5.40	-170.495	7,869.61	-71.01	7,883.57	7,872.98	10.59	744.654		
1,900.00	1,899.72	1,685.05	1,629.90	5.41	5.64	-170.500	7,872.09	-71.20	7,891.14	7,880.13	11.00	717.320		
2,000.00	1,999.63	1,804.40	1,749.18	5.60	6.04	-170.507	7,876.02	-71.43	7,898.58	7,886.99	11.59	681.314		
2,100.00	2,099.54	1,803.00	1,747.78	5.80	6.03	-170.507	7,875.97	-71.43	7,906.55	7,894.76	11.78	670.979		
2,200.00	2,199.45	1,889.90	1,834.62	6.02	6.33	-170.514	7,879.35	-71.84	7,914.67	7,902.38	12.29	643.994		
2,300.00	2,299.36	1,933.02	1,877.68	6.24	6.47	-170.519	7,881.49	-72.26	7,923.78	7,911.13	12.65	626.220		
2,400.00	2,399.27	1,992.00	1,936.55	6.47	6.67	-170.528	7,884.91	-73.05	7,933.64	7,920.56	13.08	606.547		
2,500.00	2,499.18	2,084.53	2,028.90	6.72	6.99	-170.543	7,890.54	-74.53	7,943.87	7,930.24	13.63	582.634		
2,600.00	2,599.10	2,217.81	2,161.95	6.96	7.45	-170.565	7,898.07	-76.78	7,953.67	7,939.32	14.34	554.607		
2,700.00	2,699.01	2,323.98	2,267.96	7.22	7.82	-170.580	7,903.85	-78.21	7,963.26	7,948.30	14.96	532.300		
2,800.00	2,798.92	2,436.58	2,380.38	7.48	8.21	-170.593	7,909.86	-79.27	7,972.76	7,957.15	15.61	510.792		
2,900.00	2,898.83	2,540.85	2,484.51	7.74	8.57	-170.604	7,915.27	-80.08	7,982.10	7,965.87	16.23	491.688		
3,000.00	2,998.74	2,640.66	2,584.18	8.01	8.92	-170.612	7,920.44	-80.63	7,991.44	7,974.59	16.85	474.322		
3,100.00	3,098.65	2,728.95	2,672.36	8.28	9.23	-170.617	7,925.07	-80.75	8,000.83	7,983.40	17.43	459.141		
3,200.00	3,198.56	2,815.30	2,758.57	8.56	9.54	-170.617	7,929.75	-80.21	8,010.39	7,992.39	18.00	445.024		
3,300.00	3,298.47	2,905.24	2,848.37	8.84	9.85	-170.613	7,934.77	-79.04	8,020.09	8,001.50	18.59	431.403		
3,400.00	3,398.39	2,996.97	2,939.94	9.13	10.18	-170.606	7,939.98	-77.50	8,029.90	8,010.70	19.19	418.415		
3,500.00	3,498.30	3,033.00	2,975.90	9.41	10.30	-170.602	7,942.05	-76.80	8,040.01	8,020.42	19.59	410.387		
3,600.00	3,598.21	3,129.47	3,072.17	9.70	10.65	-170.597	7,947.99	-75.51	8,050.30	8,030.09	20.22	398.228		
3,700.00	3,698.12	3,222.00	3,164.49	9.99	10.97	-170.601	7,954.38	-75.47	8,061.33	8,040.50	20.83	387.054		
3,800.00	3,798.03	3,254.36	3,196.76	10.29	11.09	-170.604	7,956.76	-75.63	8,072.61	8,051.39	21.22	380.429		
3,900.00	3,897.94	3,325.32	3,267.51	10.58	11.34	-170.607	7,962.17	-75.71	8,084.37	8,062.62	21.76	371.587		
4,000.00	3,997.85	3,411.00	3,352.91	10.88	11.65	-170.608	7,969.04	-75.33	8,096.50	8,074.15	22.35	362.270		
4,100.00	4,097.76	3,465.51	3,407.23	11.18	11.85	-170.607	7,973.61	-74.80	8,108.94	8,086.12	22.83	355.227		
4,200.00	4,197.68	3,534.32	3,475.77	11.48	12.10	-170.603	7,979.61	-73.82	8,121.78	8,098.42	23.36	347.677		
4,300.00	4,297.59	4,357.00	4,297.17	11.78	15.00	-170.625	8,013.36	-71.65	8,127.51	8,100.88	26.63	305.161		
4,400.00	4,397.50	4,428.65	4,368.79	12.08	15.25	-170.642	8,013.49	-73.55	8,131.87	8,104.69	27.18	299.152		
4,500.00	4,497.41	4,504.54	4,444.66	12.39	15.52	-170.660	8,013.85	-75.61	8,136.53	8,108.78	27.75	293.224		
4,600.00	4,597.32	4,583.78	4,523.86	12.69	15.79	-170.678	8,014.45	-77.69	8,141.47	8,113.15	28.33	287.404		
4,700.00	4,697.23	4,683.21	4,623.28	13.00	16.14	-170.693	8,015.40	-79.14	8,146.60	8,117.62	28.98	281.107		
4,800.00	4,797.14	4,817.34	4,757.41	13.31	16.61	-170.702	8,016.33	-79.50	8,151.45	8,121.70	29.76	273.935		
4,900.00	4,897.05	20,819.00	13,031.93	13.62	122.35	-170.002	85.75	83.85	8,138.18	8,063.00	75.19	108.240		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

2.00 sigma USA Compass Reference Datum

	sign: Ca												Offset Site Error:	0.00 usft
Survey Progr	ram: 18 erence	8-MWD+HDG Off		Semi M	ajor Axis		Offset Wellbo	re Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,996.97	20,819.00	13,031.93	13.92	122.35	-170.002	85.75	83.85	8,038.42	7,963.07	75.35	106.681		
5,100.00	5,096.88	20,819.00	13,031.93	14.23	122.35	-170.002	85.75	83.85	7,938.67	7,863.15	75.52	105.125		
5,200.00	5,196.79	20,819.00	13,031.93	14.55	122.35	-170.002	85.75	83.85	7,838.92	7,763.24	75.69	103.573		
5,300.00	5,296.70	20,819.00	13,031.93	14.86	122.35	-170.002	85.75	83.85	7,739.18	7,663.33	75.86	102.024		
5,400.00	5,396.61	20,819.00	13,031.93	15.17	122.35	-170.002	85.75	83.85	7,639.45	7,563.42	76.03	100.480		
5,500.00	5,496.52	20,819.00	13,031.93	15.48	122.35	-170.002	85.75	83.85	7,539.73	7,463.52	76.21	98.939		
5,600.00	5,596.43	20,819.00	13,031.93	15.79	122.35	-170.002	85.75	83.85	7,440.01	7,363.62	76.38	97.402		
5,700.00	5,696.34	20,819.00	13,031.93	16.11	122.35	-170.002	85.75	83.85	7,340.30	7,263.73	76.57	95.869		
5,800.00	5,796.26	20,819.00	13,031.93	16.42	122.35	-170.002	85.75	83.85	7,240.59	7,163.84	76.75	94.340		
5,900.00	5,896.17	20,819.00	13,031.93	16.74	122.35	-170.002	85.75	83.85	7,140.90	7,063.96	76.94	92.816		
6,000.00	5,996.08	21,195.00	13,035.95	17.05	127.42	-163.942	-289.29	103.89	7,041.02	6,960.94	80.08	87.927		
6,100.00	6,095.99	21,195.00	13,035.95	17.37	127.42	-163.942	-289.29	103.89	6,941.05	6,860.78	80.27	86.468		
6,200.00	6,195.90	21,195.00	13,035.95	17.68	127.42	-163.942	-289.29	103.89	6,841.09	6,760.62	80.47	85.014		
6,300.00	6,295.81	21,195.00	13,035.95	18.00	127.42	-163.942	-289.29	103.89	6,741.13	6,660.46	80.67	83.563		
6,400.00	6,395.72	21,195.00	13,035.95	18.32	127.42	-163.942	-289.29	103.89	6,641.17	6,560.29	80.87	82.117		
6,500.00	6,495.63	21,195.00	13,035.95	18.63	127.42	-163.942	-289.29	103.89	6,541.21	6,460.13	81.08	80.676		
6,600.00	6,595.55	21,195.00	13,035.95	18.95	127.42	-163.942	-289.29	103.89	6,441.25	6,359.96	81.29	79.239		
6,700.00	6,695.46	21,195.00	13,035.95	19.27	127.42	-163.942	-289.29	103.89	6,341.29	6,259.79	81.50	77.807		
6,800.00	6,795.37	21,195.00	13,035.95	19.59	127.42	-163.942	-289.29	103.89	6,241.34	6,159.63	81.71	76.380		
6,900.00	6,895.28	21,195.00	13,035.95	19.91	127.42	-163.942	-289.29	103.89	6,141.39	6,059.46	81.93	74.958		
7,000.00	6,995.19	21,195.00	13,035.95	20.23	127.42	-163.942	-289.29	103.89	6,041.43	5,959.28	82.15	73.541		
7,100.00	7,095.10	21,195.00	13,035.95	20.54	127.42	-163.942	-289.29	103.89	5,941.48	5,859.11	82.37	72.130		
7,200.00	7,195.01	21,195.00	13,035.95	20.86	127.42	-163.942	-289.29	103.89	5,841.53	5,758.94	82.60	70.723		
7,300.00	7,294.92	21,195.00	13,035.95	21.18	127.42	-163.942	-289.29	103.89	5,741.59	5,658.76	82.82	69.322		
7,400.00	7,394.84	21,195.00	13,035.95	21.50	127.42	-163.942	-289.29	103.89	5,641.64	5,558.59	83.05	67.927		
7,500.00	7,494.75	21,195.00	13,035.95	21.82	127.42	-163.942	-289.29	103.89	5,541.70	5,458.41	83.29	66.537		
7,600.00	7,594.66	21,195.00	13,035.95	22.14	127.42	-163.942	-289.29	103.89	5,441.76	5,358.23	83.52	65.153		
7,700.00	7,694.57	21,195.00	13,035.95	22.46	127.42	-163.942	-289.29	103.89	5,341.82	5,258.06	83.76	63.774		
7,800.00	7,794.48	21,195.00	13,035.95	22.78	127.42	-163.942	-289.29	103.89	5,241.88	5,157.88	84.00	62.401		
7,900.00	7,894.39	21,226.27	13,035.40	23.10	127.84	-162.299	-320.52	105.12	5,141.67	5,057.17	84.50	60.848		
8,000.00	7,994.30	21,227.30	13,035.39	23.42	127.85	-162.231	-321.56	105.16	5,041.71	4,956.96	84.76	59.485		
8,100.00	8,094.21	21,228.36	13,035.38	23.75	127.87	-162.159	-322.62	105.21	4,941.76	4,856.75	85.01	58.129		
8,200.00	8,194.13	21,229.45	13,035.36	24.07	127.88	-162.085	-323.70	105.27	4,841.81	4,756.54	85.28	56.778		
8,300.00	8,294.04	21,230.57	13,035.35	24.39	127.90	-162.007	-324.82	105.32	4,741.86	4,656.32	85.54	55.434		
8,400.00	8,393.95	21,231.71	13,035.34	24.71	127.91	-161.926	-325.97	105.38	4,641.92	4,556.11	85.81	54.097		
8,500.00	8,493.86	21,232.89	13,035.33	25.03	127.93	-161.841	-327.14	105.44	4,541.97	4,455.89	86.08	52.765		
8,600.00	8,593.77	21,234.11	13,035.32	25.35	127.95	-161.752	-328.36	105.50	4,442.03	4,355.67	86.35	51.441		
8,700.00	8,693.68	21,235.35	13,035.31	25.67	127.96	-161.659	-329.60	105.56	4,342.08	4,255.45	86.63	50.123		
8,800.00	8,793.59	21,236.64	13,035.30	26.00	127.98	-161.561	-330.88	105.63	4,242.14	4,155.23	86.91	48.811		
8,900.00	8,893.50	21,237.96	13,035.29	26.32	128.00	-161.458	-332.20	105.70	4,142.20	4,055.01	87.19	47.507		
9,000.00	8,993.42	21,239.32	13,035.28	26.64	128.02	-161.350	-333.56	105.77	4,042.27	3,954.79	87.48	46.209		
9,100.00	9,093.33	21,240.72	13,035.27	26.96	128.04	-161.236	-334.96	105.85	3,942.33	3,854.56	87.77	44.918		
9,200.00	9,193.24	21,242.16	13,035.26	27.29	128.05	-161.115	-336.40	105.93	3,842.40	3,754.34	88.06	43.634		
9,300.00	9,293.15	21,243.65	13,035.25	27.61	128.07	-160.988	-337.89	106.01	3,742.47	3,654.11	88.35	42.357		
9,400.00	9,393.06	21,245.19	13,035.25	27.93	128.10	-160.854	-339.42	106.09	3,642.54	3,553.88	88.65	41.087		
9,500.00	9,492.97	21,246.77	13,035.24	28.25	128.12	-160.712	-341.00	106.19	3,542.61	3,453.66	88.96	39.825		
9,600.00	9,592.88	21,248.41	13,035.23	28.58	128.14	-160.562	-342.63	106.28	3,442.69	3,353.43	89.26	38.569		
9,700.00	9,692.79	21,250.10	13,035.23	28.90	128.16	-160.402	-344.32	106.38	3,342.77	3,253.20	89.57	37.321		
9,800.00	9,792.71	21,251.84	13,035.22	29.22	128.19	-160.232	-346.06	106.48	3,242.85	3,152.97	89.88	36.080		
9,900.00	9,892.62	21,253.65	13,035.22	29.55	128.21	-160.050	-347.87	106.59	3,142.93	3,052.74	90.19	34.846		
10,000.00	9,992.53	21,255.52	13,035.22	29.87	128.24	-159.857	-349.73	106.71	3,043.02	2,952.51	90.51	33.620		
10,100.00	10,092.44	21,257.45	13,035.22	30.19	128.26	-159.650	-351.67	106.83	2,943.11	2,852.28	90.83	32.401		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Offset De	oigii.			o13H - OH /	68705 - 8	Surveys (H&	P 656)						Offset Site Error:	0.00 usft
Survey Progr	ram: 18 erence	88-MWD+HDG	M	Comi I	Major Axis		Offset Wellbo	ro Contro	Die	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
10,200.00	10,192.35	21,259.46	13,035.22	30.52	128.29	-159.428	-353.67	106.95	2,843.21	2,752.05	91.16	31.190		
10,300.00	10,292.26	21,261.54	13,035.22	30.84	128.32	-159.189	-355.74	107.09	2,743.30	2,651.82	91.49	29.986		
10,400.00	10,392.17	21,263.70	13,035.22	31.16	128.35	-158.932	-357.89	107.23	2,643.41	2,551.59	91.82	28.790		
10,500.00	10,492.08	21,289.00	13,035.40	31.49	128.69	-154.995	-383.13	109.06	2,543.72	2,451.35	92.36	27.540		
10,600.00	10,592.00	21,289.00	13,035.40	31.81	128.69	-154.995	-383.13	109.06	2,443.79	2,351.11	92.68	26.367		
10,700.00	10,691.91	21,289.00	13,035.40	32.13	128.69	-154.995	-383.13	109.06	2,343.87	2,250.87	93.00	25.202		
10,800.00	10,791.82	21,289.00	13,035.40	32.46	128.69	-154.995	-383.13	109.06	2,243.96	2,150.63	93.33	24.044		
10,900.00	10,891.73	21,289.00	13,035.40	32.78	128.69	-154.995	-383.13	109.06	2,144.06	2,050.41	93.65	22.893		
11,000.00	10,991.64	21,289.00	13,035.40	33.11	128.69	-154.995	-383.13	109.06	2,044.17	1,950.18	93.98	21.751		
11,100.00	11,091.55	21,289.00	13,035.40	33.43	128.69	-154.995	-383.13	109.06	1,944.28	1,849.97	94.31	20.616		
11,200.00	11,191.46	21,289.00	13,035.40	33.75	128.69	-154.995	-383.13	109.06	1,844.41	1,749.77	94.64	19.488		
11 200 00	11 201 27	24 200 00	12.025.40	24.00	100.60	154.005	202.42	100.06	1 711 50	1 640 50	94.98	10.260		
11,300.00 11,400.00	11,291.37 11,391.29	21,289.00 21,292.51	13,035.40 13,035.44	34.08 34.40	128.69 128.74	-154.995 -154.275	-383.13 -386.63	109.06 109.33	1,744.56 1,644.72	1,649.58 1,549.37	95.35	18.369 17.250		
11,500.00	11,491.20	21,292.51	13,035.44	34.40	128.83	-154.275	-393.20	109.33	1,544.88	1,549.37	95.35	16.134		
11,600.00	11,591.11	21,305.49	13,035.57	35.05	128.91	-151.100	-399.57	110.37	1,445.03	1,348.87	96.16	15.027		
11,700.00	11,691.02	21,311.68	13,035.63	35.38	129.00	-149.227	-405.73	110.87	1,345.19	1,248.62	96.57	13.929		
		,	-,	22.20					,	,				
11,800.00	11,790.93	21,317.68	13,035.68	35.70	129.08	-147.122	-411.71	111.37	1,245.35	1,148.36	96.99	12.840		
11,900.00	11,890.84	21,323.50	13,035.73	36.03	129.16	-144.747	-417.52	111.85	1,145.51	1,048.10	97.41	11.760		
11,907.54	11,898.38	21,323.93	13,035.73	36.05	129.16	-144.556	-417.95	111.89	1,137.98	1,040.54	97.44	11.679		
12,000.00	11,990.80	21,327.45	13,035.75	36.33	129.21	-110.625	-421.45	112.18	1,045.62	947.81	97.81	10.690		
12,028.24	12,019.04	21,327.82	13,035.76	36.36	129.22	74.667	-421.82	112.21	1,017.40	919.47	97.93	10.390		
12,100.00	12,090.80	21,328.37	13,035.76	36.36	129.22	75.491	-422.37	112.26	945.69	847.49	98.21	9.630		
12,200.00	12,190.80	21,329.11	13,035.76	36.36	129.23	76.617	-423.10	112.32	845.78	747.17	98.61	8.577		
12,300.00	12,290.80	21,329.82	13,035.77	36.36	129.24	77.718	-423.82	112.38	745.89	646.87	99.02	7.533		
12,400.00	12,390.80	21,330.52	13,035.77	36.37	129.25	78.793	-424.51	112.44	646.03	546.57	99.46	6.496		
12,500.00	12,490.80	21,331.20	13,035.78	36.37	129.26	79.844	-425.19	112.50	546.22	446.30	99.92	5.466		
12,528.24	12,519.04	21,331.39	13,035.78	36.37	129.26	80.136	-425.38	112.51	518.05	417.98	100.06	5.177		
12,550.00	12,540.79	21,331.97	13,035.78	36.40	129.27	-124.039	-425.96	112.56	496.36	396.18	100.18	4.955		
12,600.00	12,590.61	21,336.58	13,035.81	36.63	129.33	-148.876	-430.55	112.95	446.74	346.24	100.50	4.445		
12,650.00	12,639.89	21,345.65	13,035.86	36.95	129.46	-156.970	-439.59	113.73	397.76	296.86	100.90	3.942		
12,700.00	12,688.24	21,359.02	13,035.90	37.29	129.64	-160.135	-452.90	114.89	349.81	248.39	101.42	3.449		
12,750.00	12,735.30	21,376.50	13,035.93	37.62	129.88	-161.127	-470.32	116.46	303.27	201.18	102.09	2.971		
12,800.00	12,780.72	21,397.53	13,035.92	37.96	130.16	-160.813	-491.25	118.37	258.58	155.56	103.02	2.510		
12,850.00	12,824.15	21,422.17	13,035.91	38.29	130.50	-159.355	-515.79	120.63	216.23	111.84	104.39	2.071		
12,900.00	12,865.26	21,450.49	13,035.90	38.60	130.88	-156.589	-543.99	123.22	176.74	70.18	106.56	1.659		
12,950.00	12,903.73	21,474.00	13,035.88	38.90	131.20	-153.921	-567.41	125.37	141.07	31.42	109.65	1.287 Level	3	
13,000.00	12,939.27	21,474.00	13,035.88	39.18	131.20	-155.090	-567.41	125.37	117.73	7.03	110.69	1.064 Level		
13,026.24	12,956.66	21,474.00	13,035.88	39.31	131.20	-155.240	-567.41	125.37	114.22	4.62	109.61		3, CC, ES, SF	
13,050.00	12,971.62	21,474.00	13,035.88	39.43	131.20	-155.117	-567.41	125.37	117.10	9.74	107.36	1.091 Level		
13,100.00	13,000.52	21,474.00	13,035.88	39.65	131.20	-154.009 151.470	-567.41	125.37	139.51	38.20	101.31	1.377 Level	3	
13,150.00	13,025.76	21,474.00	13,035.88	39.85	131.20	-151.470	-567.41	125.37	176.26	79.11	97.14	1.814		
13,200.00	13,047.14	21,474.00	13,035.88	40.02	131.20	-146.705	-567.41	125.37	220.08	125.09	94.99	2.317		
13,250.00	13,064.50	21,474.00	13,035.88	40.15	131.20	-137.806	-567.41	125.37	267.27	173.44	93.83	2.849		
13,300.00	13,077.71	21,474.00	13,035.88	40.26	131.20	-120.284	-567.41	125.37	316.05	222.97	93.08	3.395		
13,350.00	13,086.67	21,474.00	13,035.88	40.33	131.20	-88.241	-567.41	125.37	365.49	272.99	92.51	3.951		
13,400.00	13,091.30	21,474.00	13,035.88	40.38	131.20	-53.635	-567.41	125.37	415.05	323.05	92.01	4.511		
13 //20 2/	13,092.00	21 /7/ 00	13 035 00	40.20	131 20	_10.447	_567.44	125 27	442.95	351.22	91.74	A 920		
13,428.24 13,500.00	13,092.00	21,474.00 21,474.00	13,035.88 13,035.88	40.39 40.40	131.20 131.20	-40.447 -40.447	-567.41 -567.41	125.37 125.37	442.95 513.85	351.22 422.66	91.74 91.19	4.828 5.635		
13,600.00	13,092.00	21,474.00	13,035.88	40.40	131.20	-40.447 -40.447	-567.41 -567.41	125.37	612.98	522.28	90.70	6.758		
13,700.00	13,092.00	21,474.00	13,035.88	40.43	131.20	-40.447 -40.447	-567.41 -567.41	125.37	712.36	522.28 621.97	90.70	7.881		
13,800.00	13,092.00	21,474.00	13,035.88	40.46	131.20	-40.447 -40.447	-567.41	125.37	811.89	721.70	90.39	9.002		
. 0,000.00	.0,002.00	2.,174.00	.0,000.00	40.00	.51.20		307.41	.20.07	311.00	.21.70	30.13	3.302		
13,900.00	13,092.00	21,474.00	13,035.88	40.53	131.20	-40.447	-567.41	125.37	911.52	821.47	90.04	10.123		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

	sign: Ca	ittiernen i e	d Com - c	13H - UH /	68705 - 8	Surveys (H&I	5 656)						Offset Site Error:	0.00 usft
Survey Progr Refe	ram: 18	88-MWD+HDG Off	M fset	Semi N	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,000.00	13,092.00	21,474.00	13,035.88	40.58	131.20	-40.447	-567.41	125.37	1,011.22	921.28	89.94	11.243		
14,100.00	13,092.00	21,474.00	13,035.88	40.63	131.20	-40.447	-567.41	125.37	1,110.98	1,021.11	89.87	12.362		
14,200.00	13,092.00	21,474.00	13,035.88	40.69	131.20	-40.447	-567.41	125.37	1,210.78	1,120.95	89.82	13.479		
14,300.00	13,092.00	21,474.00	13,035.88	40.76	131.20	-40.447	-567.41	125.37	1,310.61	1,220.82	89.79	14.596		
14,400.00	13,092.00	21,474.00	13,035.88	40.85	131.20	-40.447	-567.41	125.37	1,410.46	1,320.69	89.77	15.712		
14,500.00	13,092.00	21,474.00	13,035.88	40.95	131.20	-40.447	-567.41	125.37	1,510.33	1,420.58	89.76	16.827		
14,600.00	13,092.00	21,474.00	13,035.88	41.10	131.20	-40.447	-567.41	125.37	1,610.22	1,520.47	89.75	17.941		
14,700.00	13,092.00	21,474.00	13,035.88	41.29	131.20	-40.447	-567.41	125.37	1,710.12	1,620.37	89.75	19.054		
14,800.00	13,092.00	21,474.00	13,035.88	41.57	131.20	-40.447	-567.41	125.37	1,810.03	1,720.27	89.76	20.165		
14,900.00	13,092.00	21,474.00	13,035.88	41.99	131.20	-40.447	-567.41	125.37	1,909.96	1,820.18	89.77	21.275		
15,000.00	13,092.00	21,474.00	13,035.88	42.60	131.20	-40.447	-567.41	125.37	2,009.88	1,920.10	89.79	22.385		
15,100.00	13,092.00	21,474.00	13,035.88	43.42	131.20	-40.447	-567.41	125.37	2,109.82	2,020.01	89.81	23.493		
15,200.00	13,092.00	21,474.00	13,035.88	44.43	131.20	-40.447	-567.41	125.37	2,209.76	2,119.93	89.83	24.599		
15,300.00	13,092.00	21,474.00	13,035.88	45.56	131.20	-40.447	-567.41	125.37	2,309.71	2,219.85	89.86	25.704		
15,400.00	13,092.00	21,474.00	13,035.88	46.76	131.20	-40.447	-567.41	125.37	2,409.66	2,319.78	89.88	26.808		
15,500.00	13,092.00	21,474.00	13,035.88	48.01	131.20	-40.447	-567.41	125.37	2,509.61	2,419.70	89.92	27.911		
15,600.00	13,092.00	21,474.00	13,035.88	49.30	131.20	-40.447	-567.41	125.37	2,609.57	2,519.63	89.95	29.012		
15,700.00	13,092.00	21,474.00	13,035.88	50.61	131.20	-40.447	-567.41	125.37	2,709.53	2,619.55	89.98	30.111		
15,800.00	13,092.00	21,474.00	13,035.88	51.93	131.20	-40.447	-567.41	125.37	2,809.50	2,719.48	90.02	31.209		
15,900.00	13,092.00	21,474.00	13,035.88	53.27	131.20	-40.447	-567.41	125.37	2,909.47	2,819.41	90.06	32.306		
16,000.00	13,092.00	21,474.00	13,035.88	54.61	131.20	-40.447	-567.41	125.37	3,009.43	2,919.33	90.10	33.401		
16,100.00	13,092.00	21,474.00	13,035.88	55.97	131.20	-40.447	-567.41	125.37	3,109.41	3,019.26	90.14	34.494		
16,200.00	13,092.00	21,474.00	13,035.88	57.33	131.20	-40.447	-567.41	125.37	3,209.38	3,119.19	90.19	35.585		
16,300.00	13,092.00	21,474.00	13,035.88	58.69	131.20	-40.447	-567.41	125.37	3,309.35	3,219.12	90.23	36.675		
16,400.00 16,500.00	13,092.00 13,092.00	21,474.00 21,474.00	13,035.88 13,035.88	60.06 61.44	131.20 131.20	-40.447 -40.447	-567.41 -567.41	125.37 125.37	3,409.33 3,509.31	3,319.05 3,418.97	90.28 90.33	37.763 38.849		
10,300.00	15,032.00	21,474.00	13,033.00	01.44	131.20	-40.447	-307.41	125.57	5,505.51	5,410.31	30.33	30.049		
16,600.00	13,092.00	21,474.00	13,035.88	62.81	131.20	-40.447	-567.41	125.37	3,609.28	3,518.90	90.38	39.933		
16,700.00	13,092.00	21,474.00	13,035.88	64.20	131.20	-40.447	-567.41	125.37	3,709.26	3,618.83	90.44	41.016		
16,800.00	13,092.00	21,474.00	13,035.88	65.58	131.20	-40.447	-567.41	125.37	3,809.25	3,718.76	90.49	42.096		
16,900.00	13,092.00	21,474.00	13,035.88	66.97	131.20	-40.447	-567.41	125.37	3,909.23	3,818.68	90.54	43.175		
17,000.00	13,092.00	21,474.00	13,035.88	68.36	131.20	-40.447	-567.41	125.37	4,009.21	3,918.61	90.60	44.251		
17,100.00	13,092.00	21,474.00	13,035.88	69.75	131.20	-40.447	-567.41	125.37	4,109.19	4,018.53	90.66	45.326		
17,200.00	13,092.00	21,474.00	13,035.88	71.14	131.20	-40.447	-567.41	125.37	4,209.18	4,118.46	90.72	46.398		
17,300.00	13,092.00	21,474.00	13,035.88	72.54	131.20	-40.447	-567.41	125.37	4,309.16	4,218.38	90.78	47.468		
17,400.00	13,092.00	21,474.00	13,035.88	73.94	131.20	-40.447	-567.41	125.37	4,409.15	4,318.31	90.84	48.537		
17,500.00	13,092.00	21,474.00	13,035.88	75.34	131.20	-40.447	-567.41	125.37	4,509.13	4,418.23	90.91	49.603		
17,600.00	13,092.00	21,474.00	13,035.88	76.74	131.20	-40.447	-567.41	125.37	4,609.12	4,518.15	90.97	50.666		
17,700.00	13,092.00	21,474.00	13,035.88	78.14	131.20	-40.447	-567.41	125.37	4,709.11	4,618.07	91.04	51.728		
17,800.00	13,092.00	21,474.00	13,035.88	79.55	131.20	-40.447	-567.41	125.37	4,809.10	4,717.99	91.10	52.787		
17,900.00	13,092.00	21,474.00	13,035.88	80.95	131.20	-40.447	-567.41	125.37	4,909.09	4,817.91	91.17	53.844		
18,000.00	13,092.00	21,474.00	13,035.88	82.36	131.20	-40.447	-567.41	125.37	5,009.07	4,917.83	91.24	54.899		
18,100.00	13,092.00	21,474.00	13,035.88	83.76	131.20	-40.447	-567.41	125.37	5,109.06	5,017.75	91.31	55.951		
18,200.00	13,092.00	21,474.00	13,035.88	85.17	131.20	-40.447	-567.41	125.37	5,209.05	5,117.67	91.38	57.001		
18,300.00	13,092.00	21,474.00	13,035.88	86.58	131.20	-40.447	-567.41	125.37	5,309.04	5,217.59	91.46	58.049		
18,400.00	13,092.00	21,474.00	13,035.88	87.99	131.20	-40.447	-567.41	125.37	5,409.03	5,317.50	91.53	59.094		
18,500.00	13,092.00	21,474.00	13,035.88	89.40	131.20	-40.447	-567.41	125.37	5,509.02	5,417.42	91.61	60.136		
18,600.00	13,092.00	21,474.00	13,035.88	90.81	131.20	-40.447	-567.41	125.37	5,609.02	5,517.33	91.69	61.176		
18,700.00	13,092.00	21,474.00	13,035.88	92.23	131.20	-40.447	-567.41	125.37	5,709.01	5,617.24	91.76	62.214		
18,800.00	13,092.00	21,474.00	13,035.88	93.64	131.20	-40.447	-567.41	125.37	5,809.00	5,717.16	91.84	63.249		
18,900.00	13,092.00	21,474.00	13,035.88	95.06	131.20	-40.447	-567.41	125.37	5,908.99	5,817.07	91.92	64.282		
19,000.00	13,092.00	21,474.00	13,035.88	96.47	131.20	-40.447	-567.41	125.37	6,008.98	5,916.98	92.01	65.311		
			13,035.88	97.89	131.20	-40.447	-567.41	125.37	6,108.98	6,016.89	92.09	66.339		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

													Offset Site Error:	0.00 us
urvey Prog Refe	ram: 18 rence	8-MWD+HDG Off		Semi N	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi tance	gned:		Offset Well Error:	1.00 us
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	+N/-S	+E/-W	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	(usft)	(usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
19,200.00	13,092.00	21,474.00	13,035.88	99.30	131.20	-40.447	-567.41	125.37	6,208.97	6,116.80	92.17	67.363		
19,300.00	13,092.00	21,474.00	13,035.88	100.72	131.20	-40.447	-567.41	125.37	6,308.96	6,216.71	92.26	68.385		
19,400.00	13,092.00	21,474.00	13,035.88	102.14	131.20	-40.447	-567.41	125.37	6,408.96	6,316.61	92.34	69.404		
19,500.00	13,092.00	21,474.00	13,035.88	103.55	131.20	-40.447	-567.41	125.37	6,508.95	6,416.52	92.43	70.421		
19,600.00	13,092.00	21,474.00	13,035.88	104.97	131.20	-40.447	-567.41	125.37	6,608.94	6,516.43	92.52	71.435		
19,700.00	13,092.00	21,474.00	13,035.88	106.39	131.20	-40.447	-567.41	125.37	6,708.94	6,616.33	92.61	72.446		
19,800.00	13,092.00	21,474.00	13,035.88	107.81	131.20	-40.447	-567.41	125.37	6,808.93	6,716.23	92.70	73.454		
19,900.00	13,092.00	21,474.00	13,035.88	109.23	131.20	-40.447	-567.41	125.37	6,908.92	6,816.14	92.79	74.459		
20,000.00	13,092.00	21,474.00	13,035.88	110.65	131.20	-40.447	-567.41	125.37	7,008.92	6,916.04	92.88	75.462		
20,100.00	13,092.00	21,474.00	13,035.88	112.07	131.20	-40.447	-567.41	125.37	7,108.91	7,015.94	92.97	76.461		
20,200.00	13,092.00	21,474.00	13,035.88	113.49	131.20	-40.447	-567.41	125.37	7,208.91	7,115.84	93.07	77.458		
20,300.00	13,092.00	21,474.00	13,035.88	114.91	131.20	-40.447	-567.41	125.37	7,308.90	7,215.74	93.16	78.452		
20,400.00	13,092.00	21,474.00	13,035.88	116.34	131.20	-40.447	-567.41	125.37	7,408.90	7,315.64	93.26	79.443		
20,500.00	13,092.00	21,474.00	13,035.88	117.76	131.20	-40.447	-567.41	125.37	7,508.89	7,415.54	93.36	80.432		
20,600.00	13,092.00	21,474.00	13,035.88	119.18	131.20	-40.447	-567.41	125.37	7,608.89	7,515.43	93.46	81.417		
20,700.00	13,092.00	21,474.00	13,035.88	120.60	131.20	-40.447	-567.41	125.37	7,708.88	7,615.33	93.56	82.399		
20,800.00	13,092.00	21,474.00	13,035.88	122.03	131.20	-40.447	-567.41	125.37	7,808.88	7,715.22	93.66	83.379		
20,900.00	13,092.00	21,474.00	13,035.88	123.45	131.20	-40.447	-567.41	125.37	7,908.88	7,815.12	93.76	84.355		
21,000.00	13,092.00	21,474.00	13,035.88	124.87	131.20	-40.447	-567.41	125.37	8,008.87	7,915.01	93.86	85.329		
21,100.00	13,092.00	21,474.00	13,035.88	126.30	131.20	-40.447	-567.41	125.37	8,108.87	8,014.90	93.96	86.299		
21,200.00	13,092.00	21,474.00	13,035.88	127.72	131.20	-40.447	-567.41	125.37	8,208.86	8,114.80	94.07	87.267		
21,300.00	13,092.00	21,474.00	13,035.88	129.15	131.20	-40.447	-567.41	125.37	8,308.86	8,214.69	94.17	88.231		
21,400.00	13,092.00	21,474.00	13,035.88	130.57	131.20	-40.447	-567.41	125.37	8,408.85	8,314.58	94.28	89.192		
21,500.00	13,092.00	21,474.00	13,035.88	132.00	131.20	-40.447	-567.41	125.37	8,508.85	8,414.47	94.38	90.151		
21,600.00	13,092.00	21,474.00	13,035.88	133.42	131.20	-40.447	-567.41	125.37	8,608.85	8,514.35	94.49	91.106		
21,700.00	13,092.00	21,474.00	13,035.88	134.85	131.20	-40.447	-567.41	125.37	8,708.84	8,614.24	94.60	92.058		
21,800.00	13,092.00	21,474.00	13,035.88	136.27	131.20	-40.447	-567.41	125.37	8,808.84	8,714.13	94.71	93.007		
21,900.00	13,092.00	21,474.00	13,035.88	137.70	131.20	-40.447	-567.41	125.37	8,908.84	8,814.01	94.82	93.953		
22,000.00	13,092.00	21,474.00	13,035.88	139.12	131.20	-40.447	-567.41	125.37	9,008.83	8,913.90	94.93	94.896		
22,100.00	13,092.00	21,474.00	13,035.88	140.55	131.20	-40.447	-567.41	125.37	9,108.83	9,013.78	95.05	95.836		
22,200.00	13,092.00	21,474.00	13,035.88	141.98	131.20	-40.447	-567.41	125.37	9,208.83	9,113.67	95.16	96.773		
22,300.00	13,092.00	21,474.00	13,035.88	143.40	131.20	-40.447	-567.41	125.37	9,308.82	9,213.55	95.27	97.707		
22,400.00	13,092.00	21,474.00	13,035.88	144.83	131.20	-40.447	-567.41	125.37	9,408.82	9,313.43	95.39	98.637		
22,500.00	13,092.00	21,474.00	13,035.88	146.26	131.20	-40.447	-567.41	125.37	9,508.82	9,413.31	95.50	99.564		
22,600.00	13,092.00	21,474.00	13,035.88	147.69	131.20	-40.447	-567.41	125.37	9,608.81	9,513.19	95.62	100.489		
22,700.00	13,092.00	21,474.00	13,035.88	149.11	131.20	-40.447	-567.41	125.37	9,708.81	9,613.07	95.74	101.410		
22,728.24	13,092.00	21,474.00	13,035.88	149.52	131.20	-40.447	-567.41	125.37	9,737.05	9,641.28	95.77	101.669		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: RKB @
MD Reference: RKB @

North Reference:

Survey Calculation Method: Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

													Offset Site Error:	0.00 usf
Survey Progr	ram: 17 rence	4-MWD+HRG Off		Semi N	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	-43.00	1.00	1.00	6.886	8,043.23	971.29	8,101.78					
100.00	100.00	86.21	43.20	1.08	1.13	6.891	8,043.44	972.05	8,102.17	8,099.96	2.20	3,675.806		
200.00	200.00	174.00	130.96	1.60	1.44	6.907	8,044.09	974.39	8,103.19	8,100.16	3.03	2,678.256		
300.00	300.00	390.14	347.07	2.01	2.67	6.912	8,044.02	975.13	8,103.05	8,098.39	4.66	1,739.994		
400.00	400.00	487.11	444.03	2.35	3.03	6.904	8,043.60	973.99	8,102.47	8,097.11	5.37	1,509.317		
500.00	500.00	567.63	524.55	2.65	3.22	6.901	8,043.29	973.50	8,102.03	8,096.18	5.85	1,385.993		
600.00	600.00	649.98	606.90	2.93	3.39	6.899	8,043.19	973.17	8,101.85	8,095.57	6.28	1,289.081		
700.00	700.00	755.87	712.79	3.18	3.61	6.896	8,043.16	972.81	8,101.79	8,095.05	6.74	1,202.349		
800.00	800.00	845.65	802.57	3.41	3.75	6.895	8,043.05	972.64	8,101.64	8,094.53	7.11	1,139.514		
812.74	812.74	855.82	812.74	3.44	3.77	6.895	8,043.05	972.64	8,101.64	8,094.49	7.15	1,132.821		
900.00	900.00	946.79	903.71	3.64	3.89	6.896	8,043.05	972.68	8,101.65	8,094.18	7.47	1,084.401		
1,000.00	1,000.00	1,043.31	1,000.23	3.85	4.02	6.896	8,043.01	972.69	8,101.61	8,093.80	7.81	1,036.726		
1,100.00	1,100.00	1,156.23	1,113.15	4.05	4.23	6.894	8,042.96	972.48	8,101.55	8,093.33	8.21	986.775		
1,160.41	1,160.41	1,203.50	1,160.41	4.16	4.28	6.894	8,042.93	972.38	8,101.50	8,093.12	8.38	967.277		
1,200.00	1,200.00	1,235.17	1,192.09	4.24	4.31	6.893	8,042.95	972.38	8,101.52	8,093.03	8.49	954.652		
1,300.00	1,300.00	1,343.62	1,300.54	4.43	4.43	6.896	8,042.92	972.77	8,101.53	8,092.72	8.81	919.265		
1,303.19	1,303.19	1,346.27	1,303.19	4.43	4.43	6.896	8,042.92	972.79	8,101.53	8,092.71	8.82	918.291		
1,400.00	1,400.00	1,432.42	1,389.33	4.61	4.53	6.901	8,042.93	973.38	8,101.63	8,092.51	9.12	888.823		
1,469.92	1,469.92	1,525.18	1,482.10	4.73	4.65	6.904	8,042.86	973.90	8,101.62	8,092.25	9.37	865.036		
1,500.00	1,500.00	1,532.69	1,489.60	4.78	4.72	6.906	8,042.86	974.08	8,101.64	8,092.20	9.44	858.110		
1,600.00	1,599.98	1,603.00	1,559.87	4.98	5.03	-163.054	8,042.91	976.56	8,103.74	8,093.98	9.76	830.153		
1,620.70	1,620.67	1,603.00	1,559.87	4.99	5.03	-163.049	8,042.91	976.56	8,104.64	8,094.86	9.77	829.252		
1,700.00	1,699.89	1,640.77	1,597.56	5.07	5.40	-163.036	8,043.01	978.97	8,108.65	8,098.71	9.94	816.094		
1,800.00	1,799.81	1,696.00	1,652.57	5.23	5.95	-163.007	8,043.29	983.81	8,114.23	8,104.02	10.21	794.981		
1,900.00	1,899.72	1,808.69	1,764.70	5.41	6.32	-162.938	8,043.79	995.11	8,119.91	8,109.37	10.54	770.717		
2,000.00	1,999.63	1,878.00	1,833.67	5.60	6.43	-162.897	8,044.29	1,001.88	8,125.84	8,115.02	10.81	751.583		
2,100.00	2,099.54	1,954.55	1,909.84	5.80	6.56	-162.851	8,045.09	1,009.43	8,132.10	8,120.99	11.11	731.661		
2,200.00	2,199.45	2,053.53	2,008.32	6.02	6.75	-162.791	8,046.18	1,019.39	8,138.48	8,127.02	11.46	710.029		
2,300.00	2,299.36	2,148.12	2,102.42	6.24	6.95	-162.734	8,047.24	1,028.88	8,144.88	8,133.07	11.81	689.446		
2,400.00	2,399.27	2,266.47	2,220.14	6.47	7.22	-162.660	8,048.44	1,041.09	8,151.22	8,139.01	12.21	667.529		
2,500.00	2,499.18	2,376.61	2,329.65	6.72	7.49	-162.589	8,049.33	1,052.72	8,157.40	8,144.79	12.61	646.985		
2,600.00	2,599.10	2,583.55	2,535.31	6.96	8.04	-162.448	8,049.68	1,075.66	8,163.22	8,150.06	13.17	620.052		
2,700.00	2,699.01	2,716.15	2,667.09	7.22	8.42	-162.356	8,048.28	1,090.36	8,167.60	8,153.98	13.61	599.959		
2,800.00	2,798.92	2,825.00	2,775.32	7.48	8.81	-162.285	8,047.02	1,101.83	8,171.86	8,157.84	14.03	582.502		
2,900.00	2,898.83	2,884.99	2,835.09	7.74	9.02	-162.254	8,046.57	1,106.92	8,176.33	8,161.96	14.37	569.015		
3,000.00	2,998.74	2,941.62	2,891.56	8.01	9.20	-162.229	8,046.60	1,111.31	8,181.42	8,166.71	14.71	556.238		
3,100.00	3,098.65	3,018.66	2,968.35	8.28	9.43	-162.193	8,046.89	1,117.48	8,186.88	8,171.80	15.08	542.815		
3,200.00	3,198.56	3,109.00	3,058.38	8.56	9.70	-162.150	8,047.35	1,124.92	8,192.52	8,177.04	15.48	529.227		
3,300.00	3,298.47	3,192.60	3,141.69	8.84	9.96	-162.111	8,047.91	1,131.80	8,198.32	8,182.44	15.87	516.472		
3,400.00	3,398.39	3,264.33	3,213.17	9.13	10.18	-162.076	8,048.58	1,137.76	8,204.40	8,188.15	16.25	504.796		
3,500.00	3,498.30	3,339.75	3,288.31	9.41	10.42	-162.039	8,049.53	1,144.20	8,210.83	8,194.19	16.64	493.433		
3,600.00	3,598.21	3,421.21	3,369.45	9.70	10.67	-161.999	8,050.74	1,151.28	8,217.50	8,200.46	17.04	482.175		
3,700.00	3,698.12	3,546.89	3,494.56	9.99	11.08	-161.931	8,052.63	1,163.02	8,224.35	8,206.83	17.52	469.353		
3,800.00	3,798.03	3,705.85	3,653.00	10.29	11.60	-161.858	8,053.98	1,175.89	8,230.25	8,212.20	18.05	455.981		
3,900.00	3,897.94	4,074.88	4,020.63	10.58	12.83	-161.672	8,049.95	1,207.12	8,234.35	8,215.43	18.93	435.086		
4,000.00	3,997.85	4,153.00	4,098.44	10.88	13.09	-161.631	8,047.98	1,213.82	8,237.07	8,217.76	19.32	426.407		
4,100.00	4,097.76	4,247.32	4,192.42	11.18	13.40	-161.585	8,045.81	1,221.55	8,239.98	8,220.25	19.73	417.710		
4,200.00	4,197.68	4,326.71	4,271.53	11.48	13.67	-161.546	8,044.04	1,227.96	8,242.95	8,222.84	20.12	409.706		
4,300.00	4,297.59	4,417.04	4,361.55	11.78	13.97	-161.503	8,042.22	1,235.15	8,246.13	8,225.60	20.53	401.718		
4,400.00	4,397.50	4,506.74	4,450.95	12.08	14.28	-161.461	8,040.51	1,242.29	8,249.41	8,228.47	20.94	394.022		
4,500.00	4,497.41	20,644.62	12,508.95	12.39	123.41	-89.506	-201.97	1,586.35	8,163.32	8,083.60	79.72	102.398		
4,600.00	4,597.32	20,645.13	12,508.94	12.69	123.42	-89.487	-202.49	1,586.36	8,065.11	7,985.22	79.89	100.953		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

		74 1414/0											Offset Site Error:	0.00 ust
Survey Prog Refe	ram: 17 erence	74-MWD+HRG Of f	M fset	Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,700.00	4,697.23	20,645.66	12,508.94	13.00	123.43	-89.468	-203.01	1,586.37	7,966.94	7,886.88	80.06	99.511		
4,800.00	4,797.14	20,646.19	12,508.93	13.31	123.44	-89.448	-203.55	1,586.38	7,868.82	7,788.58	80.24	98.070		
4,900.00	4,897.05	20,646.74	12,508.92	13.62	123.44	-89.427	-204.10	1,586.39	7,770.74	7,690.33	80.42	96.633		
5,000.00	4,996.97	20,647.30	12,508.92	13.92	123.45	-89.407	-204.66	1,586.40	7,672.72	7,592.12	80.60	95.198		
5,100.00	5,096.88	20,686.00	12,508.89 12,508.89	14.23	123.99	-87.967	-243.35	1,587.00	7,575.23	7,494.14	81.09	93.413		
5,200.00	5,196.79	20,686.00	12,500.09	14.55	123.99	-87.967	-243.35	1,587.00	7,477.30	7,396.02	81.28	91.994		
5,300.00	5,296.70	20,686.00	12,508.89	14.86	123.99	-87.967	-243.35	1,587.00	7,379.42	7,297.95	81.47	90.578		
5,400.00	5,396.61	20,686.00	12,508.89	15.17	123.99	-87.967	-243.35	1,587.00	7,281.60	7,199.93	81.66	89.166		
5,500.00	5,496.52	20,686.00	12,508.89	15.48	123.99	-87.967	-243.35	1,587.00	7,183.83	7,101.97	81.86	87.756		
5,600.00	5,596.43	20,686.00	12,508.89	15.79	123.99	-87.967	-243.35	1,587.00	7,086.13	7,004.07	82.06	86.349		
5,700.00	5,696.34	20,686.00	12,508.89	16.11	123.99	-87.967	-243.35	1,587.00	6,988.50	6,906.23	82.27	84.946		
5,800.00	5,796.26	20,686.00	12,508.89	16.42	123.99	-87.967	-243.35	1,587.00	6,890.93	6,808.45	82.48	83.546		
5,900.00	5,896.17	20,686.00	12,508.89	16.74	123.99	-87.967	-243.35	1,587.00	6,793.44	6,710.74	82.70	82.150		
6,000.00	5,996.08	20,686.00	12,508.89	17.05	123.99	-87.967	-243.35	1,587.00	6,696.01	6,613.10	82.92	80.757		
6,100.00	6,095.99	20,686.00	12,508.89	17.37	123.99	-87.967	-243.35	1,587.00	6,598.67	6,515.53	83.14	79.368		
6,200.00	6,195.90	20,686.00	12,508.89	17.68	123.99	-87.967	-243.35	1,587.00	6,501.40	6,418.03	83.37	77.982		
6,300.00	6,295.81	20,686.00	12,508.89	18.00	123.99	-87.967	-243.35	1,587.00	6,404.22	6,320.62	83.61	76.601		
6,400.00	6,395.72	20,686.00	12,508.89	18.32	123.99	-87.967	-243.35	1,587.00	6,307.13	6,223.29	83.85	75.223		
6,500.00	6,495.63	20,686.00	12,508.89	18.63	123.99	-87.967	-243.35	1,587.00	6,210.13	6,126.04	84.09	73.850		
6,600.00	6,595.55	20,686.00	12,508.89	18.95	123.99	-87.967	-243.35	1,587.00	6,113.23	6,028.88	84.34	72.481		
6,700.00	6,695.46	20,686.00	12,508.89	19.27	123.99	-87.967	-243.35	1,587.00	6,016.43	5,931.83	84.60	71.116		
6,800.00	6,795.37	20,686.00	12,508.89	19.59	123.99	-87.967	-243.35	1,587.00	5,919.73	5,834.87	84.86	69.755		
6,900.00	6,895.28	20,686.00	12,508.89	19.91	123.99	-87.967	-243.35	1,587.00	5,823.15	5,738.01	85.13	68.399		
7,000.00	6,995.19	20,686.00	12,508.89	20.23	123.99	-87.967	-243.35	1,587.00	5,726.68	5,641.27	85.41	67.048		
7,100.00	7,095.10	20,686.00	12,508.89	20.54	123.99	-87.967	-243.35	1,587.00	5,630.34	5,544.64	85.70	65.701		
7,200.00	7,195.01	20,686.00	12,508.89	20.86	123.99	-87.967	-243.35	1,587.00	5,534.12	5,448.13	85.99	64.359		
7,300.00	7,294.92	20,686.00	12,508.89	21.18	123.99	-87.967	-243.35	1,587.00	5,438.05	5,351.76	86.29	63.022		
7,400.00	7,394.84	20,686.00	12,508.89	21.50	123.99	-87.967	-243.35	1,587.00	5,342.11	5,255.52	86.60	61.690		
7,500.00	7,494.75	20,686.00	12,508.89	21.82	123.99	-87.967	-243.35	1,587.00	5,246.33	5,159.42	86.91	60.363		
7,600.00	7,594.66	20,686.00	12,508.89	22.14	123.99	-87.967	-243.35	1,587.00	5,150.71	5,063.47	87.24	59.042		
7,700.00	7,694.57	20,686.00	12,508.89	22.46	123.99	-87.967	-243.35	1,587.00	5,055.26	4,967.68	87.57	57.725		
7,800.00	7,794.48	20,686.00	12,508.89	22.78	123.99	-87.967	-243.35	1,587.00	4,959.99	4,872.07	87.92	56.414		
7,900.00	7,894.39	20,686.00	12,508.89	23.10	123.99	-87.967	-243.35	1,587.00	4,864.90	4,776.63	88.28	55.109		
8,000.00	7,994.30	20,686.00	12,508.89	23.42	123.99	-87.967	-243.35	1,587.00	4,770.02	4,681.38	88.65	53.810		
8,100.00	8,094.21	20,686.00	12,508.89	23.75	123.99	-87.967	-243.35	1,587.00	4,675.36	4,586.33	89.03	52.516		
8,200.00	8,194.13	20,686.00	12,508.89	24.07	123.99	-87.967	-243.35	1,587.00	4,580.91	4,491.49	89.42	51.228		
8,300.00	8,294.04	20,686.00	12,508.89	24.39	123.99	-87.967	-243.35	1,587.00	4,486.71	4,396.88	89.83	49.947		
8,400.00	8,393.95	20,686.00	12,508.89	24.71	123.99	-87.967	-243.35	1,587.00	4,392.77	4,302.52	90.25	48.671		
8,500.00	8,493.86	20,686.00	12,508.89	25.03	123.99	-87.967	-243.35	1,587.00	4,299.10	4,208.41	90.69	47.403		
8,600.00	8,593.77	20,686.00	12,508.89	25.35	123.99	-87.967	-243.35	1,587.00	4,205.72	4,114.57	91.15	46.141		
8,700.00	8,693.68	20,686.00	12,508.89	25.67	123.99	-87.967	-243.35	1,587.00	4,112.65	4,021.03	91.63	44.885		
8,800.00	8,793.59	20,686.00	12,508.89	26.00	123.99	-87.967	-243.35	1,587.00	4,019.92	3,927.79	92.12	43.637		
8,900.00	8,893.50	20,686.00	12,508.89	26.32	123.99	-87.967	-243.35	1,587.00	3,927.54	3,834.90	92.64	42.396		
9,000.00	8,993.42	20,686.00	12,508.89	26.64	123.99	-87.967	-243.35	1,587.00	3,835.54	3,742.36	93.18	41.163		
9,100.00 9,200.00	9,093.33 9,193.24	20,686.00 20,686.00	12,508.89 12,508.89	26.96 27.29	123.99 123.99	-87.967 -87.967	-243.35 -243.35	1,587.00 1,587.00	3,743.96 3,652.81	3,650.21 3,558.47	93.75 94.34	39.937 38.720		
5,200.00	5,.55.24	20,000.00	,000.00	21.20	.20.00	3007	240.00	.,557.00	0,002.01	0,000.77	54.04	33.720		
9,300.00	9,293.15	20,686.00	12,508.89	27.61	123.99	-87.967	-243.35	1,587.00	3,562.14	3,467.18	94.96	37.511		
9,400.00	9,393.06	20,686.00	12,508.89	27.93	123.99	-87.967	-243.35	1,587.00	3,471.99	3,376.37	95.62	36.312		
9,500.00	9,492.97	20,707.82	12,509.21	28.25	124.29	-87.152	-265.16	1,587.17	3,382.27	3,285.75	96.51	35.044		
9,600.00	9,592.88	20,711.53	12,509.28	28.58	124.34	-87.013	-268.87	1,587.19	3,293.22	3,195.94	97.28	33.853		
9,700.00	9,692.79	20,715.41	12,509.36	28.90	124.39	-86.868	-272.76	1,587.20	3,204.81	3,106.72	98.09	32.673		
9,800.00	9,792.71	20 710 48	12,509.46	29.22	124.45	-86.716	-276.83	1,587.21	3,117.09	3,018.15	98.94	31.504		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:
Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	oigii.			оор оши		I Com 404H		, ,					Offset Site Error:	0.00 usf
Survey Prog Refe	ram: 17 erence	4-MWD+HRG Off	M set	Semi N	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi tance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,900.00	9,892.62	20,723.75	12,509.56	29.55	124.51	-86.556	-281.09	1,587.21	3,030.12	2,930.28	99.85	30.348		
10,000.00	9,992.53	20,728.22	12,509.67	29.87	124.57	-86.388	-285.56	1,587.21	2,943.98	2,843.17	100.81	29.204		
10,100.00	10,092.44	20,732.93	12,509.80	30.19	124.64	-86.212	-290.27	1,587.20	2,858.72	2,756.90	101.83	28.075		
10,200.00	10,192.35	20,737.88	12,509.94	30.52	124.70	-86.027	-295.21	1,587.18	2,774.44	2,671.53	102.91	26.960		
10,300.00	10,292.26	20,743.09	12,510.11	30.84	124.78	-85.831	-300.42	1,587.16	2,691.22	2,587.16	104.06	25.862		
10,400.00	10,392.17	20,748.59	12,510.29	31.16	124.85	-85.625	-305.92	1,587.12	2,609.16	2,503.88	105.29	24.781		
10,500.00	10,492.08	20,754.40	12,510.49	31.49	124.93	-85.407	-311.73	1,587.07	2,528.38	2,421.79	106.59	23.720		
10,600.00	10,592.00	20,760.55	12,510.72	31.81	125.02	-85.176	-317.87	1,587.01	2,449.00	2,341.02	107.98	22.679		
10,700.00	10,691.91	20,767.06	12,510.98	32.13	125.11	-84.931	-324.38	1,586.93	2,371.16	2,261.69	109.46	21.662		
10,800.00	10,791.82	20,781.00	12,511.58	32.46	125.30	-84.407	-338.30	1,586.73	2,295.02	2,183.91	111.11	20.655		
10,900.00	10,891.73	20,781.39	12,511.60	32.78	125.31	-84.393	-338.69	1,586.72	2,220.73	2,108.02	112.71	19.703		
11,000.00	10,991.64	20,790.10	12,512.00	33.11	125.43	-84.065	-347.39	1,586.57	2,148.50	2,034.01	114.49	18.766		
11,100.00	11,091.55	20,798.82	12,512.40	33.43	125.55	-83.737	-356.10	1,586.43	2,078.54	1,962.17	116.37	17.861		
11,200.00	11,191.46	20,807.53	12,512.80	33.75	125.67	-83.408	-364.80	1,586.28	2,011.08	1,892.73	118.34	16.993		
11,300.00	11,291.37	20,816.25	12,513.20	34.08	125.79	-83.079	-373.51	1,586.13	1,946.38	1,825.97	120.41	16.165		
11,400.00	11,391.29	20,824.96	12,513.60	34.40	125.91	-82.750	-382.21	1,585.98	1,884.73	1,762.17	122.56	15.379		
11,500.00	11,491.20	20,833.68	12,514.00	34.73	126.03	-82.421	-390.92	1,585.84	1,826.43	1,701.66	124.77	14.638		
11,600.00	11,591.11	20,842.39	12,514.40	35.05	126.15	-82.091	-399.62	1,585.69	1,771.83	1,644.78	127.04	13.947		
11,700.00	11,691.02	20,851.11	12,514.80	35.38	126.28	-81.761	-408.33	1,585.54	1,721.26	1,591.91	129.35	13.307		
11,800.00	11,790.93	20,859.82	12,515.20	35.70	126.40	-81.431	-417.03	1,585.39	1,675.09	1,543.43	131.65	12.723		
11,900.00	11,890.84	20,868.54	12,515.60	36.03	126.52	-81.101	-425.74	1,585.25	1,633.70	1,499.76	133.94	12.197		
11,907.54	11,898.38	20,869.20	12,515.63	36.05	126.53	-81.076	-426.39	1,585.24	1,630.78	1,496.68	134.11	12.160		
12,000.00	11,990.80	20,875.79	12,515.93	36.33	126.62	-80.126	-432.98	1,585.12	1,597.69	1,461.56	136.13	11.737		
12,028.24	12,019.04	20,877.23	12,516.00	36.36	126.64	90.103	-434.41	1,585.10	1,588.61	1,451.91	136.70	11.621		
12,100.00	12,090.80	20,880.52	12,516.15	36.36	126.68	90.228	-437.70	1,585.04	1,567.64	1,429.55	138.09	11.352		
12,200.00	12,190.80	20,885.11	12,516.36	36.36	126.75	90.402	-442.28	1,584.97	1,543.50	1,403.60	139.90	11.033		
12,300.00	12,290.80	20,889.69	12,516.57	36.36	126.81	90.576	-446.87	1,584.89	1,525.54	1,384.01	141.52	10.779		
12,400.00	12,390.80	20,894.28	12,516.78	36.37	126.87	90.750	-451.45	1,584.81	1,513.97	1,371.03	142.94	10.592		
12,500.00	12,490.80	20,898.87	12,516.99	36.37	126.94	90.925	-456.03	1,584.73	1,508.93	1,364.81	144.12	10.470		
12,526.24	12,517.04	20,900.08	12,517.04	36.37	126.96	90.970	-457.24	1,584.71	1,508.70	1,364.32	144.38	10.449 CC		
12,528.24	12,519.04	20,900.17	12,517.05	36.37	126.96	90.974	-457.33	1,584.71	1,508.71	1,364.31	144.40	10.448		
12,550.00	12,540.79	20,901.58	12,517.11	36.40	126.98	-88.404	-458.74	1,584.69	1,508.88	1,364.26	144.62	10.433 ES		
12,600.00	12,590.61	20,907.93	12,517.40	36.63	127.06	-88.016	-465.08	1,584.58	1,510.36	1,365.21	145.16	10.405		
12,650.00	12,639.89	20,918.58	12,517.89	36.95	127.21	-87.328	-475.72	1,584.40	1,513.30	1,367.58	145.72	10.385		
12,700.00	12,688.24	20,933.45	12,518.58	37.29	127.42	-86.363	-490.57	1,584.15	1,517.56	1,371.27	146.29	10.373		
12,750.00	12,735.30	20,952.41	12,519.45	37.62	127.68	-85.155	-509.51	1,583.83	1,522.99	1,376.09	146.89	10.368 SF		
12,800.00	12,780.72	20,964.00	12,519.98	37.96	127.84	-84.116	-521.08	1,583.63	1,529.42	1,382.08	147.34	10.381		
12,850.00	12,824.15	20,964.00	12,519.98	38.29	127.84	-83.357	-521.08	1,583.63	1,536.96	1,389.41	147.55	10.416		
12,900.00	12,865.26	20,964.00	12,519.98	38.60	127.84	-82.488	-521.08	1,583.63	1,545.59	1,397.86	147.72	10.463		
12,950.00 13,000.00	12,903.73 12,939.27	20,964.00 20,964.00	12,519.98 12,519.98	38.90 39.18	127.84 127.84	-81.516 -80.451	-521.08 -521.08	1,583.63 1,583.63	1,555.22 1,565.76	1,407.37 1,417.84	147.85 147.93	10.519 10.585		
13,050.00	12,971.62	20,964.00	12,519.98	39.43	127.84	-79.303	-521.08	1,583.63	1,577.12	1,429.16	147.96	10.659		
13,100.00	13,000.52	20,964.00	12,519.98	39.65	127.84	-78.084	-521.08	1,583.63	1,589.18	1,441.24	147.95	10.741		
13,150.00	13,025.76	20,964.00	12,519.98	39.85	127.84	-76.805	-521.08	1,583.63	1,601.85	1,453.96	147.89	10.831		
13,200.00	13,047.14	20,964.00	12,519.98	40.02	127.84	-75.481	-521.08	1,583.63	1,615.02	1,467.23	147.79	10.928		
13,250.00	13,064.50	20,964.00	12,519.98	40.15	127.84	-74.123	-521.08	1,583.63	1,628.56	1,480.92	147.64	11.030		
13,300.00	13,077.71	20,964.00	12,519.98	40.26	127.84	-72.744	-521.08	1,583.63	1,642.38	1,494.93	147.45	11.138		
13,350.00	13,086.67	20,964.00	12,519.98	40.33	127.84	-71.359	-521.08	1,583.63	1,656.36	1,509.14	147.22	11.251		
13,400.00	13,091.30	20,964.00	12,519.98	40.38	127.84	-69.980	-521.08	1,583.63	1,670.39	1,523.46	146.94	11.368		
13,428.24	13,092.00	20,964.00	12,519.98	40.39	127.84	-69.208	-521.08	1,583.63	1,678.30	1,531.55	146.75	11.436		
13,500.00	13,092.00	20,964.00	12,519.98	40.40	127.84	-69.208	-521.08	1,583.63	1,699.75	1,553.55	146.20	11.626		
13,600.00	13,092.00	20,964.00	12,519.98	40.43	127.84	-69.208	-521.08	1,583.63	1,734.16	1,588.91	145.26	11.939		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g			eep - Cattle	ernan Fed	om 404H -	- OH / 67732 -	ourveys (F	10 12 4/4)				Offset Site Error:	0.00 usf
Survey Progr	ram: 17	4-MWD+HRG	M set	Somi N	laior Axis		Offset Wellbe	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,700.00	13,092.00	20,964.00	12,519.98	40.46	127.84	-69.208	-521.08	1,583.63	1,773.55	1,629.44	144.11	12.307		
13,800.00	13,092.00	20,964.00	12,519.98	40.50	127.84	-69.208	-521.08	1,583.63	1,817.59	1,674.81	142.79	12.729		
13,900.00	13,092.00	20,964.00	12,519.98	40.53	127.84	-69.208	-521.08	1,583.63	1,865.96	1,724.65	141.31	13.205		
14,000.00	13,092.00	20,964.00	12,519.98	40.58	127.84	-69.208	-521.08	1,583.63	1,918.33	1,778.61	139.71	13.730		
14,100.00	13,092.00	20,964.00	12,519.98	40.63	127.84	-69.208	-521.08	1,583.63	1,974.37	1,836.35	138.02	14.305		
14,200.00	13,092.00	20,964.00	12,519.98	40.69	127.84	-69.208	-521.08	1,583.63	2,033.79	1,897.53	136.26	14.926		
14,300.00	13,092.00	20,964.00	12,519.98	40.76	127.84	-69.208	-521.08	1,583.63	2,096.30	1,961.84	134.46	15.591		
14,400.00	13,092.00	20,964.00	12,519.98	40.85	127.84	-69.208	-521.08	1,583.63	2,161.63	2,028.99	132.64	16.297		
14,500.00	13,092.00	20,964.00	12,519.98	40.95	127.84	-69.208	-521.08	1,583.63	2,229.53	2,098.71	130.81	17.043		
14,600.00	13,092.00	20,964.00	12,519.98	41.10	127.84	-69.208	-521.08	1,583.63	2,299.77	2,170.77	129.00	17.827		
14,700.00	13,092.00	20,964.00	12,519.98	41.29	127.84	-69.208	-521.08	1,583.63	2,372.15	2,244.93	127.22	18.646		
14,800.00	13,092.00	20,964.00	12,519.98	41.57	127.84	-69.208	-521.08	1,583.63	2,446.48	2,321.01	125.47	19.498		
14,900.00	13,092.00	20,964.00	12,519.98	41.99	127.84	-69.208	-521.08	1,583.63	2,522.59	2,398.82	123.77	20.382		
15,000.00	13,092.00	20,964.00	12,519.98	42.60	127.84	-69.208	-521.08	1,583.63	2,600.31	2,478.20	122.11	21.295		
15,100.00	13,092.00	20,964.00	12,519.98	43.42	127.84	-69.208	-521.08	1,583.63	2,679.51	2,559.00	120.50	22.236		
15,200.00	13,092.00	20,964.00	12,519.98	44.43	127.84	-69.208	-521.08	1,583.63	2,760.06	2,641.11	118.95	23.203		
15,300.00	13,092.00	20,964.00	12,519.98	45.56	127.84	-69.208	-521.08	1,583.63	2,841.85	2,724.39	117.46	24.194		
15,400.00	13,092.00	20,964.00	12,519.98	46.76	127.84	-69.208	-521.08	1,583.63	2,924.76	2,808.74	116.02	25.209		
15,500.00	13,092.00	20,964.00	12,519.98	48.01	127.84	-69.208	-521.08	1,583.63	3,008.72	2,894.08	114.64	26.245		
15,600.00	13,092.00	20,964.00	12,519.98	49.30	127.84	-69.208	-521.08	1,583.63	3,093.63	2,980.32	113.31	27.301		
15,700.00	13,092.00	20,964.00	12,519.98	50.61	127.84	-69.208	-521.08	1,583.63	3,179.42	3,067.38	112.04	28.377		
15,800.00	13,092.00	20,964.00	12,519.98	51.93	127.84	-69.208	-521.08	1,583.63	3,266.02	3,155.20	110.83	29.470		
15,900.00	13,092.00	20,964.00	12,519.98	53.27	127.84	-69.208	-521.08	1,583.63	3,353.37	3,243.71	109.66	30.580		
16,000.00	13,092.00	20,964.00	12,519.98	54.61	127.84	-69.208	-521.08	1,583.63	3,441.40	3,332.85	108.55	31.705		
16,100.00	13,092.00	20,964.00	12,519.98	55.97	127.84	-69.208	-521.08	1,583.63	3,530.07	3,422.59	107.48	32.844		
16,200.00	13,092.00	20,964.00	12,519.98	57.33	127.84	-69.208	-521.08	1,583.63	3,619.33	3,512.87	106.46	33.998		
16,300.00	13,092.00	20,964.00	12,519.98	58.69	127.84	-69.208	-521.08	1,583.63	3,709.14	3,603.66	105.48	35.163		
16,400.00	13,092.00	20,964.00	12,519.98	60.06	127.84	-69.208	-521.08	1,583.63	3,799.46	3,694.91	104.55	36.341		
16,500.00	13,092.00	20,964.00	12,519.98	61.44	127.84	-69.208	-521.08	1,583.63	3,890.25	3,786.59	103.66	37.529		
16,600.00	13,092.00	20,964.00	12,519.98	62.81	127.84	-69.208	-521.08	1,583.63	3,981.48	3,878.68	102.81	38.728		
16,700.00	13,092.00	20,964.00	12,519.98	64.20	127.84	-69.208	-521.08	1,583.63	4,073.13	3,971.13	101.99	39.935		
16,800.00	13,092.00	20,964.00	12,519.98	65.58	127.84	-69.208	-521.08	1,583.63	4,165.16	4,063.94	101.21	41.152		
16,900.00	13,092.00	20,964.00	12,519.98	66.97	127.84	-69.208	-521.08	1,583.63	4,257.54	4,157.08	100.47	42.376		
17,000.00	13,092.00	20,964.00	12,519.98	68.36	127.84	-69.208	-521.08	1,583.63	4,350.27	4,250.51	99.76	43.608		
17,100.00	13,092.00	20,964.00	12,519.98	69.75	127.84	-69.208	-521.08	1,583.63	4,443.31	4,344.23	99.08	44.847		
17,200.00	13,092.00	20,964.00	12,519.98	71.14	127.84	-69.208	-521.08	1,583.63	4,536.65	4,438.22	98.43	46.091		
17,300.00	13,092.00	20,964.00	12,519.98	72.54	127.84	-69.208	-521.08	1,583.63	4,630.26	4,532.46	97.80	47.342		
17,400.00	13,092.00	20,964.00	12,519.98	73.94	127.84	-69.208	-521.08	1,583.63	4,724.14	4,626.93	97.21	48.597		
17,500.00	13,092.00	20,964.00	12,519.98	75.34	127.84	-69.208	-521.08	1,583.63	4,818.26	4,721.62	96.64	49.857		
17,600.00	13,092.00	20,964.00	12,519.98	76.74	127.84	-69.208	-521.08	1,583.63	4,912.62	4,816.52	96.10	51.122		
17,700.00	13,092.00	20,964.00	12,519.98	78.14	127.84	-69.208	-521.08	1,583.63	5,007.19	4,911.62	95.58	52.390		
17,800.00	13,092.00	20,964.00	12,519.98	79.55	127.84	-69.208	-521.08	1,583.63	5,101.98	5,006.90	95.08	53.661		
17,900.00	13,092.00	20,964.00	12,519.98	80.95	127.84	-69.208	-521.08	1,583.63	5,196.95	5,102.35	94.60	54.935		
18,000.00	13,092.00	20,964.00	12,519.98	82.36	127.84	-69.208	-521.08	1,583.63	5,292.11	5,197.97	94.15	56.212		
18,100.00 18,200.00	13,092.00 13,092.00	20,964.00 20,964.00	12,519.98 12,519.98	83.76 85.17	127.84 127.84	-69.208 -69.208	-521.08 -521.08	1,583.63 1,583.63	5,387.45 5,482.96	5,293.74 5,389.66	93.71 93.29	57.491 58.772		
						-00.200								
18,300.00	13,092.00	20,964.00	12,519.98	86.58	127.84	-69.208	-521.08	1,583.63	5,578.62	5,485.72	92.89	60.054		
18,400.00	13,092.00	20,964.00	12,519.98	87.99	127.84	-69.208	-521.08	1,583.63	5,674.43	5,581.92	92.51	61.338		
18,500.00	13,092.00	20,964.00	12,519.98	89.40	127.84	-69.208	-521.08	1,583.63	5,770.38	5,678.23	92.15	62.622		
18,600.00 18,700.00	13,092.00 13,092.00	20,964.00 20,964.00	12,519.98 12,519.98	90.81 92.23	127.84 127.84	-69.208 -69.208	-521.08 -521.08	1,583.63	5,866.47 5,962.69	5,774.67 5,871.22	91.80 91.46	63.907 65.193		
								1,583.63			31.40			
18,800.00	13,092.00	20,964.00	12,519.98	93.64	127.84	-69.208	-521.08	1,583.63	6,059.02	5,967.88	91.14	66.478		







 Company:
 Titus Oil & Gas Production, LLC

 Project:
 Lea County, NM - (NAD83 NME)

 Reference Site:
 El Campeon Fed Com (NAD83)

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: RKB @.

MD Reference: North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD)

RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Offset De	sign: Cat	ttlemen Fe	d Com - D	eep - Cattle	eman Fed	I Com 404H	- OH / 67732 -	Surveys (H	1& P 474)					
								,					Offset Site Error:	0.00 usft
Survey Progr Refe	ram: 17- rence	4-MWD+HRG Off	M fset	Semi N	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
18,900.00	13,092.00	20,964.00	12,519.98	95.06	127.84	-69.208	-521.08	1,583.63	6,155.48	6,064.64	90.84	67.764		
19,000.00	13,092.00	20,964.00	12,519.98	96.47	127.84	-69.208	-521.08	1,583.63	6,252.05	6,161.50	90.55	69.049		
19,100.00	13,092.00	20,964.00	12,519.98	97.89	127.84	-69.208	-521.08	1,583.63	6,348.72	6,258.46	90.27	70.333		
19,200.00	13,092.00	20,964.00	12,519.98	99.30	127.84	-69.208	-521.08	1,583.63	6,445.50	6,355.50	90.00	71.617		
19,300.00	13,092.00	20,964.00	12,519.98	100.72	127.84	-69.208	-521.08	1,583.63	6,542.37	6,452.62	89.74	72.900		
19,400.00	13,092.00	20,964.00	12,519.98	102.14	127.84	-69.208	-521.08	1,583.63	6,639.33	6,549.83	89.50	74.181		
19,500.00	13,092.00	20,964.00	12,519.98	103.55	127.84	-69.208	-521.08	1,583.63	6,736.39	6,647.12	89.27	75.461		
19,600.00	13,092.00	20,964.00	12,519.98	104.97	127.84	-69.208	-521.08	1,583.63	6,833.53	6,744.48	89.05	76.740		
19,700.00	13,092.00	20,964.00	12,519.98	106.39	127.84	-69.208	-521.08	1,583.63	6,930.75	6,841.91	88.84	78.017		
19,800.00	13,092.00	20,964.00	12,519.98	107.81	127.84	-69.208	-521.08	1,583.63	7,028.04	6,939.41	88.63	79.292		
19,900.00	13,092.00	20,964.00	12,519.98	109.23	127.84	-69.208	-521.08	1,583.63	7,125.42	7,036.97	88.44	80.565		
20,000.00	13,092.00	20,964.00	12,519.98	110.65	127.84	-69.208	-521.08	1,583.63	7,222.86	7,134.60	88.26	81.836		
20,100.00	13,092.00	20,964.00	12,519.98	112.07	127.84	-69.208	-521.08	1,583.63	7,320.38	7,104.00	88.09	83.105		
20,200.00	13,092.00	20,964.00	12,519.98	113.49	127.84	-69.208	-521.08	1,583.63	7,417.96	7,330.03	87.92	84.371		
20,300.00	13,092.00	20,964.00	12,519.98	114.91	127.84	-69.208	-521.08	1,583.63	7,515.60	7,427.84	87.76	85.635		
20,400.00	13,092.00	20,964.00	12,519.98	116.34	127.84	-69.208	-521.08	1,583.63	7,613.30	7,525.69	87.61	86.896		
20,500.00	13,092.00	20,964.00	12,519.98	117.76	127.84	-69.208	-521.08	1,583.63	7,711.07	7,623.59	87.47	88.154		
20,600.00	13,092.00	20,964.00	12,519.98	119.18	127.84	-69.208	-521.08	1,583.63	7,808.89	7,721.55	87.34	89.410		
20,700.00	13,092.00	20,964.00	12,519.98	120.60	127.84	-69.208	-521.08	1,583.63	7,906.76	7,721.55	87.21	90.662		
20,800.00	13,092.00	20,964.00	12,519.98	122.03	127.84	-69.208	-521.08	1,583.63	8,004.69	7,819.55	87.09	91.912		
20,900.00	13,092.00	20,964.00	12,519.98	123.45	127.84	-69.208	-521.08	1,583.63	8,102.67	8,015.69	86.98	93.158		
21,000.00	13,092.00	20,964.00	12,519.98	124.87	127.84	-69.208	-521.08	1,583.63	8,200.69	8,113.82	86.87	94.401		
21,100.00	13,092.00	20,964.00	12,519.98	126.30	127.84	-69.208	-521.08	1,583.63	8,298.77	8,212.00	86.77	95.641		
21,200.00	13,092.00	20,964.00	12,519.98	127.72	127.84	-69.208	-521.08	1,583.63	8,396.89	8,310.21	86.68	96.877		
21,300.00 21,400.00	13,092.00 13,092.00	20,964.00 20,964.00	12,519.98 12,519.98	129.15 130.57	127.84 127.84	-69.208 -69.208	-521.08 -521.08	1,583.63 1,583.63	8,495.05 8,593.25	8,408.46 8,506.75	86.59 86.50	98.110 99.339		
∠1,400.00	13,092.00	20,504.00	12,018.80	130.37	127.04	-09.200	-321.06	1,000.00	0,080.20	0,000.75	00.00	33.JJ3		
21,500.00	13,092.00	20,964.00	12,519.98	132.00	127.84	-69.208	-521.08	1,583.63	8,691.50	8,605.07	86.43	100.564		
21,600.00	13,092.00	20,964.00	12,519.98	133.42	127.84	-69.208	-521.08	1,583.63	8,789.79	8,703.43	86.36	101.786		
21,700.00	13,092.00	20,964.00	12,519.98	134.85	127.84	-69.208	-521.08	1,583.63	8,888.11	8,801.82	86.29	103.004		
21,800.00	13,092.00	20,964.00	12,519.98	136.27	127.84	-69.208	-521.08	1,583.63	8,986.47	8,900.24	86.23	104.218		
21,900.00	13,092.00	20,964.00	12,519.98	137.70	127.84	-69.208	-521.08	1,583.63	9,084.87	8,998.70	86.17	105.429		
22,000.00	13,092.00	20,964.00	12,519.98	139.12	127.84	-69.208	-521.08	1,583.63	9,183.30	9,097.18	86.12	106.635		
22,100.00	13,092.00	20,964.00	12,519.98	140.55	127.84	-69.208	-521.08	1,583.63	9,281.76	9,195.69	86.07	107.837		
22,200.00	13,092.00	20,964.00	12,519.98	141.98	127.84	-69.208	-521.08	1,583.63	9,380.26	9,294.23	86.03	109.036		
22,300.00	13,092.00	20,964.00	12,519.98	143.40	127.84	-69.208	-521.08	1,583.63	9,478.79	9,392.80	85.99	110.230		
22,400.00	13,092.00	20,964.00	12,519.98	144.83	127.84	-69.208	-521.08	1,583.63	9,577.35	9,491.39	85.96	111.420		
22,500.00	13,092.00	20,964.00	12,519.98	146.26	127.84	-69.208	-521.08	1,583.63	9,675.94	9,590.01	85.93	112.606		
22,600.00	13,092.00	20,964.00	12,519.98	147.69	127.84	-69.208	-521.08	1,583.63	9,774.56	9,688.66	85.90	113.788		
22,700.00	13,092.00	20,964.00	12,519.98	149.11	127.84	-69.208	-521.08	1,583.63	9,873.20	9,787.32	85.88	114.965		
22,728.24	13,092.00	20,964.00	12,519.98	149.52	127.84	-69.208	-521.08	1,583.63	9,901.07	9,815.19	85.87	115.297		
,	. 5,002.00	_0,0000	, 0 . 0 . 0 0		.2	00.200		.,000.00	0,001.01	3,010.10				







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: Ca												Offset Site Error:	0.00 usf
Survey Progr	ram: 17 rence	4-MWD+HRG Off		Somi N	laior Axis		Offset Wellb	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	68.63	24.63	1.00	1.08	6.462	8,042.60	910.99	8,094.07					
100.00	100.00	198.51	154.48	1.08	1.57	6.442	8,042.18	908.07	8,093.47	8,090.82	2.65	3,052.510		
200.00	200.00	274.16	230.11	1.60	2.06	6.435	8,041.91	906.99	8,092.95	8,089.30	3.65	2,215.532		
300.00	300.00	366.27	322.23	2.01	2.63	6.436	8,041.62	907.19	8,092.66	8,088.07	4.59	1,763.895		
400.00	400.00	454.80	410.75	2.35	3.05	6.440	8,041.34	907.73	8,092.42	8,087.12	5.30	1,526.788		
444.57	444.57	488.62	444.57	2.49	3.13	6.442	8,041.29	907.92	8,092.39	8,086.88	5.51	1,468.263		
500.00	500.00	542.66	498.61	2.65	3.25	6.444	8,041.29	908.17	8,092.41	8,086.62	5.79	1,396.507		
595.52	595.52	639.57	595.52	2.91	3.44	6.447	8,041.19	908.61	8,092.36	8,086.12	6.25	1,295.431		
600.00	600.00	643.16	599.11	2.93	3.45	6.447	8,041.19	908.63	8,092.36	8,086.10	6.27	1,291.468		
700.00	700.00	731.86	687.81	3.18	3.62	6.451	8,041.23	909.22	8,092.48	8,085.79	6.68	1,210.768		
800.00	800.00	819.00	774.94	3.41	3.78	6.456	8,041.30	909.95	8,092.66	8,085.59	7.07	1,144.280		
900.00	900.00	899.01	854.95	3.64	3.92	6.460	8,041.62	910.58	8,093.13	8,085.71	7.43	1,089.727		
1,000.00	1,000.00	1,009.79	965.73	3.85	4.10	6.465	8,042.09	911.24	8,093.62	8,085.81	7.82	1,035.132		
1,100.00	1,100.00	1,134.38	1,090.32	4.05	4.30	6.468	8,042.40	911.82	8,093.93	8,085.71	8.22	984.416		
1,200.00	1,200.00	1,242.56	1,198.50	4.24	4.45	6.470	8,042.41	912.06	8,093.96	8,085.41	8.55	946.592		
1,300.00	1,300.00	1,335.35	1,291.28	4.43	4.60	6.471	8,042.45	912.24	8,094.02	8,085.14	8.88	911.398		
1,400.00	1,400.00	1,429.95	1,385.89	4.61	4.76	6.473	8,042.56	912.51	8,094.17	8,084.96	9.21	878.855		
1,500.00	1,500.00	1,535.06	1,490.99	4.78	4.92	6.474	8,042.69	912.68	8,094.31	8,084.76	9.55	847.812		
1,600.00	1,599.98	1,636.17	1,592.10	4.98	5.05	-163.505	8,042.78	912.71	8,096.08	8,086.20	9.88	819.384		
1,620.70	1,620.67	1,656.37	1,612.30	4.99	5.08	-163.503	8,042.80	912.70	8,096.87	8,086.95	9.92	816.122		
1,700.00	1,699.89	1,736.13	1,692.06	5.07	5.15	-163.510	8,042.90	912.64	8,100.15	8,090.04	10.11	801.080		
1,800.00	1,799.81	1,837.87	1,793.80	5.23	5.23	-163.520	8,043.00	912.42	8,104.27	8,093.88	10.39	779.879		
1,900.00	1,899.72	1,941.09	1,897.02	5.41	5.33	-163.530	8,043.08	912.31	8,108.37	8,097.68	10.69	758.425		
2,000.00	1,999.63	2,057.04	2,012.97	5.60	5.55	-163.533	8,042.93	913.15	8,112.37	8,101.30	11.07	732.790		
2,100.00	2,099.54	2,181.76	2,137.60	5.80	6.00	-163.512	8,042.01	917.65	8,116.08	8,104.59	11.49	706.499		
2,200.00	2,199.45	2,284.08	2,239.76	6.02	6.30	-163.481	8,040.85	923.16	8,119.60	8,107.77	11.82	686.669		
2,300.00	2,299.36	2,370.41	2,325.95	6.24	6.50	-163.453	8,039.95	928.03	8,123.23	8,111.08	12.15	668.508		
2,400.00	2,399.27	2,445.00	2,400.42	6.47	6.69	-163.429	8,039.24	932.27	8,127.01	8,114.53	12.47	651.645		
2,500.00	2,499.18	2,507.87	2,463.19	6.72	6.85	-163.409	8,038.88	935.85	8,131.18	8,118.39	12.79	635.954		
2,600.00	2,599.10	2,561.83	2,517.06	6.96	6.99	-163.392	8,038.93	938.90	8,135.95	8,122.85	13.10	621.258		
2,700.00	2,699.01	2,635.00	2,590.10	7.22	7.18	-163.370	8,039.44	943.08	8,141.28	8,127.84	13.44	605.747		
2,800.00	2,798.92	2,713.66	2,668.62	7.48	7.40	-163.344	8,040.19	947.84	8,146.92	8,133.12	13.80	590.459		
2,900.00	2,898.83	2,809.27	2,764.01	7.74	7.67	-163.308	8,040.99	954.23	8,152.57	8,138.38	14.19	574.670		
3,000.00	2,998.74	2,919.31	2,873.81	8.01	7.99	-163.268	8,041.94	961.34	8,158.21	8,143.61	14.60	558.756		
3,100.00	3,098.65	3,006.60	2,960.97	8.28	8.24	-163.243	8,042.79	966.13	8,163.85	8,148.87	14.99	544.757		
3,200.00	3,198.56	3,093.47	3,047.70	8.56	8.49	-163.218	8,043.77	970.91	8,169.65	8,154.27	15.38	531.354		
3,300.00	3,298.47	3,178.03	3,132.11	8.84	8.75	-163.192	8,044.84	975.78	8,175.62	8,159.85	15.77	518.527		
3,400.00	3,398.39	3,254.84	3,208.78	9.13	8.98	-163.168	8,045.97	980.28	8,181.81	8,165.66	16.15	506.549		
3,500.00	3,498.30	3,523.84	3,477.32	9.41	9.90	-163.085	8,048.07	995.75	8,187.60	8,170.72	16.88	485.184		
3,600.00	3,598.21	3,613.49	3,566.92	9.70	10.42	-163.070	8,047.97	998.96	8,191.95	8,174.51	17.43	469.906		
3,700.00	3,698.12	3,703.29	3,656.70	9.99	10.88	-163.069	8,048.20	1,000.33	8,196.42	8,178.46	17.96	456.349		
3,800.00	3,798.03	3,963.13	3,916.52	10.29	11.20	-163.082	8,047.50	1,001.60	8,200.65	8,182.20	18.45	444.382		
3,900.00	3,897.94	4,028.69	3,982.07	10.58	11.16	-163.092	8,046.78	1,000.87	8,203.45	8,184.70	18.76	437.383		
4,000.00	3,997.85	4,123.42	4,076.79	10.88	11.10	-163.104	8,045.99	1,000.10	8,206.56	8,187.49	19.07	430.296		
4,100.00	4,097.76	4,224.66	4,178.03	11.18	11.12	-163.119	8,045.09	999.21	8,209.60	8,190.12	19.48	421.376		
4,200.00	4,197.68	4,321.19	4,274.55	11.48	11.18	-163.130	8,044.23	998.65	8,212.68	8,192.75	19.93	412.168		
4,300.00	4,297.59	4,431.16	4,384.52	11.78	11.34	-163.141	8,043.18	998.33	8,215.73	8,195.28	20.44	401.874		
4,400.00	4,397.50	4,540.47	4,493.82	12.08	11.51	-163.150	8,041.94	998.25	8,218.62	8,197.65	20.97	391.891		
4,500.00	4,497.41	4,626.98	4,580.32	12.39	11.62	-163.153	8,040.94	998.72	8,221.57	8,200.23	21.34	385.283		
4,600.00	4,597.32	20,653.31	12,689.22	12.69	118.66	-104.560	-60.03	960.14	8,146.34	8,065.72	80.62	101.050		
4,700.00	4,697.23	20,655.08	12,689.24	13.00	118.69	-104.465	-61.81	960.12	8,047.05	7,966.25	80.80	99.590		
4,800.00	4,797.14	20,698.81	12,689.79	13.31	119.31	-102.087	-105.51	959.12	7,947.93	7,866.63	81.30	97.759		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

Database:

North Reference:

Survey Calculation Method: Output errors are at

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Property	ffset Des	,.g						- OH / 67733 -	, (,				Offset Site Error:	0.00 us
Name					Semi N	laior Axis		Offset Wellho	ore Centre	Dist		igned:		Offset Well Error:	1.00 us
1,000 1,00	leasured Depth (usft)	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Separation	•	Warning	
1,19000 S. 50,0868	4,900.00	4,897.05	20,703.51	12,689.82	13.62	119.38	-101.825	-110.22	959.04	7,848.65	7,767.14	81.51	96.286		
1,200.00 5,967.00 20,717.00 12,889.00 14,55 119.50 -101.033 -14.32 98.80 7,59.00 7,6	5,000.00	4,996.97	20,708.21	12,689.84	13.92	119.45	-101.562	-114.92	958.96	7,749.39	7,667.66	81.73	94.817		
1,300.00	5,100.00	5,096.88	20,712.92	12,689.87	14.23	119.52	-101.298	-119.62	958.88	7,650.14	7,568.19	81.95	93.352		
	5,200.00	5,196.79			14.55	119.58	-101.033	-124.32	958.80	7,550.91	7,468.74		91.892		
	5,300.00														
1,800 00 5,598-43 b 20,736-34 b 20,736-34 b 12,936-00 b 11,932 b -99,964 b 1-14,12 b 56.84 b 7,151-17 b 20,770 b 83,14 b 46,868 1,800 00 5,796-26 b 20,822-20 b 12,889.91 b 11,42 b 12,11 b -94,813 b -22,888 b 67,83 b 65,558 b 6,871.14 b 81,41 b 22,868 b 1,000 00 5,000 00 20,800 00 20,800 00 20,800 00 12,888 b 17,70 b 12,11 b -94,559 b -23,450 b 96,786 b 6,852 b 6,873 00 94,681 b 78,864 b 1,000 00 00,803 00 20,830,34 1 12,888 b 17,37 1 12,11 9 b -94,559 b -23,731 b 27,80 b 65,555 b 65,73 00 b 46,81 b 78,864 b 1,000 00 00,803 00 20,830 01 12,888 b 11,00 b 24,110 b -24,120 b 97,97 00 65,76 b 65,73 00 b 46,81 b 77,880 b 1,000 00 00,805 00 20,805 00 12,808 00 b 12,11 b 44,10 b 24,120 b <t< td=""><td>5,400.00</td><td>5,396.61</td><td>20,727.02</td><td>12,689.95</td><td>15.17</td><td>119.72</td><td>-100.501</td><td>-133.72</td><td>958.64</td><td>7,352.50</td><td>7,269.88</td><td>82.63</td><td>88.984</td><td></td><td></td></t<>	5,400.00	5,396.61	20,727.02	12,689.95	15.17	119.72	-100.501	-133.72	958.64	7,352.50	7,269.88	82.63	88.984		
1,70000 5,969,34 02,741,3 12,800,05 16.11 199.2 -96.04 - 147.82 56.04 7,705.04 6,717.0 83.4 4458 1,80000 5,969,06 80,222 20 10,220 10,220 11 1,020 11 10.04 711 - 23.190 167.5 0,055.0 1,055.0 1,072.37 84.30 11.02 1,00000 5,969,07 0,036,05 11,028,087 17.05 121.15 - 94.539 - 22.34.0 197.5 0,055.0 1,055.0 1,056.0 17.00 1,00000 5,969,07 0,036,05 11,028,087 17.05 121.15 - 94.539 - 22.34.0 197.5 0,055.0 1,055.0 1,056.0 1,066.0 197.0 19	5,500.00														
1,800 00 5,786 28 20,222 0 12,689 91 16.42 121 70 44.883 -22,888 697,88 6,956 78 6,871 74 84.14 82,686 1,000 00 5,096 08 20,827 81 12,689 87 17.00 121.15 -44,538 -23,420 97.87 6,757,83 6,873,90 84.88 13.22 1,000 00 0,005 99 20,303,54 12,689 84 17.37 121.19 -44.397 -24.73 6,777,83 6,873,90 84.86 73.498 0,000 00 0,005 99 20,303,64 12,689 87 18.00 121.23 44.919 -24.012 867,93 6,605,64 6,73,761 85.00 73.315 1,500 00 6,405,63 20,314,73 12,119 44.900 -24.24 857,93 6,606,48 6,375,11 85.30 73.435 1,500 00 6,805,83 20,314,73 12,129 14,400 -24.839 967,98 6,205,48 6,774,40 85.00 72.400 1,500 00 6,805,83 20,314,73 12,142<	5,600.00														
1,000 0 5,966 08 20,877 81 12,689 87 17 05 121 15 - 94.539 234.50 957.87 6,757.63 6,673.02 84.61 79.864 1,100 06 6,065.99 20,380.51 12,589.34 17.37 121 19 94.367 237.31 12.00 16 16.00 12.00 6,169.59 20,383.41 26,889.22 17.68 121.23 94.193 24.01 2 957.91 6,555.40 6,673.09 84.60 73.499 1,300 06 0,268.61 20,380.20 12,689.80 18.00 121.27 94.000 24.294 18.00 14.00 12.00 12.00 14.00 12.00 14.00 14.00 12.00 14.0															
1.000 0 6.085.00 20.830.3 12.889.84 17.37 12.19 44.897 2.27.31 897.80 6.685.8 6.873.60 88.86 78.400 13.000 0 6.286.81 20.832.02 12.889.80 18.00 12.127 44.030 2.24.12 897.01 6.589.40 6.873.61 85.55 78.806 13.000 0 6.286.81 20.832.02 12.889.70 18.32 12.131 39.448 2.45.76 897.90 6.286.40 6.873.61 85.55 78.806 13.000 0 6.286.81 20.832.02 12.889.70 18.32 12.131 39.449 2.45.76 897.90 6.281.40 6.873.65 85.50 78.806 14.000 0 8.385.52 20.881.01 12.889.77 18.32 12.131 39.493.649 2.45.76 897.90 6.281.40 6.071.42 88.12 71.370 14.000 0 8.095.55 20.841.73 12.889.72 18.95 12.131 39.433.649 2.45.42 895.00 6.15.54 6.077.42 88.12 71.570 14.000 0 8.095.50 20.841.73 12.889.72 12.131 39.433.149 2.261.62 895.00 6.15.54 6.077.42 88.12 71.570 14.000 0 6.95.55 20.841.73 12.889.50 19.59 12.147 43.3145 2.2696 2.261.42 895.00 6.05.55 76.570 8.000 14.0000 14.0000 14.0000 14.0000 14.0000 14.0000 14.0000 14.0	5,900.00	5,896.17	20,825.00	12,689.89	16.74	121.11	-94.711	-231.69	957.85	6,856.74	6,772.37	84.38	81.262		
1,200.00 1,985.00 20,831.4 12,888.82 17.88 121.23 94.193 2.40.12 957.91 65.96 6.479.39 6.479.39 8.51.0 77.080 1.00.0	6,000.00	5,996.08			17.05	121.15	-94.539	-234.50	957.87	6,757.63	6,673.02	84.61	79.864		
1,300.00 6,285.81 20,859.28 12,869.80 18.00 18.00 12.27 -94.020 -242.94 95.73 0,460.46 0,575.11 85.35 75.95 1,500.00 6,496.53 20,849.61 12,869.77 18.32 121.31 9.3849 -245.76 95.76 0,581.84 0,775.85 80 80 74.315 1,500.00 6,496.53 20,841.91 12,869.72 18.95 121.91 93.496 1,500.00 6,595.55 20,841.93 12,869.72 18.95 121.91 93.496 1,500.00 6,595.55 20,841.93 12,869.72 18.95 121.91 93.496 1,500.00 6,595.55 20,841.93 12,869.73 18.95 121.91 93.496 1,500.00 6,795.37 20,850.40 12,869.86 19.91 121.51 93.493.21 1,500.00 6,795.37 20,850.40 12,869.86 19.91 121.51 93.414 1,500.00 6,795.37 20,850.40 12,869.85 19.91 121.51 92.999 1,500.00 6,895.89 20,853.24 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.85 19.91 121.51 92.999 1,500.00 6,895.19 20,850.80 12,869.80 12,869 12.90 9 1,500.00 7,005.10 12,869.84 12.80 1	6,100.00														
	6,200.00														
1,80000 6,595.55 20,847.73 12,889.72 18,95 121.39 .93.496 251.42 98.80 6,163.54 6,077.42 88.12 71.570 1,7000 6,865.28 20,855.24 12,889.68 19.59 121.47 .93.145 .257.08 958.03 6,085.76 5,879.10 86.85 68.46 1,0000 6,085.28 20,852.24 12,889.68 19.59 121.47 .93.145 .257.08 958.03 6,585.76 5,879.10 86.85 68.46 1,0000 6,085.28 20,852.24 12,889.68 19.59 121.57 .92.299 .259.22 98.80 95.806.25,779.99 89.30 6,486.24 1,0000 6,085.28 20,852.24 12,889.68 19.59 121.57 .92.299 .259.22 98.80 95.806.25,779.99 89.30 6,486.24 1,0000 6,085.28 20,858.28 12,889.61 20,54 121.59 .92.615 .265.50 198.15 5,686.37 5,881.80 67.49 64.79 1,0000 6,085.28 20,854.24 12,859.89 12,889.61 20,54 12,85	6,300.00														
1,80000 6,595.55 20,847.73 12,889.72 18,95 121.39 .93.496 251.42 98.80 6,163.54 6,077.42 88.12 71.570 1,7000 6,865.28 20,855.24 12,889.68 19.59 121.47 .93.145 .257.08 958.03 6,085.76 5,879.10 86.85 68.46 1,0000 6,085.28 20,852.24 12,889.68 19.59 121.47 .93.145 .257.08 958.03 6,585.76 5,879.10 86.85 68.46 1,0000 6,085.28 20,852.24 12,889.68 19.59 121.57 .92.299 .259.22 98.80 95.806.25,779.99 89.30 6,486.24 1,0000 6,085.28 20,852.24 12,889.68 19.59 121.57 .92.299 .259.22 98.80 95.806.25,779.99 89.30 6,486.24 1,0000 6,085.28 20,858.28 12,889.61 20,54 121.59 .92.615 .265.50 198.15 5,686.37 5,881.80 67.49 64.79 1,0000 6,085.28 20,854.24 12,859.89 12,889.61 20,54 12,85	6,500.00	6,495.63	20,841.91	12,689.75	18.63	121.35	-93.671	-248.59	957.98	6,262.48	6,176.62	85.86	72.940		
1,800,00 6,785,72 20,805,40 12,808,08 19,59 121,47 93,145 22,708 985,08 5,986,76 5,879,10 86,65 88,846 1,000,00 6,885,28 20,853,24 12,689,65 19,91 121,55 92,929 259,92 956,09 5,786,09 5,779,99 66,93 67,491 1,000,00 7,095,10 20,858,02 12,889,81 20,52 12,155 92,782 92,655 98,515 5,680,92 87,718 63,462 3,000,00 7,195,01 20,881,17 12,689,58 20,881 21,63 92,615 -26,850 98,13 5,770,65 5,881,87 87,78 63,462 3,000,00 7,244,42 20,881,62 12,689,56 21,18 121,67 42,259 -271,30 98,22 5,770,95 5,882,87 87,78 63,462 3,000,00 7,594,62 20,877,00 12,689,46 21,82 121,85 -91,483 -233,88 98,39 5,774,99 5,860,08 88,73 59,448	6,600.00									6,163.54					
	6,700.00	6,695.46	20,847.57	12,689.70	19.27	121.43	-93.321	-254.25	958.03	6,064.63	5,978.25	86.38	70.205		
1,000 0	6,800.00	6,795.37	20,850.40	12,689.68	19.59	121.47	-93.145	-257.08	958.06	5,965.76	5,879.10	86.65	68.846		
	6,900.00	6,895.28	20,853.24	12,689.65	19.91	121.51	-92.969	-259.92	958.09	5,866.92	5,779.99	86.93	67.491		
	7,000.00	6,995.19	20,856.08	12,689.63	20.23	121.55	-92.792	-262.76	958.12	5,768.12	5,680.92	87.21	66.143		
	7,100.00	7,095.10	20,858.92	12,689.61	20.54	121.59	-92.615	-265.60	958.15	5,669.37	5,581.88	87.49	64.799		
1,400,00 7,394.84 20,867.47 12,690.54 21.50 121.71 -92.081 -274.15 958.26 5,373.36 5,284.99 88.37 60.803 1,500,00 7,494.75 20,877.00 12,689.46 21.82 121.85 -91.483 -283.68 958.39 5,707.27 5,087.25 89.02 58.149 7,000,00 7,684.66 20,877.00 12,689.46 22.41 121.85 -91.483 -283.68 958.39 5,077.60 4,988.49 89.31 56.855 7,800,00 7,944.88 20,877.00 12,689.46 22.78 121.85 -91.483 -283.68 958.39 5,881.06 4,791.14 89.92 55.566 1,900,00 7,894.39 20,877.00 12,689.46 23.42 121.85 -91.483 -283.68 958.39 4,881.06 4,791.14 89.92 54.283 1,100,00 8,094.21 20,877.00 12,689.46 23.42 121.85 -91.483 -283.68 958.39 4,881.06 4,791.14 89.92	7,200.00				20.86										
7,500,00 7,494.75 20,877.00 12,889.46 21,82 121,85 -91,483 -283.68 958.39 5,274.79 5,186.06 88.73 59,448 1,600,00 7,594.66 20,877.00 12,689.46 22,14 121,85 -91,483 -283.68 958.39 5,176.27 5,087.25 89.02 58,149 1,700,00 7,694.67 20,877.00 12,689.46 22,46 121,85 -91,483 -283.68 958.39 5,077.80 4,988.49 89.31 56,855 1,900,00 7,894.39 20,877.00 12,689.46 23.10 121,85 -91,483 -283.68 958.39 4,881.06 4,791.14 89.92 54,283 1,000,00 7,994.30 20,877.00 12,689.46 23.42 121.85 -91,483 -283.68 958.39 4,782.79 4,692.56 90.23 53.005 1,100,00 8,994.21 20,877.00 12,689.46 23.75 121.85 -91,483 -283.68 958.39 4,782.79 4,692.56 90.23	7,300.00														
(600.00 7,594.66 20,877.00 12,689.46 22.14 121.85 -91.483 -283.68 958.39 5,176.27 5,087.25 89.02 58.149 (700.00 7,694.67 20,877.00 12,689.46 22.46 121.85 -91.483 -283.68 958.39 5,077.80 4,988.49 89.31 56.855 (800.00 7,784.48 20,877.00 12,689.46 23.10 121.85 -91.483 -283.68 958.39 4,881.06 4,791.14 89.92 54.283 (900.00 7,984.30 20,877.00 12,689.46 23.42 121.85 -91.483 -283.68 958.39 4,782.79 4,692.56 90.23 53.005 (1,000.00 8,994.21 20,877.00 12,689.46 23.42 121.85 -91.483 -283.68 958.39 4,782.79 4,692.56 90.23 53.005 (3,000.00 8,949.41 20,770.00 12,689.46 24.90 121.85 -91.483 -283.68 958.39 4,894.64 4,907.79 12,689.46	7,400.00	7,394.84	20,867.47	12,689.54	21.50	121.71	-92.081	-274.15	958.26	5,373.36	5,284.99	88.37	60.803		
7,700,00 7,694.57 20,877.00 12,689.46 22,46 121.85 -91.483 -283.68 958.39 5,077.80 4,988.49 89.31 56.855 1,800.00 7,784.48 20,877.00 12,689.46 23.10 121.85 -91.483 -283.68 958.39 4,979.40 4,889.79 89.61 55.566 1,000.00 7,994.30 20,877.00 12,689.46 23.10 121.85 -91.483 -283.68 958.39 4,782.79 4,682.56 90.23 53.005 1,100.00 8,094.21 20,877.00 12,689.46 23.75 121.85 -91.483 -283.68 958.39 4,582.79 4,692.56 90.23 53.005 1,200.00 8,194.13 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,586.47 4,495.59 90.88 50.467 1,300.00 8,933.95 20,877.00 12,689.46 24.71 121.85 -91.483 -283.68 958.39 4,280.44 4,200.73 91.51	7,500.00	7,494.75			21.82	121.85	-91.483	-283.68		5,274.79	5,186.06	88.73	59.448		
1,800.00 7,794.48 20,877.00 12,689.46 22.78 121.85 -91.483 -283.68 958.39 4,979.40 4,889.79 89.61 55.566 1,000.00 7,894.39 20,877.00 12,689.46 23.10 121.85 -91.483 -283.68 958.39 4,881.06 4,791.14 89.92 54.283 1,000.00 7,994.30 20,877.00 12,689.46 23.42 121.85 -91.483 -283.68 958.39 4,782.79 4,692.56 90.23 53.005 1,000.00 8,094.21 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,586.47 4,995.59 96.85 50.467 1,300.00 8,294.04 20,877.00 12,689.46 24.37 121.85 -91.483 -283.68 958.39 4,880.44 4,397.22 91.21 49.207 1,400.00 8,393.95 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,292.64 4,200.73 91.51	7,600.00														
1,90000 7,894.39 20,877.00 12,689.46 23.10 121.85 -91.483 -283.68 958.39 4,881.06 4,791.14 89.92 54.283 1,000.00 7,994.30 20,877.00 12,689.46 23.42 121.85 -91.483 -283.68 958.39 4,684.59 4,594.04 90.55 51.733 1,200.00 8,194.13 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,684.59 4,594.04 90.55 51.733 1,200.00 8,194.13 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,684.59 4,995.99 91.21 49.207 1,400.00 8,939.59 20,877.00 12,689.46 24.71 121.85 -91.483 -283.68 958.39 4,986.44 4,200.73 91.91 46.705 1,500.00 8,493.66 20,877.00 12,689.46 25.03 121.85 -91.483 -283.68 958.39 4,292.64 4,200.73 91.91 <	7,700.00														
1,000.00 7,994.30 20,877.00 12,689.46 23.42 121.85 -91.483 -283.68 958.39 4,782.79 4,692.56 90.23 53.005 1,100.00 8,094.21 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,684.59 4,594.04 90.55 51.733 1,200.00 8,194.13 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,684.59 4,594.04 90.55 51.733 1,200.00 8,294.04 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,488.44 4,397.22 91.21 49.207 1,400.00 8,393.95 20,877.00 12,689.46 24.71 121.85 -91.483 -283.68 958.39 4,394.94 4,298.93 91.56 47.953 1,500.00 8,493.86 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,394.94 4,298.93 91.56 47.953 1,500.00 8,593.77 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,394.94 4,200.73 91.91 46.705 1,500.00 8,593.77 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,500.00 8,593.77 20,877.00 12,689.46 25.67 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,500.00 8,893.68 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,500.00 8,893.50 20,877.00 12,689.46 26.02 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,500.00 8,893.50 20,877.00 12,689.46 26.02 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,500.00 8,893.50 20,877.00 12,689.46 26.02 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,500.00 8,893.42 20,877.00 12,689.46 26.02 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,500.00 8,933.42 20,877.00 12,689.46 26.02 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,500.00 8,933.42 20,877.00 12,689.46 26.04 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,500.00 8,933.42 20,877.00 12,689.46 26.04 121.85 -91.483 -283.68 958.39 3,902.31 3,806.70 93.02 43.000 1,500.00 9,933.30 20,907.77 12,689.31 27.92 122.22 88.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,500.00 9,933.10 20,907.77 12,689.31 27.91 122.22 88.9536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,932.82 20,907.77 12,689.31 28.25 122.32 8	7,800.00														
1,100.00 8,094.21 20,877.00 12,689.46 23.75 121.85 -91.483 -283.68 958.39 4,684.59 4,594.04 90.55 51.733 1,200.00 8,194.13 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,686.47 4,495.59 90.88 50.467 1,300.00 8,294.04 20,877.00 12,689.46 24.71 121.85 -91.483 -283.68 958.39 4,488.44 4,397.22 91.21 49.207 1,400.00 8,393.95 20,877.00 12,689.46 25.03 121.85 -91.483 -283.68 958.39 4,294.04 20,877.00 12,689.46 25.03 121.85 -91.483 -283.68 958.39 4,294.04 20,073 91.91 46.705 1,500.00 8,593.77 20,877.00 12,689.46 25.05 121.85 -91.483 -283.68 958.39 4,194.88 4,102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.05 121.85 -91.483 -283.68 958.39 4,194.88 4,102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.05 121.85 -91.483 -283.68 958.39 4,194.88 4,102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.07 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 92.64 44.229 1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,900.00 8,893.50 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,900.00 8,993.42 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,900.00 8,993.42 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,997.11 3,906.70 93.02 43.000 1,900.00 9,993.33 20,907.05 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,805.05 3,711.24 93.81 40.562 1,000.00 9,993.33 20,907.05 12,689.34 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,993.33 20,907.55 12,689.31 27.91 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,400.00 9,933.15 20,905.58 12,689.31 27.91 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,200.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.30 3,071 1,000.00 9,692.79 20,914.68 12,689.30 28.58 122.35 -89.246 -318.99 958.91 3,22	7,900.00	7,894.39	20,877.00	12,689.46	23.10	121.85	-91.483	-283.68	958.39	4,881.06	4,791.14	89.92	54.283		
1,200.00 8,194.13 20,877.00 12,689.46 24.07 121.85 -91.483 -283.68 958.39 4,586.47 4,495.59 90.88 50.467 1,300.00 8,294.04 20,877.00 12,689.46 24.39 121.85 -91.483 -283.68 958.39 4,488.44 4,397.22 91.21 49.207 1,400.00 8,393.95 20,877.00 12,689.46 24.71 121.85 -91.483 -283.68 958.39 4,390.49 4,298.93 91.56 47.953 1,500.00 8,493.86 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,292.64 4,200.73 91.91 46.705 1,500.00 8,593.77 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,194.88 4,102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.67 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 4,997.11 3,906.70 93.02 43.000 1,900.00 8,893.50 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,999.71 3,906.70 93.02 43.000 1,900.00 8,993.31 20,901.35 12,689.36 26.32 121.85 -91.483 -283.68 958.39 3,992.31 3,808.91 93.41 41.777 1,000.00 9,993.33 20,901.35 12,689.36 26.64 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 9,993.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,993.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,993.35 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.659 1,400.00 9,939.05 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,992.88 20,912.32 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,500.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	8,000.00	7,994.30	20,877.00	12,689.46	23.42	121.85	-91.483	-283.68	958.39	4,782.79	4,692.56	90.23	53.005		
1,300.00 8,294.04 20,877.00 12,689.46 24.39 121.85 -91.483 -283.68 958.39 4,488.44 4,397.22 91.21 49.207 1,400.00 8,393.95 20,877.00 12,689.46 24.71 121.85 -91.483 -283.68 958.39 4,390.49 4,298.93 91.56 47.953 1,500.00 8,493.86 20,877.00 12,689.46 25.03 121.85 -91.483 -283.68 958.39 4,292.64 4,200.73 91.91 46.705 1,500.00 8,693.68 20,877.00 12,689.46 25.05 121.85 -91.483 -283.68 958.39 4,194.88 4,102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.67 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,800.00 8,893.50 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,900.00 8,993.42 20,877.00 12,689.46 26.64 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,900.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,100.00 9,093.33 20,901.35 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.22 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.50 122.33 -89.996 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	8,100.00														
1,000.00 8,393.95 20,877.00 12,689.46 24.71 121.85 -91.483 -283.68 958.39 4,390.49 4,298.93 91.56 47.953 1,500.00 8,493.86 20,877.00 12,689.46 25.03 121.85 -91.483 -283.68 958.39 4,292.64 4,200.73 91.91 46.705 1,600.00 8,593.77 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,194.88 4,102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.67 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,997.1 3,906.70 93.02 43.000 1,900.00 8,893.50 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,997.1 3,906.70 93.02 43.000 1,900.00 8,993.42 20,877.00 12,689.46 26.64 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 9,093.33 20,901.35 12,689.32 26.96 122.19 89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -88.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.61 122.25 89.675 -312.45 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 27.63 122.32 89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,500.00 9,592.88 20,912.32 12,689.30 28.58 122.32 89.99.99 -32.35 958.99 3,128.61 3,031.25 97.36 32.133 1,000.00 9,692.79 20,914.68 12,689.30 28.58 122.32 89.99.99 -32.35 958.99 3,128.61 3,031.25 97.36 32.133 1,000.00 9,692.71 20,917.10 12,689.30 28.58 122.32 89.99.99 -321.5 958.99 3,128.61 3,031.25 97.36 32.133 1,000.00 9,692.71 20,917.10 12,689.30 28.58 122.32 89.99.99 -321.5 958.99 3,128.61 3,031.25 97.36 32.133 1,000.00 9,692.71 20,917.10 12,689.30 28.59 122.32 89.99.99 -321.5 958.99 3,128.61 3,032.85 2,934.94 97.93 30.971	8,200.00														
1,500.00 8,493.86 20,877.00 12,689.46 25.03 121.85 -91.483 -283.68 958.39 4.292.64 4.200.73 91.91 46.705 1,600.00 8,593.77 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4.194.88 4.102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.67 121.85 -91.483 -283.68 958.39 4.097.24 4.004.60 92.64 44.229 1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,999.71 3,906.70 93.02 43.000 1,900.00 8,893.50 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 9,093.33 20,901.35 12,689.34 26.64 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 9,093.33 20,901.35 12,689.34 26.64 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,592.88 20,912.32 12,689.30 28.50 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.50 122.38 -89.966 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,000.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971															
6,800.00 8,593.77 20,877.00 12,689.46 25.35 121.85 -91.483 -283.68 958.39 4,194.88 4,102.62 92.27 45.464 1,700.00 8,693.68 20,877.00 12,689.46 25.67 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,999.71 3,906.70 93.02 43.000 1,900.00 8,893.50 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 8,993.42 20,877.00 12,689.46 26.64 121.85 -91.483 -283.68 958.39 3,805.05 3,711.24 93.81 40.562 1,100.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,193.24 20,903.44 12,689.31 27.	8,400.00	8,393.95	20,877.00	12,689.46	24./1	121.85	-91.483	-283.68	958.39	4,390.49	4,298.93	91.56	47.953		
1,700.00 8,693.68 20,877.00 12,689.46 25.67 121.85 -91.483 -283.68 958.39 4,097.24 4,004.60 92.64 44.229 1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,992.71 3,906.70 93.02 43.000 1,900.00 8,893.50 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.65 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	8,500.00														
1,800.00 8,793.59 20,877.00 12,689.46 26.00 121.85 -91.483 -283.68 958.39 3,992.71 3,906.70 93.02 43.000 1,900.00 8,893.50 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 8,993.42 20,877.00 12,689.46 26.64 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	8,600.00														
1,000.00 8,993.42 20,877.00 12,689.46 26.32 121.85 -91.483 -283.68 958.39 3,902.31 3,808.91 93.41 41.777 1,000.00 8,993.42 20,877.00 12,689.46 26.64 121.85 -91.483 -283.68 958.39 3,805.05 3,711.24 93.81 40.562 1,000.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	8,700.00														
0,000.00 8,993.42 20,877.00 12,689.46 26.64 121.85 -91.483 -283.68 958.39 3,805.05 3,711.24 93.81 40.562 0,100.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 0,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 0,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 0,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 0,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 0,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 0,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.906 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 0,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	8,800.00														
1,100.00 9,093.33 20,901.35 12,689.32 26.96 122.19 -89.944 -308.02 958.76 3,707.77 3,613.35 94.43 39.266 1,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	8,900.00	8,893.50	20,877.00	12,689.46	26.32	121.85	-91.483	-283.68	958.39	3,902.31	3,808.91	93.41	41.777		
1,200.00 9,193.24 20,903.44 12,689.32 27.29 122.22 -89.811 -310.11 958.80 3,610.78 3,515.91 94.87 38.059 1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	9,000.00														
1,300.00 9,293.15 20,905.58 12,689.31 27.61 122.25 -89.675 -312.25 958.84 3,513.95 3,418.62 95.33 36.859 1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	9,100.00														
1,400.00 9,393.06 20,907.77 12,689.31 27.93 122.28 -89.536 -314.44 958.87 3,417.31 3,321.49 95.81 35.666 1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	9,200.00														
1,500.00 9,492.97 20,910.02 12,689.31 28.25 122.32 -89.393 -316.69 958.91 3,320.85 3,224.55 96.31 34.481 1,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	9,300.00														
,600.00 9,592.88 20,912.32 12,689.30 28.58 122.35 -89.246 -318.99 958.95 3,224.62 3,127.79 96.83 33.303 1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	9,400.00	9,393.06	20,907.77	1∠,689.31	27.93	122.28	-89.536	-314.44	958.87	3,417.31	3,321.49	95.81	35.000		
1,700.00 9,692.79 20,914.68 12,689.30 28.90 122.38 -89.096 -321.35 958.99 3,128.61 3,031.25 97.36 32.133 1,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971	9,500.00														
0,800.00 9,792.71 20,917.10 12,689.30 29.22 122.42 -88.941 -323.77 959.04 3,032.86 2,934.94 97.93 30.971															
	9,800.00														
,000.00 9,992.53 20,922.13 12,689.31 29.87 122.49 -88.620 -328.80 959.13 2,842.23 2,743.10 99.13 28.672	10,000.00														







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g						- OH / 67733 -						Offset Site Error:	0.00 usf
Burvey Progr Refe	ram: 17 rence	74-MWD+HRG Of 1	M set	Semi M	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi tance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,100.00	10,092.44	20,924.74	12,689.31	30.19	122.52	-88.453	-331.41	959.18	2,747.41	2,647.63	99.78	27.535		
10,200.00	10,192.35	20,927.42	12,689.32	30.52	122.56	-88.281	-334.09	959.23	2,652.96	2,552.50	100.46	26.408		
10,300.00	10,292.26	20,930.18	12,689.33	30.84	122.60	-88.104	-336.85	959.29	2,558.93	2,457.74	101.19	25.290		
10,400.00	10,392.17	20,933.02	12,689.34	31.16	122.64	-87.923	-339.68	959.34	2,465.36	2,363.41	101.95	24.181		
10,500.00	10,492.08	20,935.93	12,689.35	31.49	122.68	-87.736	-342.60	959.40	2,372.32	2,269.55	102.77	23.084		
10,600.00	10,592.00	20,938.92	12,689.37	31.81	122.72	-87.544	-345.59	959.46	2,279.85	2,176.21	103.64	21.997		
10,700.00	10,691.91	20,942.00	12,689.39	32.13	122.77	-87.346	-348.67	959.52	2,188.05	2,083.47	104.58	20.922		
10,800.00	10,791.82	20,945.18	12,689.41	32.46	122.81	-87.142	-351.84	959.59	2,096.98	1,991.39	105.59	19.860		
10,900.00	10,891.73	20,948.44	12,689.43	32.78	122.86	-86.932	-355.11	959.66	2,006.76	1,900.09	106.68	18.811		
11,000.00	10,991.64	20,951.80	12,689.45	33.11	122.90	-86.715	-358.47	959.73	1,917.50	1,809.65	107.86	17.778		
11,100.00	11,091.55	20,955.27	12,689.48	33.43	122.95	-86.492	-361.93	959.80	1,829.35	1,720.21	109.14	16.762		
11,200.00	11,191.46	20,972.00	12,689.66	33.75	123.19	-85.411	-378.66	960.19	1,742.53	1,631.83	110.70	15.741		
11,300.00	11,291.37	20,972.00	12,689.66	34.08	123.19	-85.411	-378.66	960.19	1,657.08	1,544.89	112.18	14.771		
11,400.00	11,391.29	20,972.00	12,689.66	34.40	123.19	-85.411	-378.66	960.19	1,573.34	1,459.54	113.81	13.825		
11,500.00	11,491.20	20,972.00	12,689.66	34.73	123.19	-85.411	-378.66	960.19	1,491.61	1,376.03	115.58	12.905		
11,600.00	11,591.11	20,972.00	12,689.66	35.05	123.19	-85.411	-378.66	960.19	1,412.23	1,294.72	117.52	12.017		
11,700.00	11,691.02	20,979.26	12,689.76	35.38	123.29	-84.942	-385.92	960.36	1,335.61	1,215.87	119.74	11.154		
11,800.00	11,790.93	20,983.95	12,689.82	35.70	123.36	-84.638	-390.61	960.48	1,262.24	1,140.14	122.10	10.338		
11,900.00	11,890.84	20,988.69	12,689.88	36.03	123.43	-84.331	-395.34	960.60	1,192.72	1,068.09	124.63	9.570		
11,907.54	11,898.38	20,989.05	12,689.89	36.05	123.43	-84.308	-395.70	960.61	1,187.65	1,062.83	124.83	9.515		
12,000.00	11,990.80	20,992.19	12,689.93	36.33	123.47	-82.547	-398.84	960.69	1,127.90	1,000.62	127.28	8.862		
12,028.24	12,019.04	20,992.64	12,689.93	36.36	123.48	87.902	-399.29	960.70	1,110.60	982.57	128.03	8.675		
12,100.00	12,090.80	20,993.50	12,689.95	36.36	123.49	87.958	-400.15	960.72	1,068.79	938.85	129.93	8.226		
12,200.00	12,190.80	20,994.70	12,689.96	36.36	123.51	88.035	-401.35	960.75	1,016.11	883.54	132.56	7.665		
12,300.00	12,290.80	20,995.91	12,689.98	36.36	123.53	88.114	-402.56	960.79	970.90	835.85	135.04	7.190		
12,400.00	12,390.80	20,997.13	12,690.00	36.37	123.54	88.193	-403.78	960.82	934.24	797.01	137.23	6.808		
12,500.00	12,490.80	20,998.37	12,690.01	36.37	123.56	88.273	-405.02	960.85	907.17	768.18	138.99	6.527		
12,528.24	12,519.04	20,998.72	12,690.02	36.37	123.57	88.296	-405.37	960.86	901.39	762.01	139.38	6.467		
12,550.00	12,540.79	20,999.36	12,690.03	36.40	123.58	-91.504	-406.01	960.88	897.53	757.86	139.66	6.426		
12,600.00	12,590.61	21,003.62	12,690.09	36.63	123.64	-91.921	-410.26	960.99	890.68	750.39	140.28	6.349		
12,650.00	12,639.89	21,011.76	12,690.21	36.95	123.75	-91.804	-418.40	961.22	886.69	745.87	140.83	6.296		
12,696.46	12,684.85	21,022.77	12,690.37	37.26	123.91	-91.236	-429.40	961.55	885.51	744.25	141.26	6.269 CC		
12,700.00	12,688.24	21,023.74	12,690.39	37.29	123.92	-91.175	-430.37	961.58	885.52	744.22	141.29	6.267 ES		
12,750.00	12,735.30	21,039.50	12,690.63	37.62	124.14	-90.072	-446.13	962.07	887.01	745.31	141.69	6.260 SF		
12,800.00	12,780.72	21,058.94	12,690.96	37.96	124.42	-88.549	-465.55	962.73	890.91	748.87	142.04	6.272		
12,850.00	12,824.15	21,083.55	12,691.39	38.29	124.77	-86.585	-490.14	963.61	896.91	754.51	142.40	6.299		
12,900.00	12,865.26	21,112.70	12,691.90	38.60	125.18	-84.301	-519.26	964.65	904.54	761.78	142.77	6.336		
12,950.00	12,903.73	21,131.00	12,692.23	38.90	125.44	-82.503	-537.55	965.31	913.50	770.74	142.75	6.399		
13,000.00	12,939.27	21,131.00	12,692.23	39.18	125.44	-81.404	-537.55	965.31	924.33	782.20	142.13	6.503		
13,050.00 13,100.00	12,971.62 13,000.52	21,131.00 21,131.00	12,692.23 12,692.23	39.43 39.65	125.44 125.44	-80.101 -78.612	-537.55 -537.55	965.31 965.31	937.09 951.59	795.70 811.03	141.39 140.56	6.627 6.770		
13,150.00	13,025.76	21,131.00	12.692.23	39.85	125.44	-76.954	-537.55	965.31	967.65	828.02	139.63	6.930		
13,200.00	13,023.76	21,131.00	12,692.23	40.02	125.44	-75.149	-537.55	965.31	985.08	846.46	138.62	7.106		
13,250.00	13,064.50	21,131.00	12,692.23	40.02	125.44	-73.149	-537.55	965.31	1,003.67	866.14	137.53	7.100		
13,300.00	13,004.30	21,131.00	12,692.23	40.13	125.44	-73.223	-537.55	965.31	1,003.07	886.84	136.38	7.503		
13,350.00	13,086.67	21,131.00	12,692.23	40.33	125.44	-69.108	-537.55	965.31	1,043.54	908.37	135.17	7.720		
13,400.00	13,091.30	21,131.00	12,692.23	40.38	125.44	-66.976	-537.55	965.31	1,064.43	930.53	133.91	7.949		
13,428.24	13,092.00	21,131.00	12,692.23	40.39	125.44	-65.764	-537.55	965.31	1,076.41	943.25	133.17	8.083		
13,500.00	13,092.00	21,131.00	12,692.23	40.40	125.44	-65.764	-537.55	965.31	1,108.88	977.69	131.20	8.452		
13,600.00	13,092.00	21,131.00	12,692.23	40.43	125.44	-65.764	-537.55	965.31	1,160.04	1,031.79	128.25	9.045		
13,700.00	13,092.00	21,131.00	12,692.23	40.46	125.44	-65.764	-537.55	965.31	1,217.27	1,092.11	125.16	9.726		
13,800.00	13,092.00	21,131.00	12,692.23	40.50	125.44	-65.764	-537.55	965.31	1,279.77	1,157.73	122.03	10.487		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: Ca												Offset Site Error:	0.00 usf
Survey Progr Refe	ram: 17	74-MWD+HRG Of f	M fset	Semi N	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,900.00	13,092.00	21,131.00	12,692.23	40.53	125.44	-65.764	-537.55	965.31	1,346.80	1,227.86	118.94	11.324		
14,000.00	13,092.00	21,131.00	12,692.23	40.58	125.44	-65.764	-537.55	965.31	1,417.72	1,301.79	115.93	12.229		
14,100.00	13,092.00	21,131.00	12,692.23	40.63	125.44	-65.764	-537.55	965.31	1,491.97	1,378.92	113.05	13.197		
14,200.00	13,092.00	21,131.00	12,692.23	40.69	125.44	-65.764	-537.55	965.31	1,569.09	1,458.77	110.32	14.223		
14,300.00	13,092.00	21,131.00	12,692.23	40.76	125.44	-65.764	-537.55	965.31	1,648.67	1,540.91	107.75	15.301		
14,400.00	13,092.00	21,131.00	12,692.23	40.85	125.44	-65.764	-537.55	965.31	1,730.36	1,625.02	105.35	16.425		
14,500.00	13,092.00	21,131.00	12,692.23	40.95	125.44	-65.764	-537.55	965.31	1,813.90	1,710.79	103.11	17.592		
14,600.00	13,092.00	21,131.00	12,692.23	41.10	125.44	-65.764	-537.55	965.31	1,899.02	1,797.99	101.02	18.798		
14,700.00	13,092.00	21,131.00	12,692.23	41.29	125.44	-65.764	-537.55	965.31	1,985.53	1,886.44	99.09	20.037		
14,800.00	13,092.00	21,131.00	12,692.23	41.57	125.44	-65.764	-537.55	965.31	2,073.26	1,975.96	97.30	21.308		
14,900.00	13,092.00	21,131.00	12,692.23	41.99	125.44	-65.764	-537.55	965.31	2,162.05	2,066.41	95.64	22.606		
15,000.00	13,092.00	21,131.00	12,692.23	42.60	125.44	-65.764	-537.55	965.31	2,251.78	2,157.68	94.10	23.929		
15,100.00	13,092.00	21,131.00	12,692.23	43.42	125.44	-65.764	-537.55	965.31	2,342.34	2,249.66	92.68	25.273		
15,200.00	13,092.00	21,131.00	12,692.23	44.43	125.44	-65.764	-537.55	965.31	2,433.65	2,342.28	91.36	26.638		
15,300.00	13,092.00	21,131.00	12,692.23	45.56	125.44	-65.764	-537.55	965.31	2,525.61	2,435.47	90.14	28.019		
15,400.00	13,092.00	21,131.00	12,692.23	46.76	125.44	-65.764	-537.55	965.31	2,618.16	2,529.15	89.01	29.415		
15,500.00	13,092.00	21,131.00	12,692.23	48.01	125.44	-65.764	-537.55	965.31	2,711.24	2,623.28	87.95	30.825		
15,600.00	13,092.00	21,131.00	12,692.23	49.30	125.44	-65.764	-537.55	965.31	2,804.79	2,717.81	86.98	32.247		
15,700.00	13,092.00	21,131.00	12,692.23	50.61	125.44	-65.764	-537.55	965.31	2,898.78	2,812.71	86.07	33.678		
15,800.00	13,092.00	21,131.00	12,692.23	51.93	125.44	-65.764	-537.55	965.31	2,993.16	2,907.93	85.23	35.119		
15,900.00	13,092.00	21,131.00	12,692.23	53.27	125.44	-65.764	-537.55	965.31	3,087.89	3,003.44	84.45	36.566		
16,000.00	13,092.00	21,131.00	12,692.23	54.61	125.44	-65.764	-537.55	965.31	3,182.94	3,099.22	83.72	38.020		
16,100.00	13,092.00	21,131.00	12,692.23	55.97	125.44	-65.764	-537.55	965.31	3,278.29	3,195.25	83.04	39.479		
16,200.00	13,092.00	21,131.00	12,692.23	57.33	125.44	-65.764	-537.55	965.31	3,373.90	3,291.50	82.41	40.942		
16,300.00	13,092.00	21,131.00	12,692.23	58.69	125.44	-65.764	-537.55	965.31	3,469.77	3,387.95	81.82	42.409		
16,400.00	13,092.00	21,131.00	12,692.23	60.06	125.44	-65.764	-537.55	965.31	3,565.86	3,484.59	81.27	43.878		
16,500.00	13,092.00	21,131.00	12,692.23	61.44	125.44	-65.764	-537.55	965.31	3,662.16	3,581.40	80.76	45.349		
16,600.00	13,092.00	21,131.00	12,692.23	62.81	125.44	-65.764	-537.55	965.31	3,758.65	3,678.37	80.28	46.821		
16,700.00	13,092.00	21,131.00	12,692.23	64.20	125.44	-65.764	-537.55	965.31	3,855.32	3,775.49	79.83	48.293		
16,800.00	13,092.00	21,131.00	12,692.23	65.58	125.44	-65.764	-537.55	965.31	3,952.16	3,872.75	79.42	49.766		
16,900.00	13,092.00	21,131.00	12,692.23	66.97	125.44	-65.764	-537.55	965.31	4,049.15	3,970.13	79.03	51.238		
17,000.00	13,092.00	21,131.00	12,692.23	68.36	125.44	-65.764	-537.55	965.31	4,146.29	4,067.62	78.66	52.709		
17,100.00	13,092.00	21,131.00	12,692.23	69.75	125.44	-65.764	-537.55	965.31	4,243.56	4,165.23	78.33	54.178		
17,200.00	13,092.00	21,131.00	12,692.23	71.14	125.44	-65.764	-537.55	965.31	4,340.95	4,262.94	78.01	55.646		
17,300.00	13,092.00	21,131.00	12,692.23	72.54	125.44	-65.764	-537.55	965.31	4,438.45	4,360.74	77.72	57.112		
17,400.00	13,092.00	21,131.00	12,692.23	73.94	125.44	-65.764	-537.55	965.31	4,536.07	4,458.63	77.44	58.575		
17,500.00	13,092.00	21,131.00	12,692.23	75.34	125.44	-65.764	-537.55	965.31	4,633.79	4,556.60	77.18	60.036		
17,600.00	13,092.00	21,131.00	12,692.23	76.74	125.44	-65.764	-537.55	965.31	4,731.60	4,654.66	76.95	61.493		
17,700.00	13,092.00	21,131.00	12,692.23	78.14	125.44	-65.764	-537.55	965.31	4,829.50	4,752.78	76.72	62.948		
17,800.00	13,092.00	21,131.00	12,692.23	79.55	125.44	-65.764	-537.55	965.31	4,927.49	4,850.98	76.52	64.399		
17,900.00	13,092.00	21,131.00	12,692.23	80.95	125.44	-65.764	-537.55	965.31	5,025.56	4,949.24	76.32	65.846		
18,000.00	13,092.00	21,131.00	12,692.23	82.36	125.44	-65.764	-537.55	965.31	5,123.70	5,047.55	76.14	67.289		
18,100.00	13,092.00	21,131.00	12,692.23	83.76	125.44	-65.764	-537.55	965.31	5,221.91	5,145.93	75.98	68.729		
18,200.00	13,092.00	21,131.00	12,692.23	85.17	125.44	-65.764	-537.55	965.31	5,320.19	5,244.36	75.82	70.164		
18,300.00	13,092.00	21,131.00	12,692.23	86.58	125.44	-65.764	-537.55	965.31	5,418.53	5,342.85	75.68	71.595		
18,400.00	13,092.00	21,131.00	12,692.23	87.99	125.44	-65.764	-537.55	965.31	5,516.93	5,441.38	75.55	73.022		
18,500.00	13,092.00	21,131.00	12,692.23	89.40	125.44	-65.764	-537.55	965.31	5,615.39	5,539.96	75.43	74.444		
18,600.00	13,092.00	21,131.00	12,692.23	90.81	125.44	-65.764	-537.55	965.31	5,713.90	5,638.58	75.32	75.861		
18,700.00	13,092.00	21,131.00	12,692.23	92.23	125.44	-65.764	-537.55	965.31	5,812.46	5,737.24	75.22	77.274		
18,800.00	13,092.00	21,131.00	12,692.23	93.64	125.44	-65.764	-537.55	965.31	5,911.07	5,835.95	75.13	78.682		
18,900.00	13,092.00	21,131.00	12,692.23	95.06	125.44	-65.764	-537.55	965.31	6,009.73	5,934.69	75.04	80.085		
19,000.00	13,092.00	21,131.00	12,692.23	96.47	125.44	-65.764	-537.55	965.31	6,108.43	6,033.46	74.97	81.483		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g	ttlemen Fe		eep - Callie	Siliali i CC	1 00111 43411	0117 07700 -	Ourveys (i	ιαι +/+/				Offset Site Error:	0.00 usft
Survey Prog Refe	ram: 17 rence	4-MWD+HRG Off		Semi N	lajor Axis		Offset Wellbe	ore Centre	Dis	Rule Assi tance	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,100.00	13,092.00	21,131.00	12,692.23	97.89	125.44	-65.764	-537.55	965.31	6,207.17	6,132.27	74.90	82.876		
19,200.00	13,092.00	21,131.00	12,692.23	99.30	125.44	-65.764	-537.55	965.31	6,305.95	6,231.11	74.84	84.263		
19,300.00	13,092.00	21,131.00	12,692.23	100.72	125.44	-65.764	-537.55	965.31	6,404.77	6,329.99	74.78	85.646		
19,400.00	13,092.00	21,131.00	12,692.23	102.14	125.44	-65.764	-537.55	965.31	6,503.62	6,428.89	74.73	87.023		
19,500.00	13,092.00	21,131.00	12,692.23	103.55	125.44	-65.764	-537.55	965.31	6,602.51	6,527.82	74.69	88.395		
19,600.00	13,092.00	21,131.00	12,692.23	104.97	125.44	-65.764	-537.55	965.31	6,701.44	6,626.78	74.66	89.762		
19,700.00	13,092.00	21,131.00	12,692.23	106.39	125.44	-65.764	-537.55	965.31	6,800.39	6,725.76	74.63	91.123		
19,800.00	13,092.00	21,131.00	12,692.23	107.81	125.44	-65.764	-537.55	965.31	6,899.37	6,824.77	74.60	92.479		
19,900.00	13,092.00	21,131.00	12,692.23	109.23	125.44	-65.764	-537.55	965.31	6,998.39	6,923.80	74.59	93.829		
20,000.00	13,092.00	21,131.00	12,692.23	110.65	125.44	-65.764	-537.55	965.31	7,097.43	7,022.85	74.57	95.174		
20,100.00	13,092.00	21,131.00	12,692.23	112.07	125.44	-65.764	-537.55	965.31	7,196.50	7,121.93	74.56	96.513		
20,200.00	13,092.00	21,131.00	12,692.23	113.49	125.44	-65.764	-537.55	965.31	7,295.59	7,221.03	74.56	97.847		
20,300.00	13,092.00	21,131.00	12,692.23	114.91	125.44	-65.764	-537.55	965.31	7,394.70	7,320.14	74.56	99.175		
20,400.00	13,092.00	21,131.00	12,692.23	116.34	125.44	-65.764	-537.55	965.31	7,493.85	7,419.28	74.57	100.498		
20,500.00	13,092.00	21,131.00	12,692.23	117.76	125.44	-65.764	-537.55	965.31	7,593.01	7,518.43	74.58	101.815		
20,600.00	13,092.00	21,131.00	12,692.23	119.18	125.44	-65.764	-537.55	965.31	7,692.19	7,617.60	74.59	103.126		
20,700.00	13,092.00	21,131.00	12,692.23	120.60	125.44	-65.764	-537.55	965.31	7,791.40	7,716.79	74.61	104.432		
20,800.00	13,092.00	21,131.00	12,692.23	122.03	125.44	-65.764	-537.55	965.31	7,890.62	7,816.00	74.63	105.731		
20,900.00	13,092.00	21,131.00	12,692.23	123.45	125.44	-65.764	-537.55	965.31	7,989.87	7,915.22	74.65	107.026		
21,000.00	13,092.00	21,131.00	12,692.23	124.87	125.44	-65.764	-537.55	965.31	8,089.13	8,014.45	74.68	108.314		
21,100.00	13,092.00	21,131.00	12,692.23	126.30	125.44	-65.764	-537.55	965.31	8,188.41	8,113.70	74.71	109.597		
21,200.00	13,092.00	21,131.00	12,692.23	127.72	125.44	-65.764	-537.55	965.31	8,287.71	8,212.96	74.75	110.874		
21,300.00	13,092.00	21,131.00	12,692.23	129.15	125.44	-65.764	-537.55	965.31	8,387.03	8,312.24	74.79	112.146		
21,400.00	13,092.00	21,131.00	12,692.23	130.57	125.44	-65.764	-537.55	965.31	8,486.36	8,411.53	74.83	113.411		
21,500.00	13,092.00	21,131.00	12,692.23	132.00	125.44	-65.764	-537.55	965.31	8,585.71	8,510.84	74.87	114.671		
21,600.00	13,092.00	21,131.00	12,692.23	133.42	125.44	-65.764	-537.55	965.31	8,685.07	8,610.15	74.92	115.925		
21,700.00	13,092.00	21,131.00	12,692.23	134.85	125.44	-65.764	-537.55	965.31	8,784.45	8,709.48	74.97	117.174		
21,800.00	13,092.00	21,131.00	12,692.23	136.27	125.44	-65.764	-537.55	965.31	8,883.84	8,808.81	75.02	118.417		
21,900.00	13,092.00	21,131.00	12,692.23	137.70	125.44	-65.764	-537.55	965.31	8,983.24	8,908.16	75.08	119.653		
22,000.00	13,092.00	21,131.00	12,692.23	139.12	125.44	-65.764	-537.55	965.31	9,082.66	9,007.52	75.13	120.885		
22,100.00	13,092.00	21,131.00	12,692.23	140.55	125.44	-65.764	-537.55	965.31	9,182.09	9,106.89	75.20	122.110		
22,200.00	13,092.00	21,131.00	12,692.23	141.98	125.44	-65.764	-537.55	965.31	9,281.53	9,206.27	75.26	123.330		
22,300.00	13,092.00	21,131.00	12,692.23	143.40	125.44	-65.764	-537.55	965.31	9,380.98	9,305.66	75.32	124.544		
22,400.00	13,092.00	21,131.00	12,692.23	144.83	125.44	-65.764	-537.55	965.31	9,480.45	9,405.06	75.39	125.752		
22,500.00	13,092.00	21,131.00	12,692.23	146.26	125.44	-65.764	-537.55	965.31	9,579.93	9,504.47	75.46	126.954		
22,600.00	13,092.00	21,131.00	12,692.23	147.69	125.44	-65.764	-537.55	965.31	9,679.41	9,603.88	75.53	128.151		
22,700.00	13,092.00	21,131.00	12,692.23	149.11	125.44	-65.764	-537.55	965.31	9,778.91	9,703.31	75.60	129.342		
22,700.00	13,092.00	21,131.00	12,692.23	149.52	125.44	-65.764	-537.55	965.31	9,807.01	9,731.39	75.63	129.678		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: Ca												Offset Site Error:	0.00 usft
Survey Progr Refe	ram: 1	74-MWD+HDGI Off		Semi N	laior Axis		Offset Wellbe	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	81.01	38.01	1.00	1.01	6.679	8,042.72	941.77	8,097.76	(usit)	(usit)			
100.00	100.00	207.00	163.97	1.08	1.07	6.697	8,041.44	944.24	8,096.94	8,094.78	2.16	3,756.057		
200.00	200.00	284.00	240.96	1.60	1.20	6.704	8,040.91	945.19	8,096.38	8,093.58	2.80	2,894.554		
300.00	300.00	356.59	313.55	2.01	1.36	6.707	8,040.71	945.49	8,096.12	8,092.75	3.37	2,403.300		
393.33	393.33	436.37	393.33	2.33	1.57	6.708	8,040.61	945.68	8,096.03	8,092.14	3.90	2,078.251		
400.00	400.00	441.75	398.71	2.35	1.58	6.708	8,040.61	945.70	8,096.03	8,092.10	3.93	2,058.129		
500.00	500.00	528.47	485.43	2.65	1.83	6.711	8,040.67	946.14	8,096.16	8,091.67	4.48	1,805.268		
600.00	600.00	630.05	587.00	2.93	2.14	6.715	8,040.79	946.68	8,096.33	8,091.27	5.06	1,598.804		
700.00	700.00	719.74	676.69	3.18	2.41	6.711	8,041.01	946.16	8,096.52	8,090.93	5.59	1,449.208		
800.00	800.00	799.63	756.57	3.41	2.65	6.703	8,041.47	945.14	8,096.94	8,090.87	6.07	1,334.558		
900.00	900.00	896.48	853.41	3.64	2.96	6.693	8,042.22	943.77	8,097.54	8,090.95	6.60	1,227.569		
1,000.00	1,000.00	1,025.22	982.14	3.85	3.38	6.681	8,042.96	942.06	8,097.96	8,090.73	7.23	1,120.396		
1,100.00	1,100.00	1,119.36	1,076.27	4.05	3.70	6.671	8,043.32	940.78	8,098.19	8,090.44	7.74	1,045.882		
1,200.00	1,200.00	1,228.15	1,185.05	4.24	4.06	6.662	8,043.75	939.57	8,098.45	8,090.15	8.30	975.282		
1,300.00	1,300.00	1,332.84	1,289.74	4.43	4.42	6.658	8,043.98	938.96	8,098.60	8,089.75	8.85	915.360		
1,400.00	1,400.00	1,454.87	1,411.77	4.61	4.84	6.655	8,044.12	938.53	8,098.70	8,089.25	9.45	857.371		
1,500.00	1,500.00	1,613.43	1,570.23	4.78	5.38	6.690	8,042.67	943.37	8,098.11	8,087.95	10.16	797.092		
1,525.03	1,525.03	1,636.00	1,592.78	4.83	5.46	-163.289	8,042.35	944.45	8,098.01	8,087.72	10.28	787.459		
1,600.00	1,599.98	1,716.35	1,673.02	4.98	5.73	-163.259	8,041.20	948.39	8,098.93	8,088.23	10.70	757.200		
1,620.70	1,620.67	1,740.15	1,696.79	4.99	5.81	-163.249	8,040.83	949.58	8,099.50	8,088.71	10.79	750.702		
1,700.00	1,699.89	1,817.29	1,773.81	5.07	6.08	-163.227	8,039.61	953.54	8,101.93	8,090.80	11.14	727.325		
1,800.00	1,799.81	1,899.63	1,856.03	5.23	6.36	-163.202	8,038.44	957.92	8,105.17	8,093.59	11.58	699.990		
1,900.00	1,899.72	1,987.50	1,943.76	5.41	6.67	-163.174	8,037.32	962.77	8,108.59	8,096.53	12.06	672.368		
2,000.00	1,999.63	2,081.48	2,037.58	5.60	7.00	-163.144	8,036.20	968.12	8,112.11	8,099.54	12.58	645.072		
2,100.00	2,099.54	2,170.01	2,125.95	5.80	7.31	-163.114	8,035.21	973.35	8,115.75	8,102.66	13.08	620.254		
2,200.00	2,199.45	2,254.00	2,209.78	6.02	7.61	-163.085	8,034.41	978.50	8,119.55	8,105.96	13.59	597.529		
2,300.00	2,299.36	2,340.11	2,295.71	6.24	7.91	-163.054	8,033.72	983.93	8,123.54	8,109.43	14.11	575.731		
2,400.00	2,399.27	2,417.65	2,373.09	6.47	8.19	-163.024	8,033.24	989.01	8,127.75	8,113.14	14.61	556.324		
2,500.00	2,499.18	2,497.64	2,452.88	6.72	8.48	-162.993	8,032.93	994.49	8,132.23	8,117.11	15.13	537.631		
2,600.00	2,599.10	2,583.27	2,538.30	6.96	8.78	-162.958	8,032.77	1,000.50	8,136.93	8,121.26	15.67	519.280		
2,700.00	2,699.01	2,664.87	2,619.69	7.22	9.07	-162.924	8,032.74	1,006.29	8,141.79	8,125.59	16.21	502.419		
2,800.00	2,798.92	2,915.01	2,869.32	7.48	9.97	-162.834	8,031.38	1,022.12	8,146.34	8,128.98	17.35	469.451		
2,900.00	2,898.83	2,998.67	2,952.83	7.74	10.27	-162.807	8,030.12	1,026.96	8,149.59	8,131.68	17.91	455.105		
3,000.00	2,998.74	3,076.37	3,030.37	8.01	10.55	-162.779	8,029.09	1,031.84	8,153.08	8,134.64	18.44	442.031		
3,100.00	3,098.65	3,140.97	3,094.84	8.28	10.79	-162.755	8,028.42	1,035.95	8,156.90	8,137.97	18.94	430.705		
3,200.00	3,198.56	3,202.00	3,155.75	8.56	11.01	-162.735	8,028.17	1,039.59	8,161.24	8,141.82	19.42	420.193		
3,300.00	3,298.47	3,266.48	3,220.12	8.84	11.24	-162.714	8,028.20	1,043.38	8,166.04	8,146.12	19.92	409.901		
3,400.00	3,398.39	3,340.18	3,293.68	9.13	11.50	-162.689	8,028.46	1,047.95	8,171.19	8,150.73	20.46	399.419		
3,500.00	3,498.30	3,415.28	3,368.62	9.41	11.77	-162.662	8,028.91	1,052.83	8,176.64	8,155.64	21.00	389.340		
3,600.00	3,598.21	3,486.00	3,439.17	9.70	12.03	-162.634	8,029.53	1,057.76	8,182.41	8,160.88	21.53	380.024		
3,700.00	3,698.12	3,551.28	3,504.27	9.99	12.27	-162.608	8,030.32	1,062.53	8,188.58	8,166.53	22.04	371.473		
3,800.00	3,798.03	3,617.40	3,570.20	10.29	12.51	-162.580	8,031.40	1,067.48	8,195.17	8,172.61	22.56	363.253		
3,900.00	3,897.94	3,700.99	3,653.52	10.58	12.81	-162.545	8,033.08	1,073.80	8,202.15	8,179.00	23.14	354.400		
4,000.00	3,997.85	3,830.03	3,782.26	10.88	13.28	-162.499	8,035.50	1,082.39	8,208.86	8,184.97	23.90	343.514		
4,100.00	4,097.76	3,930.08	3,882.08	11.18	13.64	-162.464	8,037.28	1,088.97	8,215.50	8,190.96	24.54	334.726		
4,200.00	4,197.68	4,032.86	3,984.59	11.48	14.01	-162.425	8,039.04	1,096.11	8,222.13	8,196.93	25.20	326.231		
4,300.00	4,297.59	4,181.98	4,133.31	11.78	14.56	-162.366	8,041.07	1,106.81	8,228.45	8,202.41	26.04	316.027		
4,400.00	4,397.50	4,291.14	4,242.20	12.08	14.95	-162.325	8,042.16	1,114.37	8,234.36	8,207.64	26.72	308.129		
4,500.00	4,497.41	4,397.72	4,348.53	12.39	15.34	-162.284	8,043.18	1,121.71	8,240.25	8,212.85	27.40	300.718		
4,600.00	4,597.32	4,489.08	4,439.67	12.69	15.68	-162.250	8,044.00	1,127.96	8,246.07	8,218.05	28.02	294.243		
4,700.00	4,697.23	4,566.28	4,516.68	13.00	15.96	-162.221	8,044.87	1,133.24	8,252.12	8,223.53	28.60	288.578		
4,800.00	4,797.14	4,981.88	4,931.31	13.31	17.47	-162.068	8,044.10	1,160.84	8,258.24	8,227.83	30.41	271.561		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Page	Offset Des	sign: Ca	aulemen Fe	a Com - D	eep - Cattle	ernan Fed	Com 514H	- OH / 67734 -	Surveys (F	1& P 4/4)				Offset Site Error:	0.00 usf
					Somi B	laior Avie		Offeet Wellh	ore Centro	Dio		gned:		Offset Well Error:	1.00 usf
	Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Separation		Warning	
													265,485		
1,000 1,00															
	5,200.00	5,196.79	21,341.00	13,038.03	14.55	121.71	-78.213	-518.71	1,439.65	7,976.02	7,894.45	81.57	97.784		
Section Sect	5,300.00	5,296.70	21,341.00	13,038.03	14.86	121.71	-78.213	-518.71	1,439.65	7,877.49	7,795.71	81.78	96.323		
5,00000 5,0004 21,441,00 13,000,00 16,79 12,171 78,273 4,187,71 1,480,85 7,487,78 7,480,70 22,460 99,914 5,00000 5,70000 2,000,20 21,341,00 13,000,00 16,42 21,711 7,722,13 45,187,71 1,480,85 7,285,487 7,401,00 20,000 8,001 5,00000 5,000,00 2,000,00 1,50	5,400.00	5,396.61	21,341.00	13,038.03	15.17	121.71	-78.213	-518.71	1,439.65	7,779.00	7,697.00	82.00	94.865		
5,000	5,500.00	5,496.52			15.48	121.71	-78.213	-518.71	1,439.65	7,680.56	7,598.33	82.22	93.411		
5,00000 5,786.2 21,441.00 31,038.03 16.42 1217 7.8213 51871 1.439.65 7.382.46 7.302.54 8.2 2 8.071															
5,000 5,086.07 21,341.00 15,080.00 17.06 12171 79.213 518.71 1,498.65 7,687.10 7,707.12 63.65 84.76 86.107 86.000 6,085.90 21,341.00 13,080.00 17.06 127.17 73.213 518.71 1,498.65 7,007.77 7,071.12 63.65 84.76 86.000 6,085.00 21,341.00 13,080.00 17.06 127.17 73.213 518.71 1,498.65 6,080.77 6,070.77 7,071.12 63.65 84.76 86.000 6,080.83 21,341.00 13,080.00 18.30 127.17 73.213 518.71 1,498.65 6,080.67 6,080.74 6.91															
Control Cont															
0,000 0,005 0,00	5,900.00	5,896.17	21,341.00	13,038.03	16.74	121.71	-78.213	-518.71	1,439.65	7,287.18	7,204.03	83.16	87.632		
620000 6,1950 21,94100 13,03803 17,88 12,1710 78,213 43,1871 1,439,805 6,986.25 6,980.74 83,91 83,339 6,00000 6,39572 21,94100 13,038,03 18,22 12,171 78,213 451671 1,439,805 6,886.55 6,712.12 84,43 90,499 6,00000 6,986.55 21,94100 13,038,03 18,63 12,171 78,213 -518,71 1,439,805 6,869.50 6,613,80 47,70 79,065 6,00000 6,986.55 21,34100 13,038,03 18,63 12,171 78,213 -518,71 1,439,605 6,600.00 6,613,80 48,70 79,065 6,00000 6,986.60 21,34100 13,038,03 19,99 12,171 78,213 -518,71 1,439,60 6,000.00 6,015,20 85,44 73,400 6,00000 6,985.20 21,34100 13,038,03 20,35 12,171 78,213 -518,71 1,439,60 6,000.00 6,112,20 86,14 73,	6,000.00	5,996.08	21,341.00	13,038.03	17.05	121.71	-78.213	-518.71	1,439.65	7,188.95	7,105.55	83.40	86.197		
6.0000 6.95681 21,4140 13,038.03 18.00 121.71 - 782.13 -518.71 1,439.65 6.86.95 6.810.41 84.77 19.085 6.0000 6.496.53 21,34100 13,038.03 18.63 121.71 - 782.13 -518.71 1,439.65 6.086.59 6.813.89 84.70 79.085 6.0000 6.96.55 21,4140 13,038.03 18.65 121.71 - 782.13 -518.71 1,439.65 6.00.07 6.515.72 84.99 77.677 6.0000 6.095.55 21,4140 13,038.03 18.95 121.71 - 782.13 -518.71 1,439.65 6.00.07 6.515.72 84.99 77.677 6.0000 6.095.59 21,4140 13,038.03 18.95 121.71 - 782.13 -518.71 1,439.65 6.00.07 6.315.72 85.54 74.674 6.0000 7.795.70 13,14100 13,038.03 19.99 121.71 - 782.13 -518.71 1,439.65 6.00.00 6.315.75 85.54 74.674 6.0000 7.795.70 121.4100 13,038.03 19.91 121.71 - 782.13 -518.71 1,439.65 6.00.00 6.315.55 85.44 73.480 7.0000 7.795.10 121.4100 13,038.03 20.54 121.71 - 782.13 -518.71 1,439.65 6.00.00 6.315.55 85.44 73.480 7.0000 7.795.10 121.4100 13,038.03 20.54 121.71 - 782.13 -518.71 1,439.65 6.00.00 6.315.55 85.44 73.480 7.0000 7.795.10 121.4100 13,038.03 20.54 121.71 - 782.13 -518.71 1,439.65 6.01.72 30.02.75 85.40 85.44 70.708 7.0000 7.795.40 121.4100 13,038.03 20.54 121.71 - 782.13 -518.71 1,439.65 6.01.47 3 20.02.75 86.44 70.708 7.0000 7.794.92 121.4100 13,038.03 21.81 121.71 - 782.13 -518.71 1,439.65 6.01.47 3 20.02.75 86.44 70.708 7.0000 7.794.92 121.4100 13,038.03 21.81 121.71 - 782.13 -518.71 1,439.65 6.01.47 3 20.02.75 86.44 70.708 7.0000 7.794.92 121.4100 13,038.03 21.81 121.71 - 782.13 -518.71 1,439.65 6.01.47 3 20.02.75 86.44 70.70 86.91 7.0000 7.794.94 121.4100 13,038.03 22.44 121.71 - 782.13 -518.71 1,439.65 6.02.00 5.02.00 5.730.00 87.70 6.0591 7.0000 7.794.95 121.4100 13,038.03 22.45 121.71 - 782.13 -518.71 1,439.65 6.02.00 5.02.00 5.02.00 6.70 6.90 87.00 6.90 87.00 87.	6,100.00	6,095.99	21,341.00	13,038.03	17.37	121.71	-78.213	-518.71	1,439.65	7,090.77	7,007.12	83.65	84.766		
6,400,00 6,396,72 21,341,00 13,038,03 18,32 12,171 -78,213 -518,71 1,439,65 6,796,55 0,712,12 94,33 80,499 6,500,00 6,966,53 21,341,00 13,038,03 18,05 21,217 -78,213 -518,71 1,439,65 6,698,59 0,611,572 0,905 77,77 6,700,00 6,968,65 21,341,00 13,038,03 19,27 12,171 -78,213 -518,71 1,439,65 6,600,00 6,515,72 49,80 72,273 6,000,00 6,986,48 21,341,00 13,038,03 19,91 121,71 -78,213 -518,71 1,439,65 6,600,73,95 6,534 73,490 7,000,00 7,686,19 21,341,03 13,038,03 20,31 21,217 -78,213 -518,71 1,439,65 6,123,60 86,44 70,798 7,000,00 7,986,10 21,341,03 13,038,03 20,64 21,717 -78,213 -518,71 1,439,65 6,123,40 80,53 73,480 7,000,00															
6,500.00 6,496.63 21,341.00 13,038.03 18.63 121.71 -78.213 -518.71 1,439.65 6,698.59 6,613.89 6,477 079.085 6,600.00 6,596.55 21,341.00 13,038.03 18.95 121.71 -78.213 -518.71 1,439.65 6,000.70 6,515.72 44.00 67.00 67.00 6,000 6,000.00 6,796.37 21,341.00 13,038.03 19.99 121.71 -78.213 -518.71 1,439.65 6,000.70 6,319.55 65.24 67.62.73 6,000.00 6,796.37 21,341.00 13,038.03 19.99 121.71 -78.213 -518.71 1,439.65 6,000.70 6,319.55 65.47 48.74 6,000.00 6,796.37 21,341.00 13,038.03 19.99 121.71 -78.213 -518.71 1,439.65 6,000.70	6,300.00		21,341.00	13,038.03	18.00	121.71	-78.213	-518.71	1,439.65	6,894.57	6,810.41	84.17	81.917		
6,800.00 6,995.52 21,341.00 13,038.03 18.95 121,71 -78,213 -518,71 1,439.65 6,000.70 6,915.72 28,213 -78,213 -518,71 1,439.65 6,000.00 6,015.50 21,241.00 13,038.03 19.91 127,71 -78,213 -518,71 1,439.65 6,05.00 6,015.50 85,54 73,480 0,000.00 0,895.20 21,341.00 13,038.03 19.91 127,71 -78,213 -518,71 1,439.65 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 6,000.00 7,000.00 7,000.00 1,000.00 1,000.00 1,000.00 1,000.00 8,000.00 8,000.00 8,000.00 6,000.00 8,000.00 6,000.00 8,000.00 8,000.00 7,000.00 7,000.00 7,000.00 7,000.00 7,000.00 7,000.00 7,000.00 7,000.00 7,000.00 7,000.00 7,000.00 1,000.00 1,000.00 1,000.00 8,000.00 1	6,400.00	6,395.72	21,341.00	13,038.03	18.32	121.71	-78.213	-518.71	1,439.65	6,796.55	6,712.12	84.43	80.499		
6,700.00 6,866,40 21,341.00 13,038.03 19.27 121,71 -78,213 -518,71 1,439.65 6,028.8 6,417.00 82,26 72,73 6,000.00 6,895.28 21,341.00 13,038.03 19.91 121,71 -78,213 -518,71 1,439.65 6,007.40 6,215.68 88.84 73,480 7,000.00 6,985.19 21,341.00 13,038.03 20.23 121,71 -78,213 -518,71 1,439.65 6,007.70 6,123.64 88.14 72,002 7,000.00 7,985.10 21,341.00 13,038.03 20.86 121,71 -78,213 -518,71 1,439.65 6,014.76 5,928.00 86.76 99,330 7,500.00 7,985.92 21,341.00 13,038.03 21,81 -78,213 -518,71 1,439.65 5,928.00 86.76 99,330 7,500.00 7,494.72 21,341.00 13,038.03 21,81 -78,213 -518,71 1,439.65 5,928.00 86.76 99,330 7,500.00 7,494.75	6,500.00	6,495.63	21,341.00	13,038.03	18.63	121.71	-78.213	-518.71	1,439.65	6,698.59	6,613.89	84.70	79.085		
6,800.00 6,796.37 21,1341.00 13,038.03 19,99 121,71 -78,213 -518,71 1,439.65 6,405.09 6,319.55 85,54 74,874 6,900.00 6,896.19 21,341.00 13,038.03 20,23 121,71 -78,213 -518,71 1,439.65 6,207.76 612,564 86,14 72,092 7,000.00 7,095.10 21,341.00 13,038.03 20,84 121,71 -78,213 -518,71 1,439.65 6,112.23 86,76 86,44 70,708 7,000.00 7,965.01 21,341.00 13,038.03 20,86 121,71 -78,213 -518,71 1,439.65 6,112.23 86,76 63,30 7,400.00 7,349.42 21,341.00 13,038.03 21,86 121,71 -78,213 -518,71 1,439.65 5,220.80 87,328 87,07 65,968 7,500.00 7,494.57 21,341.00 13,038.03 21,46 121,71 -78,213 -518,71 1,439.65 5,522.08 5,537.71 86,20 63,374	6,600.00	6,595.55	21,341.00	13,038.03	18.95	121.71	-78.213	-518.71	1,439.65	6,600.70	6,515.72	84.98	77.677		
6,90000 6,895.28 21,341.00 13,038.03 19.91 121.71 -78.213 -518.71 1,439.65 6,307.40 6,221.56 85.24 73,480 7,00000 6,985.19 21,341.00 13,038.03 20.25 121.71 -78.213 -518.71 1,439.65 6,200.77 6,122.64 86.14 70.708 7,00000 7,985.01 21,341.00 13,038.03 20.86 121.71 -78.213 -518.71 1,439.65 6,014.76 5920.00 86.76 69.330 7,00000 7,984.92 21,341.00 13,038.03 21.81 121.71 -78.213 -518.71 1,439.65 5,917.38 883.03 87.07 67.958 7,500.00 7,484.75 21,341.00 13,038.03 21.81 121.71 -78.213 -518.71 1,439.65 5,922.88 5,835.15 87.73 65.230 7,500.00 7,694.60 21,341.00 13,038.03 22.14 121.71 -78.213 -518.71 1,439.65 5,228.86 5,351.55 87.73	6,700.00	6,695.46	21,341.00	13,038.03	19.27	121.71	-78.213	-518.71	1,439.65	6,502.86	6,417.60	85.26	76.273		
7,0000 6,995,19 21,341,00 13,038,03 20,23 121,71 -78,213 -518,71 1,439,65 6,209,77 6,123,64 86,14 72,092 7,100,00 7,095,10 21,341,00 13,038,03 20,54 121,71 -78,213 -518,71 1,439,65 6,112,23 6,020,77 86,44 70,708 7,200,00 7,294,92 21,341,00 13,038,03 21,81 121,71 -78,213 -518,71 1,439,65 5,917,38 5,830,30 87,07 67,958 7,400,00 7,348,64 21,341,00 13,038,03 21,82 121,71 -78,213 -518,71 1,439,65 5,220,08 5,722,88 67,07 67,958 7,600,00 7,594,66 21,341,00 13,038,03 21,82 121,71 -78,213 -518,71 1,439,65 5,222,88 5,835,15 87,73 65,30 7,600,00 7,694,66 21,341,00 13,038,03 22,14 121,71 -78,213 -518,71 1,439,65 5,522,78 5,537,71 8,613															
7,000 7,085,10 21,341,00 13,038,03 20,54 12,171 -7,8213 -518,71 1,439,65 6,112,23 6,025,78 86,44 70,708 7,200,00 7,195,01 21,341,00 13,038,03 20,86 121,71 -76,213 -518,71 1,439,65 5,917,38 5,803,00 86,76 69,330 7,400,00 7,394,44 21,341,00 13,038,03 21,50 121,71 -76,213 -518,71 1,439,65 5,820,08 5,722,88 87,40 66,591 7,500,00 7,494,75 21,341,00 13,038,03 21,82 121,71 -78,213 -518,71 1,439,65 5,625,78 5,635,71 86,837 7,000,00 7,694,66 21,341,00 13,038,03 22,44 121,71 -78,213 -518,71 1,439,65 5,625,78 5,635,71 88,08 62,525 7,000,00 7,694,57 21,341,00 13,038,03 23,10 121,71 -76,213 -518,71 1,439,65 5,23,86 5,440,36 88,43 62,525	6,900.00	6,895.28	21,341.00	13,038.03	19.91	121.71	-78.213	-518.71	1,439.65	6,307.40	6,221.56	85.84	73.480		
7,000 7,19501 2,34100 13,088,03 20.86 121,71 -78,213 -518,71 1,439,65 5,017,85 5,820,00 86,76 69,330 7,300,00 7,294,92 21,341,00 13,038,03 21,18 121,71 -78,213 -518,71 1,439,65 5,917,38 5,830,30 87,07 67,968 7,500,00 7,494,75 21,341,00 13,038,03 21,81 121,71 -78,213 -518,71 1,439,65 5,920,08 5,732,68 87,40 66,591 7,500,00 7,594,66 21,341,00 13,038,03 22,44 121,71 -78,213 -518,71 1,439,65 5,625,78 5,537,71 88,06 63,874 7,500,00 7,594,66 21,341,00 13,038,03 22,48 121,71 -78,213 -518,71 1,439,65 5,527,88 5,537,71 88,06 63,874 7,500,00 7,794,48 21,341,00 13,038,03 23,41 121,71 -78,213 -518,71 1,439,65 5,431,89 5,445,94 86,53	7,000.00	6,995.19	21,341.00	13,038.03	20.23	121.71	-78.213	-518.71	1,439.65	6,209.77	6,123.64	86.14	72.092		
7,300.00 7,294.92 21,341.00 13,038.03 21.8 121.71 -78,213 -518.71 1,439.65 5,820.08 5,732.68 87.40 66,591 7,500.00 7,394.84 21,341.00 13,038.03 21.8 121.71 -78,213 -518.71 1,439.65 5,820.08 5,732.68 87.40 66,591 7,500.00 7,594.66 21,341.00 13,038.03 22.44 121.71 -78,213 -518.71 1,439.65 5,625.78 5,537.71 86.06 63,374 7,700.00 7,694.57 21,341.00 13,038.03 22.44 121.71 -78,213 -518.71 1,439.65 5,527.78 5,537.71 80.06 63,374 7,900.00 7,894.39 21,341.00 13,038.03 22.46 121.71 -78.213 -518.71 1,439.65 5,385.12 5,440.36 88.43 62,255 8,000.00 7,994.30 21,341.00 13,038.03 23.72 121.71 -78.213 -518.71 1,439.65 5,345.18 5,441.84 89.53 <td>7,100.00</td> <td>7,095.10</td> <td>21,341.00</td> <td>13,038.03</td> <td>20.54</td> <td>121.71</td> <td>-78.213</td> <td>-518.71</td> <td>1,439.65</td> <td>6,112.23</td> <td>6,025.78</td> <td>86.44</td> <td>70.708</td> <td></td> <td></td>	7,100.00	7,095.10	21,341.00	13,038.03	20.54	121.71	-78.213	-518.71	1,439.65	6,112.23	6,025.78	86.44	70.708		
7,400,00 7,394.84 21,341.00 13,038.03 21.50 121.71 -78,213 -518.71 1,439.65 5,820.08 5,732.68 87.40 66.591 7,500.00 7,494.75 21,341.00 13,038.03 21.82 121.71 -78.213 -518.71 1,439.65 5,625.78 5,537.71 80.08 63.874 7,000.00 7,894.66 21,341.00 13,038.03 22.44 121.71 -78.213 -518.71 1,439.65 5,628.78 5,537.71 88.08 63.874 7,000.00 7,894.99 21,341.00 13,038.03 22.78 121.71 -78.213 -518.71 1,439.65 5,335.12 5,343.11 88.76 61.182 7,900.00 7,994.39 21,341.00 13,038.03 23.42 121.71 -78.213 -518.71 1,439.65 5,335.12 5,245.97 89.15 59.844 8,000.00 7,994.93 21,341.00 13,038.03 23.42 121.71 -78.213 -518.71 1,439.65 5,238.46 5,148.94 89.53 </td <td>7,200.00</td> <td>7,195.01</td> <td>21,341.00</td> <td>13,038.03</td> <td>20.86</td> <td>121.71</td> <td>-78.213</td> <td>-518.71</td> <td>1,439.65</td> <td>6,014.76</td> <td>5,928.00</td> <td>86.76</td> <td>69.330</td> <td></td> <td></td>	7,200.00	7,195.01	21,341.00	13,038.03	20.86	121.71	-78.213	-518.71	1,439.65	6,014.76	5,928.00	86.76	69.330		
7,500.00 7,494.75 21,341.00 13,038.03 21.82 121.71 -78.213 -518.71 1,439.65 5,722.88 5,635.15 87.73 65.230 7,600.00 7,594.66 21,341.00 13,038.03 22.14 121.71 -78.213 -518.71 1,439.65 5,625.78 5,537.71 88.08 63.874 7,700.00 7,594.66 21,341.00 13,038.03 22.14 121.71 -78.213 -518.71 1,439.65 5,625.78 5,40.36 88.43 62.55 7,800.00 7,794.48 21,341.00 13,038.03 22.78 121.71 -78.213 -518.71 1,439.65 5,431.89 5,431.81 88.78 61.182 7,900.00 7,794.48 21,341.00 13,038.03 23.10 121.71 -78.213 -518.71 1,439.65 5,335.12 5,245.97 89.15 59.844 8.000.00 7,794.30 21,341.00 13,038.03 23.10 121.71 -78.213 -518.71 1,439.65 5,335.12 5,245.97 89.15 59.844 8.000.00 7,794.30 21,341.00 13,038.03 23.76 121.71 -78.213 -518.71 1,439.65 5,343.11 84.04 89.53 85.13 81.000.00 8,094.21 21,341.00 13,038.03 23.76 121.71 -78.213 -518.71 1,439.65 5,418.94 89.53 85.13 8.000.00 8,094.21 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,045.55 4,955.24 90.31 55.871 8.300.00 8,294.04 21,341.00 13,038.03 24.99 121.71 -78.213 -518.71 1,439.65 5,045.55 4,955.24 90.31 55.871 8.300.00 8,293.99 5 21,341.00 13,038.03 24.79 121.71 -78.213 -518.71 1,439.65 4,855.24 90.31 55.871 8.300.00 8,293.99 5 21,341.00 13,038.03 24.79 121.71 -78.213 -518.71 1,439.65 4,855.24 90.31 55.871 8.600.00 8,893.80 21.341.00 13,038.03 24.79 121.71 -78.213 -518.71 1,439.65 4,855.24 90.31 55.871 8.600.00 8,893.80 21.341.00 13,038.03 24.79 121.71 -78.213 -518.71 1,439.65 4,855.24 4.785.08 90.71 54.560 8.600.00 8,893.80 21.341.00 13,038.03 25.57 121.71 -78.213 -518.71 1,439.65 4,855.24 4.785.08 90.71 54.660 8.600.00 8,893.80 21.341.00 13,038.03 25.07 121.71 -78.213 -518.71 1,439.65 4,855.94 4.785.08 90.71 64.684 90.900.00 8,993.80 21.341.00 13,038.03 25.07 121.71 -78.213 -518.71 1,439.65 4,855.94 4.785.08 90.91 91.30 4.785.80 90.900.00 8,993.50 21.341.00 13,038.03 25.07 121.71 -78.213 -518.71 1,439.65 4,855.94 4.785.08 93.41 46.841 90.900.00 9,993.33 21.341.00 13,038.03 25.00 121.71 -78.213 -518.71 1,439.65 4,475.04 4,477.47 92.48 93.91 45.581 91.0000 9,993.33 21.341.00 13,038.		7,294.92	21,341.00		21.18	121.71	-78.213	-518.71	1,439.65	5,917.38	5,830.30				
7,600,00 7,594,66 21,341,00 13,038,03 22.14 12,171 -78,213 -518,71 1,439,65 5,627,78 5,537,71 88,08 63,374 7,700,00 7,794,48 21,341,00 13,038,03 22,76 121,71 -78,213 -518,71 1,439,65 5,528,78 5,532,71 88,08 63,374 7,900,00 7,944,80 21,341,00 13,038,03 22,31 121,71 -78,213 -518,71 1,439,65 5,435,18 5,434,11 88,78 61,182 7,900,00 7,984,39 21,341,00 13,038,03 23,42 121,71 -78,213 -518,71 1,439,65 5,335,12 5,245,97 89,15 59,844 8,000,00 8,994,21 21,341,00 13,038,03 23,75 121,71 -78,213 -518,71 1,439,65 5,238,46 5,148,94 89,53 58,513 8,000,0 8,994,10 21,341,00 13,038,03 24,97 121,71 -78,213 -518,71 1,439,65 5,495,24 90,31 55,671	7,400.00	7,394.84	21,341.00	13,038.03	21.50	121.71	-78.213	-518.71	1,439.65	5,820.08	5,732.68	87.40	66.591		
7,700.00 7,694.57 21,341.00 13,038.03 22.46 121.71 -78.213 -518.71 1,439.65 5,528.78 5,440.36 88.43 62.525 7,800.00 7,794.48 21,341.00 13,038.03 23.10 121.71 -78.213 -518.71 1,439.65 5,548.79 5,543.19 5,245.79 88.15 59.844 8,000.00 7,994.30 21,341.00 13,038.03 23.10 121.71 -78.213 -518.71 1,439.65 5,238.46 5,148.94 89.53 58.513 8,000.00 8,994.01 21,341.00 13,038.03 23.75 121.71 -78.213 -518.71 1,439.65 5,238.46 5,148.94 89.53 58.513 8,000.00 8,994.01 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,248.65 4,949.30 4,858.59 90.71 54.560 8,000.00 8,994.04 21,341.00 13,038.03 24.79 121.71 -78.213 -518.71 1,439.65 4,949.3	7,500.00	7,494.75	21,341.00	13,038.03	21.82	121.71	-78.213	-518.71	1,439.65	5,722.88	5,635.15	87.73	65.230		
7,800.00 7,794.88 21,341.00 13,038.03 22,78 121,71 -78,213 -518,71 1,439.65 5,431.89 5,343.11 88,78 61,182 8,000.00 7,994.30 21,341.00 13,038.03 23.10 121,71 -78,213 -518,71 1,439.65 5,335.12 5,245.97 89.15 59,844 8,000.00 7,994.30 21,341.00 13,038.03 23,42 121,71 -78,213 -518,71 1,439.65 5,141.94 5,052.03 89.91 57,189 8,000.00 8,094.21 21,341.00 13,038.03 24,07 121,71 -78,213 -518,71 1,439.65 5,045.55 4,955.24 90.31 55,871 8,200.00 8,194.13 21,341.00 13,038.03 24.07 121,71 -78,213 -518,71 1,439.65 5,045.55 4,955.24 90.31 55,871 8,500.00 8,939.95 21,341.00 13,038.03 24.71 121,71 -78,213 -518,71 1,439.65 4,855.21 4,762.08 91,13 </td <td>7,600.00</td> <td>7,594.66</td> <td>21,341.00</td> <td>13,038.03</td> <td>22.14</td> <td>121.71</td> <td>-78.213</td> <td>-518.71</td> <td>1,439.65</td> <td>5,625.78</td> <td>5,537.71</td> <td>88.08</td> <td>63.874</td> <td></td> <td></td>	7,600.00	7,594.66	21,341.00	13,038.03	22.14	121.71	-78.213	-518.71	1,439.65	5,625.78	5,537.71	88.08	63.874		
7,900.00 7,894.39 21,341.00 13,038.03 23,10 121.71 -78.213 -518.71 1,439.65 5,335.12 5,245.97 89.15 59,844 8,000.00 7,994.30 21,341.00 13,038.03 23,42 121.71 -78.213 -518.71 1,439.65 5,238.46 5,148.94 89.53 58.513 8,000.00 8,194.13 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,045.55 4,955.24 90.31 55.871 8,200.00 8,294.04 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,045.55 4,955.24 90.31 55.871 8,000.00 8,294.04 21,341.00 13,038.03 24.71 121.71 -78.213 -518.71 1,439.65 4,949.30 4,885.99 90.71 54.560 8,000.00 8,93.86 21,341.00 13,038.03 25.03 121.71 -78.213 -518.71 1,439.65 4,853.21 4,762.08 91.13 <td>7,700.00</td> <td>7,694.57</td> <td>21,341.00</td> <td>13,038.03</td> <td>22.46</td> <td>121.71</td> <td>-78.213</td> <td>-518.71</td> <td>1,439.65</td> <td>5,528.78</td> <td>5,440.36</td> <td>88.43</td> <td>62.525</td> <td></td> <td></td>	7,700.00	7,694.57	21,341.00	13,038.03	22.46	121.71	-78.213	-518.71	1,439.65	5,528.78	5,440.36	88.43	62.525		
8,000.00 7,994.30 21,341.00 13,038.03 23.42 121.71 -78.213 -518.71 1,439.65 5,238.46 5,148.94 89.53 58.513 8,100.00 8,094.21 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,141.94 5,052.03 89.91 57.189 8,200.00 8,194.13 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,045.55 4,955.24 90.31 55.871 8,300.00 8,294.04 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 4,949.30 4,858.59 90.71 54.560 8,400.00 8,393.95 21,341.00 13,038.03 24.71 121.71 -78.213 -518.71 1,439.65 4,949.30 4,858.59 90.71 54.560 8,400.00 8,393.95 21,341.00 13,038.03 25.03 121.71 -78.213 -518.71 1,439.65 4,853.21 4,762.08 91.13 53.256 8,500.00 8,493.86 21,341.00 13,038.03 25.03 121.71 -78.213 -518.71 1,439.65 4,665.71 91.56 51.958 8,600.00 8,593.77 21,341.00 13,038.03 25.05 121.71 -78.213 -518.71 1,439.65 4,665.71 91.56 51.958 8,600.00 8,693.68 21,341.00 13,038.03 25.67 121.71 -78.213 -518.71 1,439.65 4,665.93 4,473.47 92.46 49.385 8,800.00 8,793.59 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,765.23 4,473.47 92.46 49.385 8,800.00 8,893.50 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,765.23 4,281.95 93.41 46.841 9,000.00 8,993.42 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,375.35 4,281.95 93.41 46.841 9,000.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,375.35 4,281.95 93.41 46.841 9,000.00 9,000.0	7,800.00	7,794.48	21,341.00	13,038.03	22.78	121.71	-78.213	-518.71	1,439.65	5,431.89	5,343.11	88.78	61.182		
8,100.00 8,094.21 21,341.00 13,038.03 23.75 121.71 -78.213 -518.71 1,439.65 5,141.94 5,052.03 89.91 57,189 8,200.00 8,194.13 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,045.55 4,955.24 90.31 558.71 8,200.00 8,393.95 21,341.00 13,038.03 24.71 121.71 -78.213 -518.71 1,439.65 4,949.30 4,858.59 90.71 54.560 8,600.00 8,933.65 21,341.00 13,038.03 25.03 121.71 -78.213 -518.71 1,439.65 4,659.51 92.00 50.688 8,600.00 8,693.77 21,341.00 13,038.03 25.35 121.71 -78.213 -518.71 1,439.65 4,661.51 4,569.51 92.00 50.688 8,700.00 8,693.68 21,341.00 13,038.03 25.67 121.71 -78.213 -518.71 1,439.65 4,661.51 4,569.51 92.00 50.688 <td>7,900.00</td> <td>7,894.39</td> <td>21,341.00</td> <td>13,038.03</td> <td>23.10</td> <td>121.71</td> <td>-78.213</td> <td>-518.71</td> <td>1,439.65</td> <td>5,335.12</td> <td>5,245.97</td> <td>89.15</td> <td>59.844</td> <td></td> <td></td>	7,900.00	7,894.39	21,341.00	13,038.03	23.10	121.71	-78.213	-518.71	1,439.65	5,335.12	5,245.97	89.15	59.844		
8,200.00 8,194.13 21,341.00 13,038.03 24.07 121.71 -78.213 -518.71 1,439.65 5,045.55 4,955.24 90.31 55.871 8,300.00 8,294.04 21,341.00 13,038.03 24.99 121.71 -78.213 -518.71 1,439.65 4,949.30 4,858.59 90.71 54.560 8,400.00 8,393.95 21,341.00 13,038.03 24.71 121.71 -78.213 -518.71 1,439.65 4,853.21 4,762.08 91.13 53.256 8,500.00 8,493.86 21,341.00 13,038.03 25.03 121.71 -78.213 -518.71 1,439.65 4,853.21 4,762.08 91.13 53.256 8,500.00 8,593.77 21,341.00 13,038.03 25.05 121.71 -78.213 -518.71 1,439.65 4,661.51 4,569.51 92.00 50.668 8,700.00 8,693.68 21,341.00 13,038.03 25.67 121.71 -78.213 -518.71 1,439.65 4,661.51 4,565.93 4,473.47 92.46 49.385 8,800.00 8,793.59 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,470.54 4,377.61 92.92 48.109 8,900.00 8,893.50 21,341.00 13,038.03 26.32 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,093.33 21,341.00 13,038.03 26.64 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,993.32 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,185.66 4,091.24 94.42 44.329 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 40.62 9,201.50 9,203.15 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,093.05 3,000.97 96.08 40.62 9,201.50 9,203.15 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,003.05 3,000.97 96.08 40.62 9,201.50 9,203.15 21,341.00 13,038.03 28.85 121.71 -78.213 -518.71 1,439.65 3,003.55 3,003.55 3,003.57 96.08 40.62 9,200.00 9,992.87 21,341.00 13,038.03 28.85 121.71 -78.213 -518.71 1,439.65 3,003.55 3,003.55 3,003.57 96.08 40.62 9,200.00 9,992.87 21,341.00 13,038.03 28.85 121.71 -78.213 -518.71 1,439.65 3,003.55 3,003.57 3,003.57 96.08 40.62 9,200.00 9,992.85 21,341.00 13,038.03 28.85 121.71 -78.213 -518.71 1,439.65 3,003.55 3,003.57 3,003.57 96.08 40.62 9,200.00 9,203.57 21,341.00 13,038.03 28.85 121.71 -78.213 -518.71 1,439.65 3,003.	8,000.00	7,994.30	21,341.00	13,038.03	23.42	121.71	-78.213	-518.71	1,439.65	5,238.46	5,148.94	89.53	58.513		
8,300.00	8,100.00	8,094.21	21,341.00	13,038.03	23.75	121.71	-78.213	-518.71	1,439.65	5,141.94	5,052.03	89.91	57.189		
8,400.00 8,393.95 21,341.00 13,038.03 24.71 121.71 -78.213 -518.71 1,439.65 4,853.21 4,762.08 91.13 53.256 8,500.00 8,493.86 21,341.00 13,038.03 25.03 121.71 -78.213 -518.71 1,439.65 4,767.27 4,665.71 91.56 51.958 8,600.00 8,593.77 21,341.00 13,038.03 25.35 121.71 -78.213 -518.71 1,439.65 4,661.51 4,569.51 92.00 50.668 8,700.00 8,693.68 21,341.00 13,038.03 25.67 121.71 -78.213 -518.71 1,439.65 4,565.93 4,473.47 92.46 49.385 8,800.00 8,793.59 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,770.54 4,377.61 92.92 48.109 8,900.00 8,993.42 21,341.00 13,038.03 26.64 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 3,996.39 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,996.93 3,901.47 95.51 41.849 9,500.00 9,492.97 21,341.00 13,038.03 28.59 121.71 -78.213 -518.71 1,439.65 3,996.93 3,901.47 95.51 41.849 9,600.00 9,492.97 21,341.00 13,038.03 28.59 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.59 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.59 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 96.68 39.403 9,600.00 9,892.79 21,341.00 13,038.03 28.59 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 96.68 39.403 9,600.00 9,892.79 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 96.61 35.805 9,800.00 9,892.79 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 96.61 35.805 9,800.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 96.61 35.805	8,200.00	8,194.13	21,341.00	13,038.03	24.07	121.71	-78.213	-518.71	1,439.65	5,045.55	4,955.24	90.31	55.871		
8,500.00 8,493.86 21,341.00 13,038.03 25.03 121.71 -78.213 -518.71 1,439.65 4,757.27 4,665.71 91.56 51.958 8,600.00 8,593.77 21,341.00 13,038.03 25.35 121.71 -78.213 -518.71 1,439.65 4,661.51 4,569.51 92.00 50.668 8,700.00 8,693.68 21,341.00 13,038.03 25.67 121.71 -78.213 -518.71 1,439.65 4,665.93 4,473.47 92.46 49.385 8,800.00 8,793.59 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,470.54 4,377.61 92.92 48.109 8,900.00 8,893.50 21,341.00 13,038.03 26.32 121.71 -78.213 -518.71 1,439.65 4,375.35 4,281.95 93.41 46.841 9,000.00 8,993.42 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,185.66 4,091.24 94.42 44.329 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.91 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,093.05 3,809.44 3,712.77 96.68 39.403 9,500.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,093.05 3,809.47 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,603.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,603.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,603.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,500.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,500.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,500.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,500.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
8,600.00 8,593.77 21,341.00 13,038.03 25.35 121.71 -78.213 -518.71 1,439.65 4,661.51 4,569.51 92.00 50.668 8,700.00 8,693.68 21,341.00 13,038.03 25.67 121.71 -78.213 -518.71 1,439.65 4,565.93 4,473.47 92.46 49.385 8,800.00 8,793.59 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,705.4 4,705.4 4,775.61 92.92 48.109 8,900.00 8,893.50 21,341.00 13,038.03 26.32 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,993.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,091.24 94.42 44.329 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,003.05 3,806.97 96.08 40.622 9,500.00 9,502.79 21,341.00 13,038.03 28.50 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,502.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 98.61 35.805 9,900.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 98.61 35.805 9,900.00 9,792.77 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 98.61 35.805 9,900.00 9,792.77 21,341.00 13,038.03 29.52 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 98.61 35.805 9,900.00 9,792.77 21,341.00 13,038.03 29.52 121.71 -78.213 -518.71 1,439.65 3,503.71 3,432.10 98.61 35.805 9,900.00 9,792.77 21,341.00 13,038.03 29.52 121.71 -78.213 -518.71 1,439.65 3,303.05 3,303.92 99.31 34.626	8,400.00	8,393.95	21,341.00	13,038.03	24.71	121.71	-78.213	-518.71	1,439.65	4,853.21	4,762.08	91.13	53.256		
8,700.00 8,693.68 21,341.00 13,038.03 25.67 121.71 -78.213 -518.71 1,439.65 4,565.93 4,473.47 92.46 49.385 8,800.00 8,793.59 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,470.54 4,377.61 92.92 48.109 8,900.00 8,893.50 21,341.00 13,038.03 26.32 121.71 -78.213 -518.71 1,439.65 4,375.35 4,281.95 93.41 46.841 9,000.00 8,993.42 21,341.00 13,038.03 26.64 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,185.66 4,091.24 94.42 44.329 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.61 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,906.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.86 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,632.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626	8,500.00	8,493.86	21,341.00	13,038.03	25.03	121.71	-78.213	-518.71	1,439.65	4,757.27	4,665.71	91.56	51.958		
8,800.00 8,793.59 21,341.00 13,038.03 26.00 121.71 -78.213 -518.71 1,439.65 4,470.54 4,377.61 92.92 48.109 8,900.00 8,893.50 21,341.00 13,038.03 26.32 121.71 -78.213 -518.71 1,439.65 4,375.35 4,281.95 93.41 46.841 9,000.00 8,993.42 21,341.00 13,038.03 26.64 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,185.66 4,091.24 94.42 44.329 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.61 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,632.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805															
8,900.00 8,893.50 21,341.00 13,038.03 26.32 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.81 9,100.00 9,093.33 21,341.00 13,038.03 26.64 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.81 9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,185.66 4,091.24 94.42 44.329 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.61 121.71 -78.213 -518.71 1,439.65 3,969.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.25 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,000.00 8,993.42 21,341.00 13,038.03 26.64 121.71 -78.213 -518.71 1,439.65 4,280.39 4,186.48 93.91 45.581 9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.61 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.25 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,100.00 9,093.33 21,341.00 13,038.03 26.96 121.71 -78.213 -518.71 1,439.65 4,185.66 4,091.24 94.42 44.329 9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.61 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626	8,900.00	8,893.50	21,341.00	13,038.03	26.32	121.71	-78.213	-518.71	1,439.65	4,375.35	4,281.95	93.41	46.841		
9,200.00 9,193.24 21,341.00 13,038.03 27.29 121.71 -78.213 -518.71 1,439.65 4,091.18 3,996.23 94.96 43.084 9,300.00 9,293.15 21,341.00 13,038.03 27.61 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,300.00 9,393.06 21,341.00 13,038.03 27.61 121.71 -78.213 -518.71 1,439.65 3,996.98 3,901.47 95.51 41.849 9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.25 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,400.00 9,393.06 21,341.00 13,038.03 27.93 121.71 -78.213 -518.71 1,439.65 3,903.05 3,806.97 96.08 40.622 9,500.00 9,492.97 21,341.00 13,038.03 28.25 121.71 -78.213 -518.71 1,439.65 3,809.44 3,712.77 96.68 39.403 9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,600.00 9,592.88 21,341.00 13,038.03 28.58 121.71 -78.213 -518.71 1,439.65 3,716.16 3,618.87 97.30 38.194 9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,700.00 9,692.79 21,341.00 13,038.03 28.90 121.71 -78.213 -518.71 1,439.65 3,623.24 3,525.31 97.94 36.995 9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,800.00 9,792.71 21,341.00 13,038.03 29.22 121.71 -78.213 -518.71 1,439.65 3,530.71 3,432.10 98.61 35.805 9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
9,900.00 9,892.62 21,341.00 13,038.03 29.55 121.71 -78.213 -518.71 1,439.65 3,438.60 3,339.29 99.31 34.626															
10,000.00 9,992.53 21,341.00 13,038.03 29.87 121.71 -78.213 -518.71 1,439.65 3,346.93 3,246.90 100.04 33.457										3,346.93					







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Offset De	oigii.			·			- OH / 67734 -	, (Offset Site Error:	0.00 ust
Survey Progr Refe	ram: 17 rence	'4-MWD+HDG Of f	M+MS fset	Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi tance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,100.00	10,092.44	21,341.00	13,038.03	30.19	121.71	-78.213	-518.71	1,439.65	3,255.76	3,154.96	100.80	32.299		
10,200.00	10,192.35	21,341.00	13,038.03	30.52	121.71	-78.213	-518.71	1,439.65	3,165.13	3,063.53	101.60	31.153		
10,300.00	10,292.26	21,341.00	13,038.03	30.84	121.71	-78.213	-518.71	1,439.65	3,075.07	2,972.63	102.44	30.019		
10,400.00	10,392.17	21,341.00	13,038.03	31.16	121.71	-78.213	-518.71	1,439.65	2,985.64	2,882.33	103.32	28.898		
10,500.00	10,492.08	21,341.00	13,038.03	31.49	121.71	-78.213	-518.71	1,439.65	2,896.91	2,792.67	104.24	27.791		
10,600.00	10,592.00	21,341.00	13,038.03	31.81	121.71	-78.213	-518.71	1,439.65	2,808.93	2,703.72	105.21	26.698		
10,700.00	10,691.91	21,341.00	13,038.03	32.13	121.71	-78.213	-518.71	1,439.65	2,721.79	2,615.55	106.24	25.620		
10,800.00	10,791.82	21,341.00	13,038.03	32.46	121.71	-78.213	-518.71	1,439.65	2,635.56	2,528.24	107.32	24.559		
10,900.00	10,891.73	21,341.00	13,038.03	32.78	121.71	-78.213	-518.71	1,439.65	2,550.33	2,441.87	108.46	23.515		
11,000.00	10,991.64	21,341.00	13,038.03	33.11	121.71	-78.213	-518.71	1,439.65	2,466.21	2,356.55	109.66	22.490		
11,100.00	11,091.55	21,341.00	13,038.03	33.43	121.71	-78.213	-518.71	1,439.65	2,383.32	2,272.39	110.93	21.485		
11,200.00	11,191.46	21,341.00	13,038.03	33.75	121.71	-78.213	-518.71	1,439.65	2,301.79	2,189.52	112.27	20.503		
11,300.00	11,291.37	21,341.00	13,038.03	34.08	121.71	-78.213	-518.71	1,439.65	2,221.77	2,108.09	113.68	19.544		
11,400.00	11,391.29	21,341.00	13,038.03	34.40	121.71	-78.213	-518.71	1,439.65	2,143.43	2,028.26	115.17	18.611		
11,500.00	11,491.20	21,341.00	13,038.03	34.73	121.71	-78.213	-518.71	1,439.65	2,066.96	1,950.22	116.74	17.706		
11,600.00	11,591.11	21,341.00	13,038.03	35.05	121.71	-78.213	-518.71	1,439.65	1,992.57	1,874.19	118.38	16.832		
11,700.00	11,691.02	21,341.00	13,038.03	35.38	121.71	-78.213	-518.71	1,439.65	1,920.51	1,800.41	120.10	15.991		
11,800.00	11,790.93	21,341.00	13,038.03	35.70	121.71	-78.213	-518.71	1,439.65	1,851.05	1,729.17	121.88	15.187		
11,900.00	11,890.84	21,341.00	13,038.03	36.03	121.71	-78.213	-518.71	1,439.65	1,784.49	1,660.76	123.73	14.423		
11,907.54	11,898.38	21,341.00	13,038.03	36.05	121.71	-78.213	-518.71	1,439.65	1,779.60	1,655.73	123.87	14.367		
12,000.00	11,990.80	21,341.00	13,038.03	36.33	121.71	-76.751	-518.71	1,439.65	1,721.42	1,595.81	125.61	13.704		
12,028.24	12,019.04	21,341.00	13,038.03	36.36	121.71	93.652	-518.71	1,439.65	1,704.36	1,578.22	126.14	13.512		
12,100.00	12,090.80	21,341.00	13,038.03	36.36	121.71	93.652	-518.71	1,439.65	1,662.46	1,534.99	127.46	13.043		
12,200.00	12,190.80	21,341.00	13,038.03	36.36	121.71	93.652	-518.71	1,439.65	1,607.58	1,478.28	129.30	12.433		
12,300.00	12,290.80	21,341.00	13,038.03	36.36	121.71	93.652	-518.71	1,439.65	1,557.20	1,426.11	131.09	11.879		
12,400.00	12,390.80	21,341.00	13,038.03	36.37	121.71	93.652	-518.71	1,439.65	1,511.76	1,378.96	132.80	11.384		
12,500.00	12,490.80	21,341.00	13,038.03	36.37	121.71	93.652	-518.71	1,439.65	1,471.72	1,337.35	134.38	10.952		
12,528.24	12,519.04	21,341.00	13,038.03	36.37	121.71	93.652	-518.71	1,439.65	1,461.46	1,326.67	134.79	10.842		
12,550.00	12,540.79	21,340.48	13,038.08	36.40	121.71	-86.629	-518.20	1,439.67	1,453.85	1,318.75	135.10	10.761		
12,600.00	12,590.61	21,339.82	13,038.14	36.63	121.70	-88.409	-517.54	1,439.69	1,437.29	1,301.49	135.81	10.583		
12,650.00	12,639.89	21,341.00	13,038.03	36.95	121.71	-89.944	-518.71	1,439.65	1,422.19	1,285.69	136.50	10.419		
12,700.00	12,688.24	21,341.00	13,038.03	37.29	121.71	-91.346	-518.71	1,439.65	1,408.69	1,271.56	137.12	10.273		
12,750.00	12,735.30	21,341.00	13,038.03	37.62	121.71	-92.554	-518.71	1,439.65	1,396.95	1,259.25	137.69	10.145		
12,800.00	12,780.72	21,341.00	13,038.03	37.96	121.71	-93.557	-518.71	1,439.65	1,387.10	1,248.90	138.20	10.037		
12,850.00	12,824.15	21,341.00	13,038.03	38.29	121.71	-94.348	-518.71	1,439.65	1,379.27	1,240.61	138.65	9.948		
12,900.00	12,865.26	21,341.00	13,038.03	38.60	121.71	-94.924	-518.71	1,439.65	1,373.54	1,234.49	139.04	9.879		
12,950.00	12,903.73	21,341.00	13,038.03	38.90	121.71	-95.279	-518.71	1,439.65	1,369.98	1,230.61	139.37	9.830		
13,000.00	12,939.27	21,341.00	13,038.03	39.18	121.71	-95.412	-518.71	1,439.65	1,368.64	1,228.99	139.65	9.801		
13,004.90	12,942.59	21,341.00	13,038.03	39.20	121.71	-95.413	-518.71	1,439.65	1,368.63	1,228.96	139.67	9.799 CC,	ES	
13,050.00	12,971.62	21,341.00	13,038.03	39.43	121.71	-95.322	-518.71	1,439.65	1,369.54	1,229.67	139.87	9.791 SF		
13,100.00	13,000.52	21,341.00	13,038.03	39.65	121.71	-95.011	-518.71	1,439.65	1,372.67	1,232.61	140.05	9.801		
13,150.00	13,025.76	21,341.00	13,038.03	39.85	121.71	-94.478	-518.71	1,439.65	1,377.97	1,237.79	140.19	9.830		
13,200.00	13,047.14	21,341.00	13,038.03	40.02	121.71	-93.729	-518.71	1,439.65	1,385.40	1,245.14	140.27	9.877		
13,250.00	13,064.50	21,341.00	13,038.03	40.15	121.71	-92.767	-518.71	1,439.65	1,394.87	1,254.56	140.30	9.942		
13,300.00 13,350.00	13,077.71 13,086.67	21,341.00 21,341.00	13,038.03 13,038.03	40.26 40.33	121.71 121.71	-91.599 -90.234	-518.71 -518.71	1,439.65 1,439.65	1,406.24 1,419.41	1,265.96 1,279.20	140.29 140.21	10.024 10.123		
13,400.00	13,091.30	21,341.00	13,038.03	40.38	121.71	-88.684	-518.71	1,439.65	1,434.22	1,294.14	140.08	10.239		
13,428.24	13,092.00	21,341.00	13,038.03	40.39	121.71	-87.732	-518.71	1,439.65	1,443.24	1,303.27	139.97	10.311		
13,500.00	13,092.00	21,341.00	13,038.03	40.40	121.71	-87.732	-518.71	1,439.65	1,468.32	1,328.68	139.63	10.516		
13,600.00 13,700.00	13,092.00 13,092.00	21,341.00 21,341.00	13,038.03 13,038.03	40.43 40.46	121.71 121.71	-87.732 -87.732	-518.71 -518.71	1,439.65 1,439.65	1,508.27 1,553.63	1,369.29 1,415.53	138.97 138.10	10.853 11.250		
13,800.00	13,092.00	21,341.00	13,038.03	40.50	121.71	-87.732	-518.71	1,439.65	1,603.96	1,466.91	137.06	11.703		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: Ca												Offset Site Error:	0.00 usft
Survey Progr Refe	ram: 17 rence	4-MWD+HDG Off		Semi M	ajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi tance	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,900.00	13,092.00	21,341.00	13,038.03	40.53	121.71	-87.732	-518.71	1,439.65	1,658.80	1,522.93	135.87	12.209		
14,000.00	13,092.00	21,341.00	13,038.03	40.58	121.71	-87.732	-518.71	1,439.65	1,717.71	1,583.14	134.57	12.764		
14,100.00	13,092.00	21,341.00	13,038.03	40.63	121.71	-87.732	-518.71	1,439.65	1,780.29	1,647.08	133.21	13.365		
14,200.00	13,092.00	21,341.00	13,038.03	40.69	121.71	-87.732	-518.71	1,439.65	1,846.17	1,714.37	131.80	14.007		
14,300.00	13,092.00	21,341.00	13,038.03	40.76	121.71	-87.732	-518.71	1,439.65	1,915.01	1,784.63	130.38	14.687		
14,400.00	13,092.00	21,341.00	13,038.03	40.85	121.71	-87.732	-518.71	1,439.65	1,986.50	1,857.53	128.97	15.403		
14,500.00	13,092.00	21,341.00	13,038.03	40.95	121.71	-87.732	-518.71	1,439.65	2,060.36	1,932.78	127.58	16.149		
14,600.00	13,092.00	21,341.00	13,038.03	41.10	121.71	-87.732	-518.71	1,439.65	2,136.35	2,010.12	126.23	16.924		
14,700.00	13,092.00	21,341.00	13,038.03	41.29	121.71	-87.732	-518.71	1,439.65	2,214.25	2,089.33	124.92	17.725		
14,800.00	13,092.00	21,341.00	13,038.03	41.57	121.71	-87.732	-518.71	1,439.65	2,293.87	2,170.21	123.66	18.550		
14,900.00	13,092.00	21,341.00	13,038.03	41.99	121.71	-87.732	-518.71	1,439.65	2,375.03	2,252.57	122.46	19.395		
15,000.00	13,092.00	21,341.00	13,038.03	42.60	121.71	-87.732	-518.71	1,439.65	2,457.57	2,336.27	121.31	20.259		
15,100.00	13,092.00	21,341.00	13,038.03	43.42	121.71	-87.732	-518.71	1,439.65	2,541.37	2,421.16	120.21	21.141		
15,200.00	13,092.00	21,341.00	13,038.03	44.43	121.71	-87.732	-518.71	1,439.65	2,626.31	2,507.13	119.17	22.037		
15,300.00	13,092.00	21,341.00	13,038.03	45.56	121.71	-87.732	-518.71	1,439.65	2,712.27	2,594.08	118.19	22.948		
15,400.00	13,092.00	21,341.00	13,038.03	46.76	121.71	-87.732	-518.71	1,439.65	2,799.16	2,681.90	117.26	23.870		
15,500.00	13,092.00	21,341.00	13,038.03	48.01	121.71	-87.732	-518.71	1,439.65	2,886.91	2,770.52	116.39	24.804		
15,600.00	13,092.00	21,341.00	13,038.03	49.30	121.71	-87.732	-518.71	1,439.65	2,975.42	2,859.86	115.56	25.748		
15,700.00	13,092.00	21,341.00	13,038.03	50.61	121.71	-87.732	-518.71	1,439.65	3,064.65	2,949.86	114.78	26.700		
15,800.00	13,092.00	21,341.00	13,038.03	51.93	121.71	-87.732	-518.71	1,439.65	3,154.52	3,040.47	114.05	27.660		
15,900.00	13,092.00	21,341.00	13,038.03	53.27	121.71	-87.732	-518.71	1,439.65	3,244.98	3,131.62	113.36	28.626		
16,000.00	13,092.00	21,341.00	13,038.03	54.61	121.71	-87.732	-518.71	1,439.65	3,335.98	3,223.28	112.70	29.599		
16,100.00	13,092.00	21,341.00	13,038.03	55.97	121.71	-87.732	-518.71	1,439.65	3,427.49	3,315.40	112.09	30.578		
16,200.00	13,092.00	21,341.00	13,038.03	57.33	121.71	-87.732	-518.71	1,439.65	3,519.46	3,407.95	111.51	31.560		
16,300.00	13,092.00	21,341.00	13,038.03	58.69	121.71	-87.732	-518.71	1,439.65	3,611.86	3,500.89	110.97	32.547		
16,400.00	13,092.00	21,341.00	13,038.03	60.06	121.71	-87.732	-518.71	1,439.65	3,704.65	3,594.19	110.46	33.538		
16,500.00	13,092.00	21,341.00	13,038.03	61.44	121.71	-87.732	-518.71	1,439.65	3,797.81	3,687.83	109.98	34.532		
16,600.00	13,092.00	21,341.00	13,038.03	62.81	121.71	-87.732	-518.71	1,439.65	3,891.31	3,781.78	109.53	35.528		
16,700.00	13,092.00	21,341.00	13,038.03	64.20	121.71	-87.732	-518.71	1,439.65	3,985.12	3,876.02	109.10	36.527		
16,800.00	13,092.00	21,341.00	13,038.03	65.58	121.71	-87.732	-518.71	1,439.65	4,079.23	3,970.53	108.70	37.527		
16,900.00	13,092.00	21,341.00	13,038.03	66.97	121.71	-87.732	-518.71	1,439.65	4,173.61	4,065.29	108.32	38.529		
17,000.00	13,092.00	21,341.00	13,038.03	68.36	121.71	-87.732	-518.71	1,439.65	4,268.25	4,160.28	107.97	39.532		
17,100.00	13,092.00	21,341.00	13,038.03	69.75	121.71	-87.732	-518.71	1,439.65	4,363.12	4,255.49	107.64	40.536		
17,200.00	13,092.00	21,341.00	13,038.03	71.14	121.71	-87.732	-518.71	1,439.65	4,458.22	4,350.90	107.32	41.540		
17,300.00	13,092.00	21,341.00	13,038.03	72.54	121.71	-87.732	-518.71	1,439.65	4,553.53	4,446.51	107.03	42.546		
17,400.00	13,092.00	21,341.00	13,038.03	73.94	121.71	-87.732	-518.71	1,439.65	4,649.04	4,542.29	106.75	43.551		
17,500.00	13,092.00	21,341.00	13,038.03	75.34	121.71	-87.732	-518.71	1,439.65	4,744.73	4,638.24	106.49	44.556		
17,600.00	13,092.00	21,341.00	13,038.03	76.74	121.71	-87.732	-518.71	1,439.65	4,840.60	4,734.36	106.24	45.561		
17,700.00	13,092.00	21,341.00	13,038.03	78.14	121.71	-87.732	-518.71	1,439.65	4,936.63	4,830.62	106.01	46.566		
17,800.00	13,092.00	21,341.00	13,038.03	79.55	121.71	-87.732	-518.71	1,439.65	5,032.82	4,927.02	105.80	47.570		
17,900.00	13,092.00	21,341.00	13,038.03	80.95	121.71	-87.732	-518.71	1,439.65	5,129.15	5,023.55	105.60	48.573		
18,000.00	13,092.00	21,341.00	13,038.03	82.36	121.71	-87.732	-518.71	1,439.65	5,225.62	5,120.21	105.41	49.576		
18,100.00	13,092.00	21,341.00	13,038.03	83.76	121.71	-87.732	-518.71	1,439.65	5,322.22	5,216.99	105.23	50.578		
18,200.00	13,092.00	21,341.00	13,038.03	85.17	121.71	-87.732	-518.71	1,439.65	5,418.94	5,313.88	105.06	51.579		
18,300.00	13,092.00	21,341.00	13,038.03	86.58	121.71	-87.732	-518.71	1,439.65	5,515.78	5,410.87	104.91	52.578		
18,400.00	13,092.00	21,341.00	13,038.03	87.99	121.71	-87.732	-518.71	1,439.65	5,612.73	5,507.97	104.76	53.577		
18,500.00	13,092.00	21,341.00	13,038.03	89.40	121.71	-87.732	-518.71	1,439.65	5,709.78	5,605.16	104.62	54.574		
18,600.00	13,092.00	21,341.00	13,038.03	90.81	121.71	-87.732	-518.71	1,439.65	5,806.94	5,702.44	104.50	55.569		
18,700.00	13,092.00	21,341.00	13,038.03	92.23	121.71	-87.732	-518.71	1,439.65	5,904.19	5,799.81	104.38	56.564		
18,800.00	13,092.00	21,341.00	13,038.03	93.64	121.71	-87.732	-518.71	1,439.65	6,001.53	5,897.26	104.27	57.556		
18,900.00	13,092.00	21,341.00	13,038.03	95.06	121.71	-87.732	-518.71	1,439.65	6,098.96	5,994.79	104.17	58.547		
19,000.00	13,092.00	21,341.00	13,038.03	96.47	121.71	-87.732	-518.71	1,439.65	6,196.47	6,092.39	104.08	59.536		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Survey Prog Refe	ram: 17- rence	4-MWD+HDG Off		Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi tance	gned:		Offset Well Error:	1.00 usft
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
19,100.00	13,092.00	21,341.00	13,038.03	97.89	121.71	-87.732	-518.71	1,439.65	6,294.05	6,190.06	103.99	60.524		
19,200.00	13,092.00	21,341.00	13,038.03	99.30	121.71	-87.732	-518.71	1,439.65	6,391.72	6,287.80	103.91	61.510		
19,300.00	13,092.00	21,341.00	13,038.03	100.72	121.71	-87.732	-518.71	1,439.65	6,489.45	6,385.61	103.84	62.493		
19,400.00	13,092.00	21,341.00	13,038.03	102.14	121.71	-87.732	-518.71	1,439.65	6,587.25	6,483.47	103.78	63.475		
19,500.00	13,092.00	21,341.00	13,038.03	103.55	121.71	-87.732	-518.71	1,439.65	6,685.12	6,581.40	103.72	64.455		
19,600.00	13,092.00	21,341.00	13,038.03	104.97	121.71	-87.732	-518.71	1,439.65	6,783.04	6,679.38	103.66	65.433		
19,700.00	13,092.00	21,341.00	13,038.03	106.39	121.71	-87.732	-518.71	1,439.65	6,881.03	6,777.42	103.62	66.409		
19,800.00	13,092.00	21,341.00	13,038.03	107.81	121.71	-87.732	-518.71	1,439.65	6,979.08	6,875.50	103.57	67.382		
19,900.00	13,092.00	21,341.00	13,038.03	109.23	121.71	-87.732	-518.71	1,439.65	7,077.18	6,973.64	103.54	68.354		
20,000.00	13,092.00	21,341.00	13,038.03	110.65	121.71	-87.732	-518.71	1,439.65	7,175.33	7,071.82	103.51	69.323		
20,100.00	13,092.00	21,341.00	13,038.03	112.07	121.71	-87.732	-518.71	1,439.65	7,273.53	7,170.05	103.48	70.290		
20,200.00	13,092.00	21,341.00	13,038.03	113.49	121.71	-87.732	-518.71	1,439.65	7,371.78	7,268.33	103.46	71.255		
20,300.00	13,092.00	21,341.00	13,038.03	114.91	121.71	-87.732	-518.71	1,439.65	7,470.08	7,366.64	103.44	72.218		
20,400.00	13,092.00	21,341.00	13,038.03	116.34	121.71	-87.732	-518.71	1,439.65	7,568.42	7,465.00	103.42	73.178		
20,500.00	13,092.00	21,341.00	13,038.03	117.76	121.71	-87.732	-518.71	1,439.65	7,666.81	7,563.39	103.42	74.136		
20,600.00	13,092.00	21,341.00	13,038.03	119.18	121.71	-87.732	-518.71	1,439.65	7,765.23	7,661.82	103.41	75.092		
20,700.00	13,092.00	21,341.00	13,038.03	120.60	121.71	-87.732	-518.71	1,439.65	7,863.70	7,760.29	103.41	76.045		
20,800.00	13,092.00	21,341.00	13,038.03	122.03	121.71	-87.732	-518.71	1,439.65	7,962.20	7,858.79	103.41	76.996		
20,900.00	13,092.00	21,341.00	13,038.03	123.45	121.71	-87.732	-518.71	1,439.65	8,060.74	7,957.33	103.42	77.944		
21,000.00	13,092.00	21,341.00	13,038.03	124.87	121.71	-87.732	-518.71	1,439.65	8,159.32	8,055.89	103.43	78.890		
21,100.00	13,092.00	21,341.00	13,038.03	126.30	121.71	-87.732	-518.71	1,439.65	8,257.93	8,154.49	103.44	79.833		
04 000 00	40.000.00	04 044 00	10 000 00	107.70	101.71	07.700	540.74	4 400 05	0.050.57	0.050.40	100.10	00.774		
21,200.00	13,092.00	21,341.00	13,038.03	127.72	121.71	-87.732	-518.71	1,439.65	8,356.57	8,253.12	103.46	80.774		
21,300.00	13,092.00	21,341.00	13,038.03	129.15	121.71	-87.732	-518.71	1,439.65	8,455.25	8,351.77	103.48	81.712		
21,400.00	13,092.00	21,341.00	13,038.03	130.57	121.71	-87.732	-518.71	1,439.65	8,553.95	8,450.46	103.50	82.648		
21,500.00 21,600.00	13,092.00 13,092.00	21,341.00 21,341.00	13,038.03 13,038.03	132.00 133.42	121.71 121.71	-87.732 -87.732	-518.71 -518.71	1,439.65 1,439.65	8,652.69 8,751.45	8,549.17 8,647.90	103.52 103.55	83.581 84.512		
21,600.00	13,092.00	21,341.00	13,036.03	133.42	121.71	-01.132	-510.71	1,439.00	0,751.45	0,047.90	103.55	04.512		
21,700.00	13,092.00	21,341.00	13,038.03	134.85	121.71	-87.732	-518.71	1,439.65	8,850.25	8,746.66	103.58	85.440		
21,800.00	13,092.00	21,341.00	13,038.03	136.27	121.71	-87.732	-518.71	1,439.65	8,949.07	8,845.45	103.62	86.366		
21,900.00	13,092.00	21,341.00	13,038.03	137.70	121.71	-87.732	-518.71	1,439.65	9,047.91	8,944.26	103.66	87.288		
22,000.00	13,092.00	21,341.00	13,038.03	139.12	121.71	-87.732	-518.71	1,439.65	9,146.78	9,043.09	103.69	88.209		
22,100.00	13,092.00	21,341.00	13,038.03	140.55	121.71	-87.732	-518.71	1,439.65	9,245.68	9,141.94	103.74	89.126		
22,200.00	13,092.00	21,341.00	13,038.03	141.98	121.71	-87.732	-518.71	1,439.65	9,344.59	9,240.81	103.78	90.041		
22,300.00	13,092.00	21,341.00	13,038.03	143.40	121.71	-87.732	-518.71	1,439.65	9,443.54	9,339.71	103.83	90.953		
22,400.00	13,092.00	21,341.00	13,038.03	144.83	121.71	-87.732	-518.71	1,439.65	9,542.50	9,438.62	103.88	91.863		
22,500.00	13,092.00	21,341.00	13,038.03	146.26	121.71	-87.732	-518.71	1,439.65	9,641.48	9,537.55	103.93	92.770		
22,600.00	13,092.00	21,341.00	13,038.03	147.69	121.71	-87.732	-518.71	1,439.65	9,740.49	9,636.50	103.98	93.674		
22,700.00	13,092.00	21,341.00	13,038.03	149.11	121.71	-87.732	-518.71	1,439.65	9,839.51	9,735.47	104.04	94.575		
22,700.00	13,092.00	21,341.00	13,038.03	149.11	121.71	-87.732	-516.71 -518.71	1,439.65	9,867.48	9,763.47	104.04	94.829		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Survey Progr	rom: 17	'9-MWD+HDGI	M							Rule Assi	anodi		Offset Site Error: Offset Well Error:	1.00 usf
Refe	rence	Off	set		lajor Axis		Offset Wellb	ore Centre		ance	_			1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	2.00	1.00	1.00	90.698	-15.37	1,262.14	1,262.24	, ,	, ,			
100.00	100.00	103.34	105.34	1.08	1.01	90.698	-15.37	1,261.93	1,262.03	1,259.93	2.10	601.953		
200.00	200.00	207.42	209.41	1.60	1.07	90.698	-15.37	1,261.28	1,261.41	1,258.74	2.67	473.016		
300.00	300.00	308.41	310.40	2.01	1.24	90.703	-15.46	1,260.50	1,260.64	1,257.38	3.25	387.655		
400.00	400.00	411.82	413.81	2.35	1.49	90.713	-15.67	1,259.46	1,259.64	1,255.79	3.85	327.601		
500.00	500.00	509.51	511.49	2.65	1.77	90.725	-15.93	1,258.44	1,258.59	1,254.17	4.42	284.622		
600.00	600.00	607.01	608.99	2.93	2.07	90.743	-16.31	1,257.71	1,257.85	1,252.86	4.99	251.976		
700.00	700.00	707.12	709.10	3.18	2.39	90.754	-16.55	1,256.95	1,257.09	1,251.52	5.56	225.963		
800.00	800.00	803.51	805.48	3.41	2.70	90.774	-16.98	1,256.35	1,256.48	1,250.37	6.11	205.481		
900.00	900.00	901.47	903.44	3.64	3.03	90.788	-17.28	1,256.05	1,256.17	1,249.51	6.66	188.515		
1,000.00	1,000.00	1,000.19	1,002.16	3.85	3.36	90.808	-17.71	1,255.80	1,255.93	1,248.72	7.21	174.272		
1,100.00	1,100.00	1,104.42	1,106.39	4.05	3.72	90.829	-18.16	1,255.52	1,255.67	1,247.91	7.76	161.745		
1,200.00	1,200.00	1,198.33	1,200.30	4.24	4.04	90.865	-18.95	1,255.15	1,255.29	1,247.02	8.28	151.664		
1,203.01	1,203.01	1,201.05	1,203.01	4.25	4.05	90.866	-18.98	1,255.15	1,255.29	1,247.00	8.29	151.393		
1,300.00	1,300.00	1,291.00	1,292.95	4.43	4.35	90.923	-20.23	1,255.43	1,255.62	1,246.84	8.78	143.042		
1,400.00	1,400.00	1,390.61	1,392.54	4.61	4.69	91.007	-22.07	1,256.06	1,256.27	1,246.98	9.30	135.135		
1,500.00	1,500.00	1,498.97	1,500.89	4.78	5.06	91.083	-23.75	1,256.39	1,256.61	1,246.77	9.85	127.639		
1,600.00	1,599.98	1,614.41	1,616.33	4.98	5.47	-78.979	-24.50	1,255.63	1,255.63	1,245.27	10.37	121.140		
1,620.70	1,620.67	1,638.38	1,640.29	4.99	5.55	-79.028	-24.51	1,255.28	1,255.18	1,244.73	10.45	120.112		
1,700.00	1,699.89	1,728.40	1,730.29	5.07	5.86	-79.212	-24.17	1,253.49	1,252.97	1,242.15	10.82	115.772		
1,800.00	1,799.81	1,842.04	1,843.89	5.23	6.26	-79.453	-23.60	1,250.15	1,249.25	1,237.91	11.34	110.181		
1,900.00	1,899.72	1,952.29	1,954.04	5.41	6.65	-79.685	-23.07	1,245.61	1,244.34	1,232.49	11.85	105.007		
2,000.00	1,999.63	2,051.96	2,053.62	5.60	7.00	-79.905	-22.42	1,241.31	1,239.27	1,226.94	12.33	100.527		
2,100.00	2,099.54	2,152.99	2,154.54	5.80	7.35	-80.131	-21.73	1,236.84	1,234.11	1,221.30	12.81	96.340		
2,200.00	2,199.45	2,261.04	2,262.48	6.02	7.73	-80.370	-21.11	1,231.80	1,228.74	1,215.43	13.32	92.282		
2,300.00	2,299.36	2,378.30	2,379.54	6.24	8.15	-80.586	-21.42	1,224.98	1,222.23	1,208.38	13.85	88.249		
2,400.00	2,399.27	2,474.00	2,475.03	6.47	8.50	-80.739	-22.23	1,218.80	1,215.09	1,200.77	14.32	84.864		
2,500.00	2,499.18	2,572.76	2,573.60	6.72	8.85	-80.902	-22.96	1,212.71	1,208.22	1,193.43	14.80	81.661		
2,600.00	2,599.10	2,669.00	2,669.66	6.96	9.20	-81.062	-23.71	1,206.84	1,201.46	1,186.20	15.26	78.707		
2,700.00	2,699.01	2,765.37	2,765.86	7.22	9.55	-81.221	-24.50	1,201.25	1,194.99	1,179.26	15.73	75.947		
2,800.00	2,798.92	2,860.35	2,860.70	7.48	9.89	-81.381	-25.24	1,196.14	1,188.96	1,172.76	16.20	73.397		
2,900.00	2,898.83	2,960.02	2,960.24	7.74	10.25	-81.553	-25.97	1,191.00	1,183.16	1,166.48	16.68	70.941		
3,000.00	2,998.74	3,064.98	3,065.03	8.01	10.63	-81.715	-27.17	1,185.30	1,177.08	1,159.90	17.17	68.539		
3,100.00	3,098.65	3,162.78	3,162.67	8.28	10.99	-81.846	-28.73	1,179.90	1,170.91	1,153.26	17.65	66.350		
3,200.00	3,198.56	3,258.24	3,257.99	8.56	11.33	-81.972	-30.32	1,174.89	1,165.00	1,146.89	18.11	64.319		
3,300.00	3,298.47	3,351.50	3,351.12	8.84	11.67	-82.089	-32.00	1,170.43	1,159.58	1,141.01	18.57	62.441		
3,400.00	3,398.39	3,442.62	3,442.15	9.13	12.00	-82.203	-33.64	1,166.66	1,154.80	1,135.78	19.02	60.713		
3,500.00	3,498.30	3,531.00	3,530.47	9.41	12.32	-82.318	-35.11	1,163.86	1,150.99	1,131.53	19.46	59.149		
3,600.00	3,598.21	3,629.56	3,628.99	9.70	12.67	-82.478	-36.14	1,161.19	1,147.69	1,127.75	19.93	57.583		
3,700.00	3,698.12	3,727.20	3,726.59	9.99	13.02	-82.626	-37.37	1,158.72	1,144.56	1,124.16	20.40	56.108		
3,800.00	3,798.03	3,826.89	3,826.24	10.29	13.38	-82.748	-39.22	1,156.38	1,141.59	1,120.72	20.87	54.688		
3,900.00	3,897.94	3,933.06	3,932.36	10.58	13.76	-82.886	-41.05	1,153.59	1,138.35	1,116.98	21.37	53.264		
4,000.00	3,997.85	4,036.37	4,035.60	10.88	14.14	-83.031	-42.66	1,150.26	1,134.53	1,112.67	21.86	51.902		
4,100.00	4,097.76	4,132.96	4,132.13	11.18	14.48	-83.165	-44.23	1,147.25	1,130.83	1,108.51	22.32	50.657		
4,200.00	4,197.68	4,227.51	4,226.63	11.48	14.83	-83.294	-45.78	1,144.65	1,127.49	1,104.71	22.78	49.497		
4,300.00	4,297.59	4,328.48	4,327.56	11.78	15.19	-83.428	-47.53	1,142.28	1,124.56	1,101.30	23.26	48.354		
4,400.00	4,397.50	4,436.13	4,435.15	12.08	15.58	-83.585	-49.14	1,139.11	1,121.05	1,097.29	23.76	47.188		
4,500.00	4,497.41	4,528.43	4,527.39	12.39	15.91	-83.722	-50.52	1,136.23	1,117.39	1,093.19	24.20	46.165		
4,600.00	4,597.32	4,619.47	4,618.39	12.69	16.24	-83.837	-52.23	1,134.32	1,114.70	1,090.06	24.65	45.230		
4,700.00	4,697.23	4,728.94	4,727.82	13.00	16.63	-83.944	-54.87	1,132.22	1,112.20	1,087.05	25.15	44.221		
4,800.00	4,797.14	4,818.89	4,817.71	13.31	16.95	-84.026	-57.20	1,130.09	1,109.25	1,083.66	25.59	43.351		
4,900.00	4,897.05	4,903.62	4,902.41	13.62	17.25	-84.101	-59.37	1,129.26	1,107.64	1,081.64	26.00	42.603		







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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: **Survey Calculation Method:** Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

-		O MAND . LIDO:	4							Dul. 1			Offset Site Error:	0.00 usf
urvey Progi Refe	ram: 1/ rence	9-MWD+HDGI Offs		Semi N	ajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,996.97	5,008.54	5,007.29	13.92	17.62	-84.179	-62.28	1,129.08	1,106.86	1,080.38	26.48	41.795		
5,100.00	5,096.88	5,115.93	5,114.63	14.23	18.00	-84.275	-65.03	1,127.83	1,105.07	1,078.10	26.98	40.960		
5,200.00	5,196.79	5,226.36	5,225.02	14.55	18.39	-84.413	-67.17	1,125.67	1,102.56	1,075.07	27.49	40.112		
5,300.00	5,296.70	5,321.26	5,319.88	14.86	18.73	-84.538	-68.92	1,123.58	1,099.82	1,071.88	27.94	39.364		
5,400.00	5,396.61	5,426.87	5,425.45	15.17	19.11	-84.663	-71.12	1,121.59	1,097.40	1,068.97	28.43	38.600		
5,500.00	5,496.52	5,606.69	5,604.89	15.48	19.77	-84.955	-73.97	1,111.11	1,091.34	1,062.21	29.13	37.466		
5,600.00	5,596.43	5,734.06	5,731.39	15.79	20.24	-85.164	-76.64	1,096.58	1,079.33	1,049.68	29.65	36.398		
5,700.00	5,696.34	5,830.67	5,827.23	16.11	20.60	-85.320	-78.88	1,084.57	1,066.39	1,036.28	30.12	35.407		
5,800.00	5,796.26	5,925.67	5,921.53	16.42	20.96	-85.474	-81.09	1,073.32	1,054.04	1,023.46	30.58	34.469		
5,900.00	5,896.17	6,024.60	6,019.76	16.74	21.33	-85.630	-83.51	1,061.77	1,041.85	1,010.80	31.05	33.556		
6,000.00	5,996.08	6,123.45	6,117.90	17.05	21.70	-85.787	-85.98	1,050.23	1,029.67	998.15	31.52	32.671		
6,100.00	6,095.99	6,218.32	6,212.12	17.37	22.06	-85.926	-88.59	1,039.37	1,017.69	985.72	31.98	31.825		
6,200.00	6,195.90	6,331.96	6,324.91	17.68	22.49	-86.050	-92.57	1,026.15	1,005.50	973.02	32.48	30.961		
6,300.00	6,295.81	6,430.98	6,423.04	18.00	22.86	-86.087	-97.38	1,013.85	992.34	959.39	32.95	30.116		
6,400.00	6,395.72	6,527.30	6,518.52	18.32	23.23	-86.116	-102.18	1,002.07	979.37	945.95	33.42	29.304		
6,500.00	6,495.63	6,623.06	6,613.48	18.63	23.60	-86.148	-106.88	990.67	966.72	932.83	33.89	28.526		
6,600.00	6,595.55	6,722.17	6,711.78	18.95	23.98	-86.178	-111.81	979.05	954.25	919.88	34.36	27.768		
6,700.00	6,695.46	6,822.06	6,810.86	19.27	24.36	-86.211	-116.72	967.29	941.73	906.89	34.84	27.029		
6,800.00	6,795.37	6,920.35	6,908.35	19.59	24.74	-86.249	-121.49	955.71	929.22	893.91	35.32	26.312		
6,900.00	6,895.28	7,016.59	7,003.83	19.91	25.11	-86.281	-126.25	944.59	916.92	881.14	35.79	25.623		
7,000.00	6,995.19	7,111.36	7,097.89	20.23	25.47	-86.317	-130.83	934.04	905.05	868.80	36.25	24.966		
7,100.00	7,095.10	7,210.81	7,196.66	20.54	25.85	-86.363	-135.48	923.36	893.60	856.87	36.73	24.331		
7,200.00	7,195.01	7,320.62	7,305.64	20.86	26.27	-86.527	-139.01	910.39	881.22	844.00	37.22	23.677		
7,300.00	7,294.92	7,419.57	7,403.79	21.18	26.65	-86.735	-141.44	898.05	868.30	830.62	37.69	23.041		
7,400.00	7,394.84	7,514.10	7,497.60	21.50	27.01	-86.936	-143.76	886.64	855.78	817.64	38.14	22.436		
7,500.00	7,494.75	7,607.76	7,590.61	21.82	27.37	-87.151	-145.85	875.84	843.85	805.25	38.60	21.862		
7,600.00	7,594.66	7,710.66	7,692.85	22.14	27.76	-87.402	-147.96	864.43	832.40	793.32	39.07	21.303		
7,700.00	7,694.57	7,820.70	7,802.00	22.46	28.19	-87.610	-151.39	850.93	819.62	780.06	39.56	20.716		
7,800.00	7,794.48	7,911.83	7,892.34	22.78	28.54	-87.729	-155.06	839.55	806.56	766.54	40.02	20.154		
7,900.00	7,894.39	7,999.49	7,979.41	23.10	28.88	-87.843	-158.48	829.96	795.03	754.56	40.47	19.647		
8,000.00	7,994.30	8,101.83	8,081.16	23.42	29.27	-87.975	-162.42	819.63	784.35	743.40	40.95	19.156		
8,100.00	8,094.21	8,202.65	8,181.27	23.75	29.66	-88.070	-166.93	808.67	772.81	731.39	41.42	18.657		
8,200.00	8,194.13	8,291.14	8,269.22	24.07	30.00	-88.156	-170.80	799.64	761.97	720.10	41.87	18.200		
8,300.00	8,294.04	8,405.88	8,383.32	24.39	30.44	-88.333	-174.96	788.34	751.67	709.29	42.38	17.738		
8,400.00	8,393.95	8,509.08	8,485.73	24.71	30.84	-88.543	-178.40	776.02	739.24	696.38	42.86	17.249		
8,500.00	8,493.86	8,594.81	8,570.87	25.03	31.17	-88.737	-180.99	766.40	727.60	684.31	43.29	16.806		
8,600.00	8,593.77	8,685.19	8,660.80	25.35	31.51	-88.959	-183.37	757.70	717.59	673.85	43.74	16.407		
8,700.00	8,693.68	8,777.87	8,753.12	25.67	31.86	-89.216	-185.36	749.71	708.66	664.48	44.18	16.040		
8,800.00	8,793.59	8,871.92	8,846.87	26.00	32.21	-89.500	-187.05	742.38	700.63	656.00	44.63	15.699		
8,900.00	8,893.50	8,969.38	8,944.06	26.32	32.58	-89.806	-188.64	735.33	693.19	648.10	45.09	15.374		
9,000.00	8,993.42	9,065.12	9,039.56	26.64	32.93	-90.117	-190.09	728.75	686.14	640.60	45.54	15.067		
9,100.00	9,093.33	9,156.76	9,131.02	26.96	33.27	-90.427	-191.26	723.20	679.98	634.01	45.98	14.790		
9,200.00	9,193.24	9,249.81	9,223.95	27.29	33.61	-90.752	-192.19	718.63	675.00	628.59	46.41	14.543		
9,300.00	9,293.15	9,342.85	9,316.91	27.61	33.94	-91.100	-192.74	714.89	671.01	624.16	46.85	14.323		
9,400.00 9,438.26	9,393.06 9,431.28	9,426.19 9,458.00	9,400.22 9,432.03	27.93 28.05	34.23 34.34	-91.411 -91.518	-193.03 -193.14	712.83 712.69	668.64 668.48	621.41 621.11	47.23 47.37	14.158 14.112		
9,500.00	9,492.97	9,513.23	9,487.26	28.25	34.52	-91.693 01.070	-193.36	712.99	668.83	621.23	47.61	14.049		
9,600.00	9,592.88	9,607.31 9,705.41	9,581.33	28.58	34.82	-91.970 -92.232	-193.81 -194.45	714.42	670.35 672.42	622.34 623.98	48.01	13.962		
9,700.00	9,692.79		9,679.41	28.90	35.13 35.46	-92.232 -92.464	-194.45 -195.63	716.48	674.44		48.44	13.881		
9,800.00 9,900.00	9,792.71 9,892.62	9,808.79 9,910.50	9,782.76 9,884.44	29.22 29.55	35.46	-92.464 -92.633	-195.63 -197.59	718.68 720.44	674.44 675.89	625.53 626.53	48.90 49.36	13.791 13.693		
0,000.00	9,992.53	10,019.46	9,993.37	29.87	36.15	-92.885	-198.99	721.50	676.76	626.90	49.87	13.571		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: El (Offset Site Error:	0.00 usf
urvey Prog Refe	ram: 17	9-MWD+HDG Off	M set	Semi M	laior Axis		Offset Wellbe	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,100.00	10,092.44	10,116.62	10,090.53	30.19	36.47	-93.295	-198.25	721.35	677.02	626.70	50.31	13.456		
10,200.00	10,192.35	10,216.15	10,190.05	30.52	36.80	-93.761	-196.90	721.33	677.57	626.80	50.78	13.344		
10,300.00	10,292.26	10,312.67	10,286.56	30.84	37.11	-94.185	-195.82	721.66	678.47	627.25	51.22	13.246		
10,400.00	10,392.17	10,414.46	10,388.35	31.16	37.44	-94.579	-195.26	722.24	679.48	627.79	51.69	13.145		
10,500.00	10,492.08	10,519.79	10,493.66	31.49	37.78	-94.859	-196.25	722.85	680.16	627.97	52.18	13.035		
10,600.00	10,592.00	10,640.85	10,611.66	31.81	38.19	-93.211	-220.63	726.37	678.25	625.61	52.64	12.884		
10,700.00	10,691.91	10,819.28	10,762.40	32.13	38.76	-85.888	-313.38	731.88	671.89	618.37	53.53	12.552		
10,800.00	10,791.82	10,873.84	10,799.79	32.46	38.93	-82.620	-353.07	732.48	665.54	611.45	54.10	12.303		
10,817.40	10,809.20	10,882.65	10,805.33	32.51	38.95	-82.051	-359.91	732.74	665.39	611.19	54.20	12.277 CC, I	ES	
10,900.00	10,891.73	10,929.81	10,832.66	32.78	39.10	-78.849	-398.29	734.41	668.71	613.90	54.80	12.202 SF		
11,000.00	10,991.64	10,985.69	10,860.43	33.11	39.26	-74.810	-446.74	735.88	681.77	626.17	55.60	12.263		
11,100.00	11,091.55	11,033.00	10,880.42	33.43	39.42	-71.261	-489.60	736.11	705.18	649.02	56.16	12.557		
11,200.00	11,191.46	11,074.15	10,895.96	33.75	39.56	-68.143	-527.70	735.67	738.91	682.47	56.43	13.093		
11,300.00	11,291.37	11,106.60	10,907.37	34.08	39.67	-65.695	-558.06	735.00	782.08	725.74	56.34	13.881		
11,400.00	11,391.29	11,134.25	10,916.09	34.40	39.78	-63.606	-584.29	734.11	833.75	777.72	56.03	14.880		
11,500.00	11,491.20	11,163.37	10,924.69	34.73	39.89	-61.427	-612.08	732.97	892.56	836.83	55.74	16.014		
11,600.00	11,591.11	11,175.00	10,928.01	35.05	39.93	-60.565	-623.22	732.47	957.42	902.36	55.05	17.391		
11,700.00	11,691.02	11,197.66	10,934.04	35.38	40.02	-58.897	-645.04	731.47	1,027.29	972.59	54.70	18.780		
11,800.00	11,790.93	11,222.00	10,939.66	35.70	40.12	-57.123	-668.70	730.42	1,101.71	1,047.26	54.45	20.232		
11,900.00	11,890.84	11,222.00	10,939.66	36.03	40.12	-57.123	-668.70	730.42	1,179.36	1,125.52	53.84	21.907		
11,907.54	11,898.38	11,222.00	10,939.66	36.05	40.12	-57.123	-668.70	730.42	1,185.35	1,131.56	53.79	22.035		
12,000.00	11,990.80	11,222.00	10,939.66	36.33	40.12	-59.329	-668.70	730.42	1,260.61	1,207.24	53.37	23.619		
12,028.24	12,019.04	11,222.00	10,939.66	36.36	40.12	109.915	-668.70	730.42	1,284.22	1,230.95	53.26	24.111		
12,100.00	12,090.80	11,222.00	10,939.66	36.36	40.12	109.915	-668.70	730.42	1,345.09	1,292.07	53.02	25.369		
12,200.00	12,190.80	11,240.84	10,943.37	36.36	40.20	111.354	-687.15	729.65	1,431.19	1,378.17	53.03	26.989		
12,300.00	12,290.80	11,246.03	10,944.28	36.36	40.22	111.746	-692.25	729.45	1,519.12	1,466.20	52.92	28.706		
12,400.00	12,390.80	11,250.73	10,945.08	36.37	40.24	112.102	-696.89	729.28	1,608.39	1,555.52	52.88	30.417		
12,500.00	12,490.80	11,269.00	10,947.80	36.37	40.31	113.468	-714.94	728.65	1,699.05	1,646.00	53.04	32.033		
12,528.24	12,519.04	11,269.00	10,947.80	36.37	40.31	113.468	-714.94	728.65	1,724.73	1,671.70	53.04	32.519		
12,550.00	12,540.79	11,269.00	10,947.80	36.40	40.31	-61.730	-714.94	728.65	1,744.51	1,691.47	53.04	32.891		
12,600.00	12,590.61	11,269.00	10,947.80	36.63	40.31	-53.088	-714.94	728.65	1,789.46	1,736.42	53.04	33.738		
12,650.00	12,639.89	11,269.00	10,947.80	36.95	40.31	-46.004	-714.94	728.65	1,833.51	1,780.47	53.04	34.570		
12,700.00	12,688.24	11,269.00	10,947.80	37.29	40.31	-40.297	-714.94	728.65	1,876.40	1,823.37	53.03	35.382		
12,750.00	12,735.30	11,269.00	10,947.80	37.62	40.31	-35.717	-714.94	728.65	1,917.90	1,864.87	53.03	36.169		
12,800.00	12,780.72	11,269.00	10,947.80	37.96	40.31	-32.031	-714.94	728.65	1,957.78	1,904.76	53.02	36.924		
12,850.00	12,824.15	11,269.00	10,947.80	38.29	40.31	-29.047	-714.94	728.65	1,995.85	1,942.82	53.02	37.641		
12,900.00	12,865.26	11,293.22	10,950.52	38.60	40.41	-26.276	-738.99	727.99	2,031.25	1,978.05	53.21	38.178		
12,950.00	12,903.73	11,316.00	10,952.16	38.90	40.50	-24.092	-761.71	727.60	2,064.96	2,011.59	53.37	38.691		
13,000.00	12,939.27	11,316.00	10,952.16	39.18	40.50	-22.546	-761.71	727.60	2,095.73	2,042.35	53.38	39.264		
13,050.00	12,971.62	11,316.00	10,952.16	39.43	40.50	-21.265	-761.71	727.60	2,124.02	2,070.63	53.39	39.782		
13,100.00	13,000.52	11,340.69	10,953.31	39.65	40.61	-20.057	-786.37	727.26	2,149.46	2,095.89	53.57	40.125		
13,150.00	13,025.76	11,363.39	10,954.10	39.85	40.70	-19.099	-809.05	726.90	2,171.75	2,118.02	53.73	40.418		
13,200.00	13,047.14	11,395.00	10,954.78	40.02	40.84	-18.301	-840.65	726.29	2,190.79	2,136.85	53.95	40.610		
13,250.00	13,064.50	11,421.03	10,955.10	40.15	40.95	-17.704	-866.68	725.74	2,206.33	2,152.19	54.13	40.758		
13,300.00	13,077.71	11,461.42	10,955.46	40.26	41.14	-17.224	-907.05	724.81	2,218.09	2,163.69	54.40	40.773		
13,350.00	13,086.67	11,503.88	10,955.65	40.33	41.34	-16.897	-949.50	723.76	2,225.96	2,171.28	54.68	40.707		
13,400.00	13,091.30	11,549.96	10,955.73	40.38	41.56	-16.713	-995.56	722.51	2,229.79	2,174.80	54.99	40.547		
13,428.24	13,092.00	11,576.09	10,955.72	40.39	41.69	-16.673	-1,021.68	721.75	2,230.15	2,175.03	55.12	40.458		
13,500.00	13,092.00	11,642.10	10,955.70	40.40	42.04	-16.619	-1,087.67	720.20	2,229.50	2,174.07	55.43	40.221		
13,597.04	13,092.00	11,721.71	10,955.76	40.43	42.48	-16.590	-1,167.28	719.77	2,229.03	2,173.24	55.79	39.955		
13,600.00	13,092.00	11,723.93	10,955.75	40.43	42.49	-16.589	-1,169.50	719.77	2,229.03	2,173.23	55.80	39.948		
13,700.00	13,092.00	11,845.23	10,956.22	40.46	43.20	-16.593	-1,290.79	720.94	2,228.67	2,172.17	56.50	39.445		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Offset Des	sign: El	Campeon I	ed Com -	214H - OH	/ 68221	- Surveys (ŀ	1&P 474)						Offset Site Error:	0.00 usft
Survey Progr Refe	ram: 17	9-MWD+HDG Of f	M fset	Semi N	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,800.00	13,092.00	12,016.42	10,962.81	40.50	44.32	-16.666	-1,461.81	723.57	2,224.44	2,166.69	57.75	38.520		
13,900.00	13,092.00	12,100.89	10,966.44	40.53	44.90	-16.721	-1,546.18	725.54	2,220.71	2,162.42	58.29	38.096		
14,000.00	13,092.00	12,186.60	10,969.67	40.58	45.52	-16.781	-1,631.80	727.80	2,217.58	2,158.70	58.88	37.662		
14,100.00	13,092.00	12,269.70	10,972.23	40.63	46.15	-16.840	-1,714.82	730.21	2,215.19	2,155.71	59.48	37.245		
14,200.00	13,092.00 13,092.00	12,353.43	10,974.18	40.69	46.79 47.45	-16.894	-1,798.50	732.63	2,213.53	2,153.42	60.11	36.827		
14,300.00	13,092.00	12,436.00	10,975.34	40.76	47.45	-16.940	-1,881.03	734.92	2,212.70	2,151.95	60.75	36.422		
14,330.47	13,092.00	12,453.45	10,975.45	40.78	47.60	-16.948	-1,898.46	735.38	2,212.65	2,151.77	60.87	36.348		
14,400.00	13,092.00	12,497.48	10,975.34	40.85	47.96	-16.963	-1,942.48	736.44	2,213.11	2,151.92	61.20	36.163		
14,500.00	13,092.00	12,567.23	10,974.08	40.95	48.55	-16.973	-2,012.21	737.89	2,215.12	2,153.38	61.75	35.874		
14,600.00	13,092.00	12,707.22	10,971.05	41.10	49.76	-16.999	-2,152.12	741.21	2,217.92	2,154.84	63.08	35.158		
14,700.00	13,092.00	12,810.76	10,970.89	41.29	50.69	-17.030	-2,255.64	743.51	2,218.43	2,154.36	64.07	34.623		
14,800.00	13,092.00	12,900.96	10,970.53	41.57	51.52	-17.065	-2,345.80	745.90	2,219.30	2,154.36	64.94	34.172		
14,900.00	13,092.00	12,989.39	10,969.84	41.99	52.35	-17.104	-2,434.19	748.55	2,220.65	2,154.83	65.82	33.738		
15,000.00	13,092.00	13,111.18	10,968.73	42.60	53.53	-17.119	-2,555.96	750.68	2,221.74	2,154.62	67.13	33.098		
15,100.00	13,092.00	13,194.00	10,967.54	43.42	54.34	-17.102	-2,638.76	751.14	2,222.96	2,154.99	67.96	32.708		
15,200.00	13,092.00	13,257.93	10,965.86	44.43	54.99	-17.085	-2,702.67	751.60	2,225.32	2,156.74	68.58	32.448		
15,300.00	13,092.00	13,493.79	10,966.75	45.56	57.42	-17.136	-2,938.41	755.68	2,225.03	2,153.51	71.52	31.111		
15,400.00	13,092.00	13,587.55	10,970.10	46.76	58.42	-17.197	-3,032.08	758.00	2,222.07	2,149.44	72.62	30.597		
15,500.00	13,092.00	13,674.76	10,972.68	48.01	59.36	-17.241	-3,119.23	759.83	2,219.58	2,145.93	73.65	30.137		
15,600.00	13,092.00	13,761.00	10,974.86	49.30	60.30	-17.278	-3,205.43	761.46	2,217.47	2,142.79	74.67	29.695		
15,700.00	13,092.00	13,856.00	10,976.57	50.61	61.34	-17.306	-3,300.40	762.99	2,215.94	2,140.11	75.84	29.219		
15,800.00	13,092.00	13,944.81	10,977.54	51.93	62.33	-17.322	-3,389.20	764.18	2,214.99	2,138.07	76.92	28.795		
15,865.27	13,092.00	13,990.80	10,977.79	52.80	62.85	-17.325	-3,435.18	764.69	2,214.69	2,137.22	77.46	28.591		
15,900.00 16,000.00	13,092.00 13,092.00	14,014.45 14,088.60	10,977.71 10,976.63	53.27 54.61	63.11 63.95	-17.323 -17.301	-3,458.83 -3,532.98	764.86 765.01	2,214.77 2,215.92	2,137.04 2,137.31	77.73 78.61	28.492 28.190		
16,100.00	13,092.00	14,168.57	10,974.51	55.97	64.86	-17.258	-3,612.91	764.71	2,218.05	2,137.31	79.56	27.879		
16,200.00	13,092.00	14,349.91	10,971.05	57.33	66.96	-17.175	-3,794.19	764.15	2,220.07	2,138.04	82.03	27.064		
16,300.00	13,092.00	14,436.46	10,971.43	58.69	67.97	-17.152	-3,880.75	763.95	2,219.30	2,136.17	83.13	26.697		
16,400.00	13,092.00	14,527.95	10,971.36	60.06	69.04	-17.122	-3,972.24	763.65	2,219.00	2,134.68	84.31	26.319		
16,417.91	13,092.00	14,543.57	10,971.29	60.31	69.23	-17.116	-3,987.86	763.56	2,218.99	2,134.47	84.51	26.256		
16,500.00	13,092.00	14,613.00	10,970.73	61.44	70.05	-17.080	-4,057.28	762.93	2,219.18	2,133.79	85.39	25.987		
16,600.00	13,092.00	14,694.85	10,969.38	62.81	71.02	-17.025	-4,139.11	761.91	2,220.12	2,133.69	86.43	25.688		
16,700.00	13,092.00	14,771.86	10,967.31	64.20	71.95	-16.965	-4,216.08	760.86	2,222.01	2,134.63	87.38	25.429		
16,800.00	13,092.00	14,848.76	10,964.38	65.58	72.88	-16.898	-4,292.93	759.78	2,224.96	2,136.63	88.33	25.188		
16,900.00	13,092.00	14,954.67	10,959.49	66.97	74.17	-16.797	-4,398.70	758.18	2,228.69	2,138.95	89.74	24.836		
17,000.00	13,092.00	15,063.80	10,955.22	68.36	75.50	-16.676	-4,507.72	755.59	2,231.46	2,140.28	91.18	24.472		
17,100.00	13,092.00	15,219.56	10,951.73	69.75	77.41	-16.537	-4,663.40	752.46	2,232.62	2,139.23	93.39	23.906		
17,200.00	13,092.00	15,303.96	10,950.50	71.14	78.46	-16.470	-4,747.78	750.93	2,233.24	2,138.74	94.50	23.633		
17,300.00	13,092.00	15,383.54	10,948.62	72.54	79.45	-16.400	-4,827.32	749.39	2,234.69	2,139.16	95.53	23.393		
17,400.00	13,092.00	15,463.00	10,945.96	73.94	80.44	-16.325	-4,906.72	747.90	2,237.09	2,140.54	96.55	23.170		
17,500.00	13,092.00	15,601.86	10,942.54	75.34	82.18	-16.209	-5,045.52	745.51	2,238.57	2,140.03	98.54	22.717		
17,600.00	13,092.00	15,688.49	10,940.73	76.74	83.28	-16.145	-5,132.11	744.29	2,239.93	2,140.22	99.71	22.465		
17,700.00 17,800.00	13,092.00 13,092.00	15,773.96	10,938.38	78.14	84.36	-16.087	-5,217.55	743.42	2,242.01	2,141.15 2,142.37	100.86	22.229		
17,800.00	13,092.00	15,864.87 15,948.73	10,935.99 10,933.45	79.55 80.95	85.52 86.59	-16.068 -16.066	-5,308.42 -5,392.23	744.19 745.66	2,244.51 2,247.64	2,142.37	102.14 103.32	21.975 21.754		
18,000.00	13,092.00	16,031.00	10,930.59	82.36	87.64	-16.068	-5,474.43	747.35	2,251.32	2,146.85	104.47	21.549		
18,100.00	13,092.00	16,125.00	10,926.73	83.76	88.85	-16.067	-5,568.33	749.34	2,255.59	2,149.75	105.84	21.312		
18,200.00	13,092.00	16,217.09	10,922.37	85.17	90.04	-16.055	-5,660.30	750.98	2,260.36	2,153.20	107.16	21.093		
18,300.00	13,092.00	16,303.05	10,917.87	86.58	91.16	-16.033	-5,746.14	752.21	2,265.52	2,157.15	108.37	20.905		
18,400.00	13,092.00	16,477.09	10,910.87	87.99	93.42	-15.983	-5,920.02	753.81	2,269.39	2,158.27	111.12	20.422		
18,500.00	13,092.00	16,613.16	10,909.08	89.40	95.19	-15.971	-6,056.07	755.16	2,270.61	2,157.37	113.23	20.052		
18,600.00	13,092.00	16,704.56	10,908.50	90.81	96.39	-15.981	-6,147.45	756.62	2,271.39	2,156.79	114.60	19.820		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: El (Offset Site Error:	0.00 us
	rence	9-MWD+HDG Off	set		Major Axis		Offset Wellb	ore Centre		Rule Assi tance			Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
18,700.00	13,092.00	16,787.00	10,907.58	92.23	97.47	-15.993	-6,229.87	758.16	2,272.72	2,156.90	115.82	19.623		
8,800.00	13,092.00	16,860.27	10,907.38	93.64	98.43	-16.003	-6,303.11	759.69	2,275.03	2,158.16	116.87	19.466		
	13,092.00		10,906.07					761.71						
18,900.00		17,002.43		95.06	100.31	-15.998	-6,445.23		2,277.16	2,158.03	119.13	19.115		
19,000.00	13,092.00	17,137.31	10,902.57	96.47	102.09	-15.989	-6,580.09	762.82	2,277.56	2,156.31	121.25	18.784		
19,100.00	13,092.00	17,290.46	10,906.49	97.89	104.13	-16.052	-6,733.15	765.75	2,275.05	2,151.31	123.74	18.386		
19,200.00	13,092.00	17,384.37	10,909.39	99.30	105.38	-16.096	-6,826.99	767.62	2,272.38	2,147.15	125.22	18.146		
19,300.00	13,092.00	17,478.08	10,911.86	100.72	106.63	-16.132	-6,920.65	769.32	2,270.07	2,143.37	126.71	17.916		
19,400.00	13,092.00	17,577.07	10,914.35	102.14	107.96	-16.162	-7,019.61	770.80	2,267.80	2,139.52	128.28	17.679		
19,500.00	13,092.00	17,667.12	10,916.38	103.55	109.17	-16.190	-7,109.61	772.23	2,265.82	2,136.12	129.70	17.470		
19,600.00	13,092.00	17,751.64	10,917.77	104.97	110.30	-16.208	-7,194.12	773.38	2,264.36	2,133.34	131.02	17.283		
19,699.47	13,092.00	17,827.00	10,918.11	106.38	111.31	-16.206	-7,269.48	773.91	2,263.84	2,131.69	132.15	17.131		
19,700.00	13,092.00	17,827.00	10,918.11	106.39	111.31	-16.206	-7,269.48	773.91	2,263.84	2,131.69	132.15	17.131		
19,800.00	13,092.00	17,909.71	10,917.58	107.81	112.42	-16.188	-7,352.18	774.12	2,264.26	2,130.87	133.39	16.975		
19,900.00	13,092.00	18,002.23	10,916.39	109.23	113.66	-16.159	-7,444.69	774.15	2,265.24	2,130.45	134.79	16.806		
20,000.00	13,092.00	18,106.84	10,915.02	110.65	115.07	-16.130	-7,549.29	774.37	2,266.29	2,129.89	136.40	16.615		
20,100.00	13,092.00	18,201.67	10,913.93	112.07	116.35	-16.116	-7,644.12	775.01	2,267.31	2,129.44	137.87	16.446		
20,200.00	13,092.00	18,275.78	10,912.55	113.49	117.35	-16.100	-7,718.21	775.46	2,269.01	2,130.06	138.95	16.330		
20,300.00	13,092.00	18,409.45	10,909.95	114.91	119.16	-16.080	-7,851.85	776.67	2,270.97	2,129.86	141.11	16.093		
20,400.00	13,092.00	18,498.37	10,909.93	116.34	120.37	-16.087	-7,940.75	778.15	2,272.26	2,129.76	142.50	15.945		
20,500.00	13,092.00 13,092.00	18,674.37 18,778.85	10,909.81	117.76 119.18	122.76 124.18	-16.133 -16.165	-8,116.70	781.46 783.02	2,272.13	2,126.66 2,122.74	145.47 147.18	15.619 15.423		
20,600.00	13,092.00	10,770.00	10,912.38	119.10	124.10	-10.100	-8,221.15	703.02	2,269.92	2,122.74	147.10	15.425		
20,680.33	13,092.00	18,808.00	10,913.10	120.32	124.58	-16.173	-8,250.28	783.43	2,268.68	2,121.10	147.59	15.372		
20,700.00	13,092.00	18,808.00	10,913.10	120.60	124.58	-16.173	-8,250.28	783.43	2,268.77	2,121.22	147.55	15.376		
20,800.00	13,092.00	18,808.00	10,913.10	122.03	124.58	-16.173	-8,250.28	783.43	2,271.84	2,124.60	147.24	15.430		
20,900.00	13,092.00	18,808.00	10,913.10	123.45	124.58	-16.173	-8,250.28	783.43	2,279.29	2,132.56	146.74	15.533		
21,000.00	13,092.00	18,808.00	10,913.10	124.87	124.58	-16.173	-8,250.28	783.43	2,291.10	2,145.05	146.05	15.687		
21,100.00	13,092.00	18,808.00	10,913.10	126.30	124.58	-16.173	-8,250.28	783.43	2,307.17	2,161.99	145.18	15.891		
21,200.00	13,092.00	18,808.00	10,913.10	127.72	124.58	-16.173	-8,250.28	783.43	2,327.44	2,183.28	144.16	16.145		
21,300.00	13,092.00	18,808.00	10,913.10	129.15	124.58	-16.173	-8,250.28	783.43	2,351.79	2,208.79	143.00	16.446		
21,400.00	13,092.00	18,808.00	10,913.10	130.57	124.58	-16.173	-8,250.28	783.43	2,380.10	2,238.39	141.71	16.796		
21,500.00	13,092.00	18,808.00	10,913.10	132.00	124.58	-16.173	-8,250.28	783.43	2,412.22	2,271.90	140.31	17.192		
21,600.00	13,092.00	18,808.00	10,913.10	133.42	124.58	-16.173	-8,250.28	783.43	2,448.01	2,309.17	138.83	17.633		
21,700.00	13,092.00	18,808.00	10,913.10	134.85	124.58	-16.173	-8,250.28	783.43	2,446.01	2,350.02	137.28	18.118		
	13,092.00	18,808.00	10,913.10	134.85	124.58	-16.173 -16.173		783.43 783.43	2,487.30	2,350.02	137.28			
21,800.00							-8,250.28					18.646		
21,900.00	13,092.00	18,808.00	10,913.10	137.70	124.58	-16.173	-8,250.28	783.43	2,575.76	2,441.71	134.05	19.215		
22,000.00	13,092.00	18,808.00	10,913.10	139.12	124.58	-16.173	-8,250.28	783.43	2,624.59	2,492.20	132.39	19.824		
22,100.00	13,092.00	18,808.00	10,913.10	140.55	124.58	-16.173	-8,250.28	783.43	2,676.27	2,545.53	130.74	20.470		
22,200.00	13,092.00	18,808.00	10,913.10	141.98	124.58	-16.173	-8,250.28	783.43	2,730.63	2,601.54	129.09	21.153		
22,300.00	13,092.00	18,808.00	10,913.10	143.40	124.58	-16.173	-8,250.28	783.43	2,787.52	2,660.06	127.46	21.869		
22,400.00	13,092.00	18,808.00	10,913.10	144.83	124.58	-16.173	-8,250.28	783.43	2,846.79	2,720.93	125.86	22.618		
22,500.00	13,092.00	18,808.00	10,913.10	146.26	124.58	-16.173	-8,250.28	783.43	2,908.29	2,783.99	124.30	23.398		
22,600.00	13,092.00	18,808.00	10,913.10	147.69	124.58	-16.173	-8,250.28	783.43	2,971.88	2,849.11	122.77	24.207		
22,700.00	13,092.00	18,808.00	10,913.10	149.11	124.58	-16.173	-8,250.28	783.43	3,037.44	2,916.14	121.29	25.042		
22,728.24	13,092.00	18,808.00	10,913.10	149.52	124.58	-16.173	-8,250.28	783.43	3,056.29	2,935.40	120.88	25.283		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: RKB @ 32
MD Reference: RKB @ 32

North Reference: Gri

Survey Calculation Method: Minimular Output errors are at 2.00 si Database: USA C

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma USA Compass Reference Datum

													Offset Site Error:	0.00 usf
Survey Progr Refe	ram: 17 rence	6-MWD+HDGI Off		Semi N	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	2.00	1.00	1.00	90.620	-14.64	1,352.15	1,352.24					
100.00	100.00	99.15	101.15	1.08	1.01	90.631	-14.89	1,352.11	1,352.19	1,350.10	2.10	645.280		
200.00	200.00	199.51	201.51	1.60	1.06	90.663	-15.64	1,351.98	1,352.07	1,349.41	2.66	508.489		
268.23	268.23	266.24	268.23	1.87	1.16	90.691	-16.30	1,351.93	1,352.03	1,349.00	3.04	445.221		
300.00	300.00	297.30	299.30	2.01	1.22	90.705	-16.63	1,351.94	1,352.04	1,348.81	3.23	418.282		
400.00	400.00	392.63	394.62	2.35	1.45	90.752	-17.74	1,352.11	1,352.24	1,348.44	3.80	355.919		
500.00	500.00	488.66	490.64	2.65	1.71	90.795	-18.77	1,352.64	1,352.80	1,348.44	4.36	309.955		
600.00	600.00	591.10	593.07	2.93	2.02	90.831	-19.64	1,353.29	1,353.45	1,348.50	4.94	273.701		
700.00	700.00	690.88	692.85	3.18	2.33	90.870	-20.56	1,353.78	1,353.96	1,348.44	5.51	245.581		
800.00	800.00	784.97	786.93	3.41	2.64	90.896	-21.18	1,354.47	1,354.70	1,348.65	6.06	223.726		
900.00	900.00	889.16	891.11	3.64	2.99	90.936	-22.14	1,355.32	1,355.53	1,348.90	6.63	204.600		
1,000.00	1,000.00	995.31	997.26	3.85	3.35	90.979	-23.17	1,355.71	1,355.91	1,348.72	7.20	188.396		
1,100.00	1,100.00	1,095.03	1,096.98	4.05	3.69	91.018	-24.09	1,355.87	1,356.09	1,348.35	7.74	175.175		
1,200.00	1,200.00	1,190.96	1,192.90	4.24	4.03	91.061	-25.13	1,356.20	1,356.45	1,348.19	8.27	164.075		
1,300.00	1,300.00	1,284.47	1,286.40	4.43	4.35	91.119	-26.50	1,356.86	1,357.18	1,348.40	8.78	154.580		
1,400.00	1,400.00	1,380.63	1,382.53	4.61	4.69	91.199	-28.41	1,358.01	1,358.42	1,349.12	9.30	146.111		
1,500.00	1,500.00	1,481.73	1,483.60	4.78	5.05	91.290	-30.60	1,359.21	1,359.66	1,349.83	9.83	138.342		
1,600.00	1,599.98	1,583.97	1,585.81	4.98	5.41	-78.661	-32.85	1,360.33	1,360.46	1,350.15	10.31	131.985		
1,620.70	1,620.67	1,605.34	1,607.17	4.99	5.48	-78.674	-33.32	1,360.54	1,360.51	1,350.13	10.38	131.008		
1,700.00	1,699.89	1,688.18	1,689.99	5.07	5.78	-78.743	-35.13	1,361.22	1,360.55	1,349.81	10.74	126.677		
1,800.00	1,799.81	1,790.34	1,792.12	5.23	6.14	-78.832	-37.25	1,361.81	1,360.35	1,349.13	11.23	121.182		
1,900.00	1,899.72	1,887.83	1,889.60	5.41	6.49	-78.922	-39.16	1,362.39	1,360.17	1,348.47	11.70	116.238		
2,000.00	1,999.63	1,999.12	2,000.85	5.60	6.88	-79.020	-41.45	1,362.79	1,359.77	1,347.54	12.23	111.220		
2,100.00	2,099.54	2,100.30	2,102.02	5.80	7.24	-79.097	-43.81	1,362.60	1,358.82	1,346.11	12.71	106.879		
2,200.00	2,199.45	2,197.56	2,199.25	6.02	7.59	-79.168	-46.15	1,362.56	1,358.01	1,344.82	13.19	102.976		
2,300.00	2,299.36	2,310.14	2,311.78	6.24	7.99	-79.237	-49.15	1,362.01	1,356.77	1,343.06	13.71	98.933		
2,400.00	2,399.27	2,415.17	2,416.75	6.47	8.36	-79.286	-52.32	1,360.65	1,354.73	1,340.52	14.21	95.313		
2,500.00	2,499.18	2,510.42	2,511.96	6.72	8.70	-79.333	-55.14	1,359.55	1,352.82	1,338.14	14.68	92.160		
2,600.00	2,599.10	2,603.36	2,604.85	6.96	9.03	-79.381	-57.85	1,358.84	1,351.32	1,336.18	15.14	89.270		
2,700.00	2,699.01	2,693.61	2,695.07	7.22	9.35	-79.432	-60.38	1,358.75	1,350.47	1,334.88	15.59	86.641		
2,800.00	2,798.92	2,791.05	2,792.48	7.48	9.70	-79.497	-62.90	1,359.28	1,350.26	1,334.20	16.06	84.065		
2,900.00	2,898.83	2,895.51	2,896.89	7.74	10.07	-79.564	-65.65	1,359.46	1,349.69	1,333.13	16.56	81.492		
3,000.00	2,998.74	3,001.03	3,002.38	8.01	10.45	-79.622	-68.66	1,359.50	1,348.99	1,331.92	17.07	79.045		
3,100.00	3,098.65	3,109.10	3,110.37	8.28	10.84	-79.644	-72.60	1,358.82	1,347.62	1,330.04	17.58	76.662		
3,200.00	3,198.56	3,202.14	3,203.34	8.56	11.18	-79.652	-76.28	1,358.13	1,346.15	1,328.11	18.04	74.624		
3,300.00	3,298.47	3,291.91	3,293.03	8.84	11.50	-79.664	-79.71	1,358.13	1,345.42	1,326.93	18.49	72.775		
3,400.00	3,398.39	3,399.75	3,400.80	9.13	11.89	-79.679	-83.82	1,358.43	1,344.98	1,325.98	19.00	70.785		
3,500.00	3,498.30	3,530.98	3,531.91	9.41	12.36	-79.688	-89.04	1,356.60	1,342.84	1,323.25	19.59	68.547		
3,600.00	3,598.21	3,640.40	3,641.22	9.70	12.75	-79.726	-92.67	1,353.31	1,339.08	1,318.99	20.10	66.627		
3,700.00	3,698.12	3,738.09	3,738.79	9.99	13.09	-79.744	-96.29	1,350.19	1,335.16	1,314.59	20.57	64.911		
3,800.00	3,798.03	3,834.19	3,834.77	10.29	13.44	-79.747	-100.18	1,347.40	1,331.52	1,310.49	21.04	63.293		
3,900.00	3,897.94	3,924.54	3,925.01	10.58	13.76	-79.740	-104.07	1,345.08	1,328.24	1,306.75	21.49	61.812		
4,000.00	3,997.85	4,008.88	4,009.27	10.88	14.06	-79.734	-107.70	1,343.88	1,326.08	1,304.16	21.92	60.499		
4,100.00	4,097.76	4,099.46	4,099.75	11.18	14.39	-79.728	-111.59	1,343.48	1,324.90	1,302.53	22.37	59.224		
4,200.00	4,197.68	4,197.74	4,197.95	11.48	14.75	-79.729	-115.65	1,343.37	1,324.05	1,301.20	22.85	57.944		
4,300.00	4,297.59	4,295.21	4,295.36	11.78	15.10	-79.743	-119.36	1,343.42	1,323.37	1,300.05	23.33	56.734		
4,400.00	4,397.50	4,391.40	4,391.48	12.08	15.45	-79.759	-123.00	1,343.68	1,322.90	1,299.11	23.80	55.592		
4,461.09	4,458.53	4,448.60	4,448.63	12.27	15.66	-79.765	-125.21	1,344.01	1,322.81	1,298.73	24.08	54.938		
4,500.00	4,497.41	4,484.42	4,484.42	12.39	15.79	-79.770	-126.59	1,344.32	1,322.86	1,298.60	24.25	54.540		
4,600.00	4,597.32	4,582.01	4,581.94	12.69	16.14	-79.796	-130.04	1,345.51	1,323.34	1,298.61	24.73	53.513		
4,700.00	4,697.23	4,693.50	4,693.35	13.00	16.54	-79.813	-134.28	1,346.30	1,323.32	1,298.06	25.26	52.397		
4,800.00	4,797.14	4,790.71	4,790.48	13.31	16.89	-79.813	-138.31	1,346.46	1,322.76	1,297.03	25.73	51.410		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

urvey Progr	ram: 17	'6-MWD+HDGI	М							Rule Assi	aned:		Offset Well Error:	1.00 ust
Refe	rence	Offs	set		laior Axis		Offset Wellb	ore Centre		ance	_			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,826.02	4,823.13	4,813.54	4,813.28	13.39	16.98	-79.815	-139.21	1,346.60	1,322.73	1,296.88	25.84	51.181		
4,900.00	4,897.05	4,877.01	4,876.71	13.62	17.21	-79.821	-141.69	1,347.31	1,323.01	1,296.85	26.16	50.569		
5,000.00	4,996.97	4,965.23	4,964.82	13.92	17.52	-79.809	-145.64	1,349.12	1,324.32	1,297.72	26.60	49.784		
5,100.00	5,096.88	5,090.94	5,090.34	14.23	17.98	-79.758	-152.04	1,351.68	1,325.79	1,298.60	27.19	48.766		
5,200.00	5,196.79	5,224.07	5,223.33	14.55	18.46	-79.748	-157.78	1,350.31	1,323.93	1,296.15	27.79	47.646		
5,300.00	5,296.70	5,322.88	5,322.05	14.86	18.82	-79.759	-161.61	1,348.34	1,321.21	1,292.94	28.26	46.745		
5,400.00	5,396.61	5,420.17	5,419.25	15.17	19.17	-79.773	-165.32	1,346.56	1,318.65	1,289.91	28.74	45.887		
5,500.00	5,496.52	5,518.68	5,517.67	15.48	19.52	-79.786	-169.09	1,344.91	1,316.24	1,287.03	29.21	45.056		
5,600.00	5,596.43	5,617.76	5,616.67	15.79	19.88	-79.799	-172.90	1,343.34	1,313.93	1,284.23	29.69	44.251		
5,700.00	5,696.34	5,716.95	5,715.78	16.11	20.24	-79.813	-176.68	1,341.82	1,311.65	1,281.48	30.17	43.473		
5,800.00	5,796.26	5,815.56	5,814.31	16.42	20.59	-79.835	-180.27	1,340.41	1,309.49	1,278.84	30.65	42.726		
5,900.00	5,896.17	5,910.51	5,909.20	16.74	20.94	-79.868	-183.43	1,339.18	1,307.46	1,276.35	31.11	42.026		
6,000.00	5,996.08	5,999.85	5,998.49	17.05	21.26	-79.904	-186.33	1,338.64	1,306.13	1,274.58	31.55	41.394		
6,100.00	6,095.99	6,092.88	6,091.47	17.37	21.60	-79.934	-189.50	1,338.81	1,305.57	1,273.56	32.01	40.787		
6,200.00	6,195.90	6,192.21	6,190.74	17.68	21.96	-79.969	-192.83	1,339.14	1,305.17	1,272.68	32.49	40.174		
6,300.00	6,295.81	6,289.12	6,287.59	18.00	22.31	-80.006	-195.99	1,339.64	1,304.95	1,272.00	32.96	39.596		
6,349.60	6,345.37	6,337.40	6,335.85	18.16	22.48	-80.026	-197.55	1,339.97	1,304.93	1,271.74	33.19	39.317		
6,400.00	6,395.72	6,386.69	6,385.11	18.32	22.66	-80.046	-199.14	1,340.35	1,304.95	1,271.52	33.43	39.038		
6,500.00	6,495.63	6,485.13	6,483.50	18.63	23.01	-80.086	-202.30	1,341.23	1,305.11	1,271.21	33.90	38.498		
6,600.00	6,595.55	6,584.37	6,582.69	18.95	23.37	-80.136	-205.28	1,342.19	1,305.34	1,270.97	34.38	37.973		
6,700.00	6,695.46	6,683.27	6,681.54	19.27	23.73	-80.197	-208.00	1,343.20	1,305.64	1,270.80	34.85	37.467		
6,800.00	6,795.37	6,783.87	6,782.11	19.59	24.09	-80.273	-210.43	1,344.29	1,306.00	1,270.68	35.32	36.972		
6,900.00	6,895.28	6,883.96	6,882.17	19.91	24.45	-80.357	-212.67	1,345.29	1,306.28	1,270.48	35.80	36.491		
7,000.00	6,995.19	6,992.42	6,990.61	20.23	24.83	-80.462	-214.77	1,346.13	1,306.35	1,270.05	36.30	35.989		
7,100.00	7,095.10	7,097.01	7,095.18	20.54	25.21	-80.592	-216.17	1,346.30	1,305.79	1,269.01	36.78	35.499		
7,200.00	7,195.01	7,195.00	7,193.17	20.86	25.56	-80.725	-217.21	1,346.35	1,305.15	1,267.91	37.24	35.043		
7,300.00	7,294.92	7,290.00	7,288.16	21.18	25.90	-80.854	-218.20	1,346.64	1,304.78	1,267.08	37.69	34.616		
7,399.86	7,394.70	7,387.93	7,386.09	21.50	26.25	-80.985	-219.29	1,347.22	1,304.69	1,266.54	38.15	34.199		
7,400.00	7,394.84	7,388.07	7,386.22	21.50	26.25	-80.985	-219.29	1,347.23	1,304.69	1,266.53	38.15	34.198		
7,500.00	7,494.75	7,486.08	7,484.22	21.82	26.60	-81.114	-220.42	1,347.97	1,304.76	1,266.16	38.61	33.796		
7,600.00	7,594.66	7,583.73	7,581.86	22.14	26.94	-81.241	-221.59	1,348.85	1,305.00	1,265.94	39.06	33.408		
7,700.00	7,694.57	7,679.78	7,677.90	22.46	27.29	-81.357	-222.90	1,350.02	1,305.54	1,266.03	39.51	33.042		
7,800.00	7,794.48	7,787.79	7,785.90	22.78	27.66	-81.510	-223.91	1,351.07	1,305.86	1,265.87	40.00	32.649		
7,900.00	7,894.39	7,890.49	7,888.59	23.10	28.01	-81.721	-223.36	1,351.54	1,305.72	1,265.28	40.44	32.288		
7,962.82	7,957.15	7,951.26	7,949.36	23.31	28.20	-81.855	-222.82	1,351.84	1,305.67	1,264.97	40.70	32.080		
8,000.00	7,994.30	7,987.23	7,985.33	23.42	28.32	-81.934	-222.52	1,352.06	1,305.69	1,264.83	40.85	31.960		
8,100.00	8,094.21	8,086.55	8,084.65	23.75	28.65	-82.147	-221.79	1,352.80	1,305.87	1,264.59	41.28	31.635		
8,200.00	8,194.13	8,189.87	8,187.96	24.07	28.99	-82.356	-221.79	1,353.40	1,305.91	1,264.19	41.72	31.300		
8,300.00	8,294.04	8,289.39	8,287.48	24.39	29.32	-82.550	-221.03	1,353.81	1,305.78	1,263.63	42.15	30.977		
8,316.12	8,310.14	8,304.95	8,303.04	24.44	29.37	-82.580	-220.97	1,353.89	1,305.77	1,263.55	42.22	30.927		
8,400.00	8,393.95	8,388.28	8,386.37	24.71	29.65	-82.750	-220.57	1,354.36	1,305.82	1,263.24	42.58	30.667		
8,500.00	8,493.86	8,487.62	8,485.70	25.03	29.97	-82.960	-219.90	1,354.91	1,305.88	1,262.87	43.01	30.364		
8,600.00	8,593.77	8,586.57	8,584.65	25.35	30.30	-83.170	-219.23	1,355.53	1,306.04	1,262.60	43.43	30.070		
8,700.00	8,693.68	8,684.74	8,682.82	25.67	30.63	-83.368	-218.78	1,356.25	1,306.30	1,262.44	43.86	29.782		
8,800.00	8,793.59	8,781.81	8,779.88	26.00	30.96	-83.558	-218.44	1,357.14	1,306.75	1,262.46	44.29	29.505		
8,900.00	8,893.50	8,880.07	8,878.14	26.32	31.29	-83.747	-218.16	1,358.23	1,307.41	1,262.69	44.72	29.233		
9,000.00	8,993.42	8,979.50	8,977.56	26.64	31.63	-83.939	-217.88	1,359.40	1,308.16	1,263.00	45.16	28.966		
9,100.00	9,093.33	9,078.56	9,076.61	26.96	31.97	-84.132	-217.54	1,360.61	1,308.96	1,263.37	45.60	28.706		
9,200.00	9,193.24	9,192.07	9,190.12	27.29	32.36	-84.354	-217.15	1,361.58	1,309.44	1,263.36	46.08	28.415		
9,300.00	9,293.15	9,312.69	9,310.72	27.61	32.76	-84.598	-216.72	1,360.33	1,307.93	1,261.35	46.58	28.078		
9,400.00	9,393.06	9,402.74	9,400.78	27.93	33.06	-84.773	-216.58	1,359.48	1,306.61	1,259.62	46.99	27.809		
	9,492.97	9,496.18	9,494.21	28.25	33.38	-84.959	-216.29	1,359.16	1,305.91	1,258.51	47.40	27.551		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Survey Progi	ram: 17	6-MWD+HDG	M							Rule Assi	anod:		Offset Site Error: Offset Well Error:	1.00 usf
Refe	rence	Off	set		lajor Axis		Offset Wellb	ore Centre		ance	=			1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,600.00	9,592.88	9,594.72	9,592.75	28.58	33.72	-85.120	-216.73	1,359.24	1,305.59	1,257.74	47.84	27.288		
9,700.00	9,692.79	9,696.40	9,694.42	28.90	34.09	-85.257	-217.90	1,359.24	1,305.12	1,256.82	48.31	27.016		
9,800.00	9,792.71	9,795.04	9,793.06	29.22	34.44	-85.417	-218.40	1,359.20	1,304.70	1,255.94	48.76	26.757		
9,900.00	9,892.62	9,891.69	9,889.71	29.55	34.78	-85.587	-218.57	1,359.29	1,304.44	1,255.23	49.21	26.510		
9,927.97	9,920.56	9,918.36	9,916.38	29.64	34.88	-85.632	-218.65	1,359.37	1,304.43	1,255.10	49.33	26.444		
10,000.00	9,992.53	9,987.69	9,985.71	29.87	35.12	-85.747	-218.92	1,359.69	1,304.51	1,254.86	49.65	26.276		
10,100.00	10,092.44	10,094.49	10,092.51	30.19	35.50	-85.924	-219.33	1,360.17	1,304.62	1,254.49	50.12	26.028		
10,200.00	10,192.35	10,228.89	10,226.88	30.52	35.98	-86.106	-221.01	1,358.74	1,303.18	1,252.49	50.69	25.706		
10,300.00	10,292.26	10,360.44	10,358.28	30.84	36.44	-86.203	-224.88	1,353.84	1,298.83	1,247.58	51.25	25.342		
10,400.00	10,392.17	10,456.09	10,453.75	31.16	36.78	-86.242	-228.54	1,349.16	1,293.29	1,241.59	51.70	25.016		
10,500.00	10,492.08	10,544.68	10,542.23	31.49	37.09	-86.310	-231.11	1,345.72	1,288.82	1,236.70	52.12	24.728		
10,600.00	10,592.00	10,634.22	10,631.68	31.81	37.40	-86.384	-233.58	1,342.72	1,284.93	1,232.39	52.54	24.455		
10,700.00	10,691.91	10,731.24	10,728.67	32.13	37.73	-86.558	-234.04	1,340.23	1,282.06	1,229.08	52.98	24.201		
10,800.00	10,791.82	10,859.56	10,856.89	32.46	38.17	-86.836	-233.82	1,335.13	1,277.90	1,224.40	53.50	23.886		
10,900.00	10,891.73	10,947.44	10,944.66	32.78	38.47	-87.013	-234.09	1,330.85	1,272.82	1,218.91	53.90	23.613		
11,000.00	10,991.64	11,037.99	11,035.15	33.11	38.78	-87.173	-234.76	1,327.57	1,268.91	1,214.59	54.32	23.360		
11,100.00	11,091.55	11,134.75	11,131.85	33.43	39.12	-87.347	-235.38	1,324.45	1,265.43	1,210.67	54.75	23.112		
11,200.00	11,191.46	11,209.76	11,206.84	33.75	39.37	-87.494	-235.55	1,322.57	1,262.79	1,207.68	55.11	22.913		
11,244.41	11,235.83	11,239.37	11,236.45	33.90	39.47	-87.554	-235.49	1,322.37	1,262.43	1,207.17	55.26	22.846		
11,300.00	11,291.37	11,286.72	11,283.80	34.08	39.63	-87.653	-235.28	1,322.57	1,262.58	1,207.11	55.47	22.761		
11,400.00	11,391.29	11,392.71	11,389.79	34.40	40.00	-87.862	-235.05	1,323.11	1,262.96	1,207.03	55.94	22.579		
11,500.00	11,491.20	11,504.78	11,501.85	34.73	40.39	-88.029	-236.17	1,322.73	1,262.33	1,205.89	56.43	22.369		
11,600.00	11,591.11	11,614.31	11,611.36	35.05	40.78	-88.190	-237.39	1,321.59	1,261.00	1,204.08	56.92	22.154		
11,700.00	11,691.02	11,708.06	11,705.10	35.38	41.10	-88.392	-237.10	1,320.15	1,259.40	1,202.06	57.34	21.964		
11,800.00	11,790.93	11,812.01	11,809.05	35.70	41.45	-88.623	-236.59	1,318.84	1,258.12	1,200.33	57.79	21.769		
11,900.00	11,890.84	11,902.99	11,900.02	36.03	41.76	-88.802	-236.66	1,317.80	1,256.89	1,198.67	58.21	21.591		
11,907.54	11,898.38	11,909.74	11,906.77	36.05	41.78	-88.815	-236.67	1,317.75	1,256.83	1,198.58	58.24	21.578		
12,000.00	11,990.80	11,995.26	11,992.29	36.33	42.07	-88.921	-236.43	1,317.38	1,256.42	1,197.80	58.62	21.434		
12,028.24	12,019.04	12,023.34	12,020.36	36.36	42.17	81.048	-236.18	1,317.32	1,256.40	1,197.68	58.72	21.398		
12,100.00	12,090.80	12,098.47	12,095.48	36.36	42.42	80.990	-234.96	1,316.90	1,256.19	1,197.23	58.96	21.307		
12,189.76	12,180.56	12,183.57	12,180.56	36.36	42.71	80.907	-233.21	1,316.40	1,255.95	1,196.71	59.24	21.199 CC		
12,200.00	12,190.80	12,192.71	12,189.70	36.36	42.74	80.910	-233.26	1,316.41	1,255.96	1,196.68	59.28	21.188 ES		
12,300.00	12,290.80	12,282.00	12,278.44	36.36	43.06	81.274	-241.07	1,318.10	1,256.48	1,196.87	59.61	21.078		
12,400.00	12,390.80	12,344.69	12,337.47	36.37	43.29	82.217	-261.36	1,322.49	1,258.98	1,199.09	59.89	21.022		
12,500.00	12,490.80	12,394.67	12,382.05	36.37	43.48	83.236	-283.22	1,328.06	1,265.29	1,205.14	60.15	21.036		
12,528.24	12,519.04	12,406.57	12,392.31	36.37	43.52	83.506	-289.02	1,329.69	1,267.91	1,207.70	60.21	21.058		
12,550.00	12,540.79	12,424.00	12,407.05	36.40	43.59	-95.312	-297.94	1,332.33	1,270.30	1,209.99	60.31	21.062		
12,600.00	12,590.61	12,424.00	12,407.05	36.63	43.59	-94.648	-297.94	1,332.33	1,276.91	1,216.54	60.37	21.153		
12,650.00	12,639.89	12,450.10	12,428.44	36.95	43.68	-93.311	-312.15	1,336.94	1,285.04	1,224.47	60.57	21.215		
12,700.00	12,688.24	12,472.00	12,445.75	37.29	43.76	-91.959	-324.77	1,341.50	1,294.85	1,234.08	60.77	21.306		
	12,735.30	12,485.47	12,456.12	37.62	43.81	-90.638	-332.80	1,344.58	1,305.98	1,245.04	60.94	21.430		
12,800.00	12,780.72	12,519.00	12,481.29	37.96	43.94	-89.027	-353.29	1,352.99	1,318.45	1,257.22	61.23	21.532		
12,850.00	12,824.15	12,519.00	12,481.29	38.29	43.94	-87.662	-353.29	1,352.99	1,331.62	1,270.25	61.37	21.699		
12,900.00	12,865.26	12,553.38	12,506.02	38.60	44.06	-86.035	-375.22	1,362.45	1,345.53	1,283.83	61.70	21.809		
12,950.00	12,903.73	12,688.93	12,593.08	38.90	44.58	-83.989	-473.30	1,395.67	1,358.34	1,295.69	62.64	21.684		
13,000.00	12,939.27	12,725.99	12,613.96	39.18	44.73	-82.650	-503.02	1,403.03	1,368.99	1,305.95	63.04	21.717		
13,050.00	12,971.62	12,755.00	12,629.35	39.43	44.85	-81.431	-526.86	1,409.08	1,379.84	1,316.44	63.40	21.765		
13,100.00	13,000.52	12,755.00	12,629.35	39.65	44.85	-80.277	-526.86	1,409.08	1,391.23	1,327.63	63.60	21.874		
13,150.00	13,025.76	12,779.81	12,641.41	39.85	44.95	-79.103	-547.74	1,414.88	1,402.76	1,338.76	64.00	21.919		
13,200.00	13,047.14	12,803.00	12,651.33	40.02	45.04	-77.959	-567.74	1,421.13	1,415.07	1,350.65	64.42	21.967		
13,250.00	13,064.50	12,803.00	12,651.33	40.15	45.04	-76.714	-567.74	1,421.13	1,427.44	1,362.67	64.77	22.039		
13,300.00	13,077.71	12,803.00	12,651.33	40.26	45.04	-75.404	-567.74	1,421.13	1,440.47	1,375.29	65.18	22.099		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	o.g			404H - OH									Offset Site Error:	0.00 usf
urvey Prog	ram: 17 erence	6-MWD+HDG	M set	Semi M	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,350.00	13,086.67	12,822.74	12,658.69	40.33	45.12	-74.303	-585.00	1,427.24	1,453.36	1,387.66	65.71	22.119		
13,400.00	13,091.30	12,850.00	12,667.16	40.38	45.23	-73.362	-608.93	1,437.16	1,467.25	1,400.97	66.28	22.137		
13,428.24	13,092.00	12,850.00	12,667.16	40.39	45.23	-72.642	-608.93	1,437.16	1,474.52	1,407.95	66.57	22.150		
13,500.00	13,092.00	12,850.00	12,667.16	40.40	45.23	-72.642	-608.93	1,437.16	1,494.75	1,427.39	67.37	22.189		
13,600.00	13,092.00	12,898.00	12,678.88	40.43	45.42	-73.315	-651.14	1,456.76	1,527.30	1,458.70	68.61	22.261		
13,700.00	13,092.00	13,492.00	12,691.95	40.46	48.22	-74.995	-1,222.82	1,576.36	1,545.63	1,472.97	72.66	21.272		
13,800.00	13,092.00	13,492.00	12,691.95	40.50	48.22	-74.995	-1,222.82	1,576.36	1,551.39	1,478.03	73.36	21.148		
13,900.00	13,092.00	13,580.54	12,688.13	40.53	48.75	-74.931	-1,310.88	1,584.76	1,560.75	1,485.82	74.93	20.830		
14,000.00	13,092.00	13,746.14	12,686.11	40.58	49.80	-74.976	-1,475.84	1,598.66	1,568.19	1,490.92	77.28	20.293		
14,100.00	13,092.00	13,866.00	12,686.05	40.63	50.59	-75.024	-1,595.53	1,605.03	1,572.28	1,493.01	79.27	19.834		
14,200.00	13,092.00	13,989.51	12,685.91	40.69	51.47	-75.055	-1,718.93	1,610.08	1,575.24	1,493.87	81.37	19.359		
14,300.00	13,092.00	14,155.34	12,685.81	40.76	52.70	-75.087	-1,884.64	1,615.47	1,578.52	1,494.54	83.98	18.797		
14,400.00	13,092.00	14,245.00	12,684.41	40.85	53.38	-75.021	-1,974.28	1,614.52	1,577.01	1,491.21	85.80	18.379		
14,500.00	13,092.00	14,339.00	12,683.01	40.95	54.13	-74.962	-2,068.27	1,614.42	1,576.37	1,488.65	87.72	17.971		
14,506.36	13,092.00	14,339.00	12,683.01	40.96	54.13	-74.962	-2,068.27	1,614.42	1,576.35	1,488.58	87.77	17.959		
14,600.00	13,092.00	14,437.06	12,681.53	41.10	54.93	-74.907	-2,166.31	1,614.99	1,576.38	1,486.67	89.71	17.571		
14,636.66	13,092.00	14,469.08	12,681.09	41.16	55.21	-74.890	-2,198.33	1,615.14	1,576.34	1,485.93	90.42	17.434		
14,700.00	13,092.00	14,528.00	12,681.14	41.29	55.71	-74.893	-2,257.24	1,615.86	1,576.48	1,484.80	91.67	17.197		
14,800.00	13,092.00	14,692.16	12,681.10	41.57	57.12	-74.836	-2,421.31	1,611.59	1,571.96	1,477.50	94.47	16.641		
14,900.00	13,092.00	14,842.78	12,682.30	41.99	58.46	-74.786	-2,571.67	1,603.41	1,565.09	1,467.98	97.12	16.116		
15,000.00	13,092.00	14,905.00	12,683.85	42.60	59.02	-74.817	-2,633.84	1,601.55	1,560.11	1,461.25	98.87	15.780		
15,072.01	13,092.00	14,905.00	12,683.85	43.17	59.02	-74.817	-2,633.84	1,601.55	1,558.45	1,458.82	99.63	15.643		
15,100.00	13,092.00	14,905.00	12,683.85	43.42	59.02	-74.817	-2,633.84	1,601.55	1,558.70	1,458.79	99.91	15.601		
15,200.00	13,092.00	15,217.20	12,691.74	44.43	62.03	-75.035	-2,945.16	1,597.97	1,560.85	1,456.41	104.44	14.945		
15,300.00 15,400.00	13,092.00 13,092.00	15,282.00 15,331.99	12,693.91 12,695.47	45.56 46.76	62.65 63.15	-75.051 -75.072	-3,009.66 -3,059.52	1,592.11 1,588.97	1,550.28 1,542.41	1,443.95 1,434.32	106.33 108.09	14.580 14.269		
15,500.00	13,092.00	15,376.00	12,696.63	48.01	63.59	-75.095	-3,103.49	1,587.42	1,537.68	1,427.91	109.77	14.008		
15,586.71	13,092.00	15,421.22	12,697.94	49.13	64.06	-75.137	-3,148.69	1,587.34	1,536.28	1,424.98	111.30	13.803		
15,600.00 15,700.00	13,092.00 13,092.00	15,427.11 15,471.81	12,698.14 12,699.90	49.30 50.61	64.12 64.58	-75.145 -75.223	-3,154.57 -3,199.19	1,587.46 1,589.42	1,536.31 1,538.61	1,424.80 1,425.46	111.52 113.15	13.776 13.598		
15,800.00	13,092.00	15,565.00	12,700.50	51.93	65.58	-75.223	-3,199.19	1,594.33	1,542.63	1,427.20	115.43	13.364		
45 000 00	40,000,00	45 000 70	40 000 74	50.07	00.05	75.050	0.000.07	4 500 05	4 5 4 7 0 4	4 400 44	447.40	40.405		
15,900.00 16,000.00	13,092.00 13,092.00	15,636.78 15,715.25	12,698.71 12,697.27	53.27 54.61	66.35 67.21	-75.250 -75.250	-3,363.87 -3,442.08	1,598.35 1,604.56	1,547.84 1,555.00	1,430.44 1,435.53	117.40 119.47	13.185 13.016		
16,100.00	13,092.00	15,821.92	12,695.80	55.97	68.39	-75.274	-3,548.34	1,613.77	1,562.78	1,440.80	121.99	12.811		
16,200.00	13,092.00	15,937.16	12,696.71	57.33	69.67	-75.383	-3,663.19	1,623.11	1,569.49	1,444.82	124.68	12.511		
16,300.00	13,092.00	16,120.12	12,701.17	58.69	71.75	-75.629	-3,845.71	1,634.57	1,574.76	1,446.40	128.36	12.269		
16,400.00	13,092.00	16,252.69	12,701.81	60.06	73.24	-75.647	-3,978.26	1,635.35	1,574.13	1,442.91	131.21	11.997		
16,500.00	13,092.00	16,336.06	12,701.81	61.44	74.19	-75.580	-4,061.61	1,635.18	1,574.13	1,442.91	133.45	11.791		
16,500.18	13,092.00	16,336.18	12,700.14	61.44	74.20	-75.580	-4,061.74	1,635.18	1,573.51	1,440.05	133.46	11.791		
16,600.00	13,092.00	16,414.00	12,700.07	62.81	75.09	-75.584	-4,139.53	1,636.68	1,574.42	1,438.77	135.65	11.607		
16,700.00	13,092.00	16,499.97	12,701.75	64.20	76.10	-75.664	-4,225.43	1,639.82	1,576.49	1,438.51	137.98	11.425		
16,800.00	13,092.00	16,642.66	12,701.70	65.58	77.77	-75.665	-4,368.08	1,641.45	1,576.35	1,435.32	141.03	11.177		
16,822.77	13,092.00	16,658.87	12,701.60	65.90	77.96	-75.660	-4,384.29	1,641.54	1,576.30	1,434.78	141.52	11.138		
16,900.00	13,092.00	16,720.77	12,701.66	66.97	78.69	-75.667	-4,446.18	1,642.59	1,576.80	1,433.53	143.27	11.006		
17,000.00	13,092.00	16,829.33	12,701.17	68.36	79.98	-75.657	-4,554.73	1,644.44	1,577.64	1,431.75	145.89	10.814		
17,100.00	13,092.00	16,920.37	12,701.37	69.75	81.07	-75.666	-4,645.76	1,645.54	1,577.87	1,429.56	148.31	10.639		
17,200.00	13,092.00	16,983.53	12,702.12	71.14	81.83	-75.707	-4,708.87	1,647.77	1,580.06	1,429.70	150.36	10.509		
17,300.00	13,092.00	17,095.94	12,702.52	72.54	83.20	-75.754	-4,821.18	1,652.58	1,583.21	1,430.10	153.11	10.340		
17,400.00	13,092.00	17,236.54	12,702.20	73.94	84.91	-75.754	-4,961.74	1,655.19	1,583.99	1,427.78	156.21	10.140		
17,500.00	13,092.00	17,428.60	12,699.65	75.34	87.24	-75.610	-5,153.70	1,650.92	1,581.39	1,421.72	159.67	9.904		
17,600.00	13,092.00	17,535.15	12,698.25	76.74	88.52	-75.493	-5,260.04	1,644.58	1,575.00	1,412.77	162.23	9.709		
17,700.00	13,092.00	17,585.47	12,697.28	78.14	89.14	-75.433	-5,310.29	1,642.17	1,570.12	1,405.81	164.31	9.556		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: El (Offset Site Error:	0.00 usf
Burvey Prog Refe	ram: 17	6-MWD+HDG Off		Semi N	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
17,800.00	13,092.00	17,643.00	12,696.56	79.55	89.85	-75.402	-5,367.81	1,642.14	1,568.99	1,402.60	166.39	9.430		
17,806.26	13,092.00	17,643.00	12,696.56	79.63	89.85	-75.402	-5,367.81	1,642.14	1,568.98	1,402.51	166.47	9.425		
17,900.00	13,092.00	17,676.36	12,696.17	80.95	90.27	-75.396	-5,401.15	1,643.33	1,571.07	1,403.04	168.04	9.350		
18,000.00	13,092.00	17,737.00	12,694.95	82.36	91.03	-75.383	-5,461.65	1,647.18	1,576.55	1,406.58	169.97	9.276		
18,100.00	13,092.00	17,875.07	12,693.24	83.76	92.79	-75.381	-5,599.49	1,654.82	1,581.13	1,407.91	173.23	9.127		
18,200.00	13,092.00	18,066.25	12,692.71	85.17	95.21	-75.390	-5,790.53	1,659.64	1,583.21	1,406.12	177.09	8.940		
18,300.00	13,092.00	18,174.74	12,690.74	86.58	96.58	-75.295	-5,898.98	1,657.84	1,581.13	1,401.39	179.74	8.797		
18,400.00	13,092.00	18,318.44	12,691.11	87.99	98.39	-75.257	-6,042.61	1,653.70	1,577.34	1,394.59	182.74	8.631		
18,500.00	13,092.00	18,399.00	12,691.95	89.40	99.40	-75.256	-6,123.13	1,651.22	1,573.09	1,387.91	185.18	8.495		
18,600.00	13,092.00	18,475.08	12,691.78	90.81	100.37	-75.229	-6,199.18	1,649.70	1,570.21	1,382.65	187.55	8.372		
18,700.00	13,092.00	18,562.11	12,689.44	92.23	101.49	-75.124	-6,286.17	1,648.14	1,568.23	1,378.25	189.98	8.255		
18,800.00	13,092.00	18,687.62	12,687.53	93.64	103.10	-75.026	-6,411.64	1,646.12	1,566.21	1,373.38	192.83	8.122		
18,900.00	13,092.00	18,758.45	12,687.92	95.06	104.01	-75.026	-6,482.46	1,645.32	1,564.02	1,368.86	195.15	8.014		
19,000.00	13,092.00	18,850.16	12,687.71	96.47	105.19	-75.010	-6,574.16	1,645.29	1,563.10	1,365.41	197.69	7.907		
19,052.16	13,092.00	18,889.65	12,687.51	97.21	105.71	-75.000	-6,613.66	1,645.37	1,562.81	1,363.91	198.90	7.857		
19,100.00	13,092.00	18,918.54	12,687.35	97.89	106.08	-74.995	-6,642.54	1,645.78	1,563.10	1,363.20	199.91	7.819		
19,200.00	13,092.00	18,986.31	12,686.92	99.30	106.97	-74.996	-6,710.27	1,648.09	1,565.53	1,363.47	202.06	7.748		
19,300.00	13,092.00	19,075.10	12,686.47	100.72	108.14	-75.010	-6,798.97	1,652.06	1,569.07	1,364.52	204.55	7.671		
19,400.00	13,092.00	19,154.00	12,686.34	102.14	109.18	-75.042	-6,877.73	1,656.76	1,573.89	1,367.04	206.86	7.609		
19,500.00	13,092.00	19,313.38	12,684.09	103.55	111.28	-74.992	-7,036.99	1,661.40	1,575.44	1,364.95	210.49	7.485		
19,600.00	13,092.00	19,385.77	12,682.69	104.97	112.24	-74.956	-7,109.35	1,663.46	1,577.79	1,365.08	212.71	7.418		
19,700.00	13,092.00	19,458.60	12,681.42	106.39	113.21	-74.939	-7,182.07	1,667.07	1,582.05	1,367.16	214.89	7.362		
19,800.00	13,092.00	19,669.39	12,681.98	107.81	116.01	-74.990	-7,392.60	1,672.42	1,583.43	1,364.19	219.24	7.222		
19,859.54	13,092.00	19,698.45	12,682.30	108.66	116.39	-74.999	-7,421.64	1,672.48	1,582.83	1,362.36	220.48	7.179		
19,900.00	13,092.00	19,723.00	12,682.91	109.23	116.72	-75.023	-7,446.18	1,673.07	1,583.09	1,361.73	221.36	7.152		
20,000.00	13,092.00	19,862.81	12,685.86	110.65	118.58	-75.135	-7,585.93	1,675.29	1,583.29	1,358.67	224.62	7.049		
20,100.00	13,092.00	19,986.05	12,686.00	112.07	120.21	-75.109	-7,709.15	1,673.21	1,580.63	1,353.11	227.52	6.947		
20,200.00	13,092.00	20,074.54	12,683.88	113.49	121.38	-75.006	-7,797.59	1,670.94	1,577.86	1,347.84	230.02	6.860		
20,300.00	13,092.00	20,178.51	12,680.93	114.91	122.75	-74.872	-7,901.49	1,668.75	1,575.64	1,342.99	232.64	6.773		
20,400.00	13,092.00	20,294.15	12,680.28	116.34	124.29	-74.813	-8,017.09	1,666.06	1,572.61	1,337.18	235.43	6.680		
20,500.00	13,092.00	20,385.00	12,680.89	117.76	125.49	-74.806	-8,107.91	1,663.94	1,569.26	1,331.24	238.02	6.593		
20,600.00	13,092.00	20,477.73	12,683.57	119.18	126.73	-74.881	-8,200.59	1,662.85	1,566.45	1,325.75	240.70	6.508		
20,686.31	13,092.00	20,525.00	12,685.89	120.41	127.37	-74.958	-8,247.80	1,662.71	1,564.78	1,322.15	242.63	6.449		
20,700.00	13,092.00	20,525.00	12,685.89	120.60	127.37	-74.958	-8,247.80	1,662.71	1,564.84	1,322.03	242.81	6.445		
20,800.00	13,092.00	20,525.00	12,685.89	122.03	127.37	-74.958	-8,247.80	1,662.71	1,568.91	1,325.26	243.65	6.439 SF		
20,900.00	13,092.00	20,525.00	12,685.89	123.45	127.37	-74.958	-8,247.80	1,662.71	1,579.30	1,335.66	243.64	6.482		
21,000.00	13,092.00	20,525.00	12,685.89	124.87	127.37	-74.958	-8,247.80	1,662.71	1,595.91	1,353.08	242.83	6.572		
21,100.00	13,092.00	20,525.00	12,685.89	126.30	127.37	-74.958	-8,247.80	1,662.71	1,618.54	1,377.28	241.27	6.708		
21,200.00	13,092.00	20,525.00	12,685.89	127.72	127.37	-74.958	-8,247.80	1,662.71	1,646.94	1,407.90	239.04	6.890		
21,300.00	13,092.00	20,525.00	12,685.89	129.15	127.37	-74.958	-8,247.80	1,662.71	1,680.82	1,444.58	236.24	7.115		
21,400.00	13,092.00	20,525.00	12,685.89	130.57	127.37	-74.958	-8,247.80	1,662.71	1,719.85	1,486.88	232.98	7.382		
21,500.00	13,092.00	20,525.00	12,685.89	132.00	127.37	-74.958	-8,247.80	1,662.71	1,763.70	1,534.36	229.34	7.690		
21,600.00	13,092.00	20,525.00	12,685.89	133.42	127.37	-74.958	-8,247.80	1,662.71	1,812.01	1,586.57	225.44	8.038		
21,700.00	13,092.00	20,525.00	12,685.89	134.85	127.37	-74.958	-8,247.80	1,662.71	1,864.43	1,643.08	221.36	8.423		
21,800.00	13,092.00	20,525.00	12,685.89	136.27	127.37	-74.958	-8,247.80	1,662.71	1,920.64	1,703.47	217.17	8.844		
21,900.00	13,092.00	20,525.00	12,685.89	137.70	127.37	-74.958	-8,247.80	1,662.71	1,980.30	1,767.36	212.94	9.300		
22,000.00	13,092.00	20,525.00	12,685.89	139.12	127.37	-74.958	-8,247.80	1,662.71	2,043.12	1,834.39	208.73	9.788		
22,100.00	13,092.00	20,525.00	12,685.89	140.55	127.37	-74.958	-8,247.80	1,662.71	2,108.81	1,904.24	204.57	10.308		
22,200.00	13,092.00	20,525.00	12,685.89	141.98	127.37	-74.958	-8,247.80	1,662.71	2,177.11	1,976.61	200.50	10.858		
22,300.00	13,092.00	20,525.00	12,685.89	143.40	127.37	-74.958	-8,247.80	1,662.71	2,247.79	2,051.23	196.55	11.436		
22,400.00	13,092.00	20,525.00	12,685.89	144.83	127.37	-74.958	-8,247.80	1,662.71	2,320.62	2,127.89	192.74	12.040		
22,500.00	13,092.00	20,525.00	12,685.89	146.26	127.37	-74.958	-8,247.80	1,662.71	2,395.42	2,206.35	189.06	12.670		





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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:
Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	sign: E	Campeon F	ed Com -	404H - OH	/ 68222	- Surveys (H	&P 474)						Offset Site Error:	0.00 usft
Survey Progr Refer Measured		76-MWD+HDGI Off Measured	set			Highside	Offset Wellbo	ore Centre	Dis Between	Rule Assi tance Between	gned: Minimum	Separation	Offset Well Error: Warning	1.00 usft
Depth (usft)	Depth (usft)	Depth (usft)	Offset Semi Maior Axis Measured Vertical Reference Offset Depth Depth (usft) (usft) (usft) (usft)		Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor			
22,600.00	13,092.00	20,525.00	12,685.89	147.69	127.37	-74.958	-8,247.80	1,662.71	2,472.00	2,286.45	185.54	13.323		
22,700.00	13,092.00	20,525.00	12,685.89	149.11	127.37	-74.958	-8,247.80	1,662.71	2,550.20	2,368.02	182.18	13.998		
22,728.24	13,092.00	20,525.00	12,685.89	149.52	127.37	-74.958	-8,247.80	1,662.71	2,572.56	2,391.30	181.26	14.193		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

vey Progr	am: 17	6-MWD+HDGI	И							Rule Assi	gned:		Offset Well Error:	1.00 us
Refer	rence Vertical	Offs	set Vertical	Semi N Reference	lajor Axis Offset	Himboldo	Offset Wellb	ore Centre		ance	Minimum	Separation		
easured Depth (usft)	Depth (usft)	Measured Depth (usft)	Depth (usft)	(usft)	(usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	Warning	
0.00	0.00	0.00	2.00	1.00	1.00	90.669	-15.09	1,292.13	1,292.22	()	()			
100.00	100.00	98.81	100.81	1.08	1.01	90.675	-15.22	1,292.10	1,292.19	1,290.10	2.10	616.676		
200.00	200.00	198.41	200.41	1.60	1.06	90.691	-15.59	1,292.01	1,292.11	1,289.45	2.66	486.293		
209.22	209.22	207.23	209.22	1.63	1.07	90.693	-15.62	1,292.01	1,292.11	1,289.40	2.70	477.931		
300.00	300.00	293.98	295.98	2.01	1.21	90.701	-15.80	1,292.14	1,292.25	1,289.03	3.22	401.273		
400.00	400.00	403.41	405.40	2.35	1.46	90.708	-15.97	1,292.05	1,292.16	1,288.35	3.81	338.821		
500.00	500.00	501.27	503.26	2.65	1.73	90.728	-16.42	1,291.72	1,291.82	1,287.44	4.38	294.638		
600.00	600.00	598.01	600.00	2.93	2.02	90.761	-17.15	1,291.55	1,291.67	1,286.72	4.95	261.088		
600.07	600.07	598.07	600.07	2.93	2.02	90.761	-17.15	1,291.55	1,291.67	1,286.72	4.95	261.069		
700.00	700.00	694.44	696.44	3.18	2.32	90.784	-17.68	1,291.74	1,291.87	1,286.37	5.50	234.743		
800.00	800.00	798.59	800.57	3.41	2.66	90.819	-18.47	1,291.91	1,292.04	1,285.97	6.08	212.572		
900.00	900.00	901.86	903.85	3.64	3.01	90.841	-18.97	1,291.65	1,291.80	1,285.15	6.64	194.424		
00.00	1,000.00	1,000.18	1,002.17	3.85	3.34	90.864	-19.46	1,291.39	1,291.54	1,284.35	7.19	179.677		
079.80	1,079.80	1,077.81	1,079.80	4.01	3.61	90.878	-19.79	1,291.32	1,291.47	1,283.86	7.61	169.603		
100.00	1,100.00	1,097.30	1,099.29	4.05	3.68	90.882	-19.89	1,291.32	1,291.48	1,283.75	7.72	167.237		
200.00	1,200.00	1,192.26	1,194.24	4.24	4.00	90.914	-20.60	1,291.52	1,291.70	1,283.45	8.24	156.698		
300.00	1,300.00	1,283.34	1,285.31	4.43	4.32	90.954	-21.53	1,292.18	1,292.44	1,283.70	8.74	147.845		
400.00	1,400.00	1,379.22	1,381.18	4.61	4.64	90.961	-21.71	1,293.59	1,293.91	1,284.66	9.25	139.957		
500.00	1,500.00	1,484.43	1,486.38	4.78	4.99	90.923	-20.86	1,294.89	1,295.13	1,285.36	9.77	132.565		
600.00	1,599.98	1,583.25	1,585.19	4.98	5.32	-79.153	-20.20	1,295.91	1,295.82	1,285.61	10.22	126.821		
620.70	1,620.67	1,603.05	1,605.00	4.99	5.38	-79.190	-20.08	1,296.14	1,295.92	1,285.63	10.29	125.990		
700.00	1,699.89	1,695.51	1,697.45	5.07	5.69	-79.394	-19.29	1,296.91	1,295.96	1,285.31	10.66	121.596		
800.00	1,799.81	1,806.84	1,808.76	5.23	6.07	-79.688	-17.26	1,296.58	1,294.88	1,283.72	11.15	116.112		
900.00	1,899.72	1,904.00	1,905.88	5.41	6.39	-79.974	-14.83	1,296.04	1,293.57	1,281.96	11.61	111.441		
00.000	1,999.63	2,000.65	2,002.51	5.60	6.72	-80.253	-12.53	1,295.73	1,292.53	1,280.47	12.06	107.146		
100.00	2,099.54	2,103.19	2,105.02	5.80	7.07	-80.530	-10.54	1,295.41	1,291.53	1,278.99	12.54	102.994		
,200.00	2,199.45	2,223.70	2,225.52	6.02	7.48	-80.826	-8.90	1,294.24	1,289.94	1,276.86	13.08	98.642		
300.00	2,299.36	2,390.65	2,392.23	6.24	8.06	-81.287	-5.63	1,286.52	1,284.71	1,270.96	13.75	93.417		
400.00	2,399.27	2,505.70	2,506.86	6.47	8.46	-81.627	-3.07	1,277.07	1,275.86	1,261.59	14.27	89.435		
500.00	2,499.18	2,595.01	2,595.86	6.72	8.77	-81.878	-1.46	1,269.82	1,267.19	1,252.48	14.71	86.164		
600.00	2,599.10	2,701.21	2,701.76	6.96	9.14	-82.163	0.10	1,261.93	1,259.25	1,244.06	15.20	82.867		
700.00	2,699.01	2,814.93	2,814.96	7.22	9.54	-82.512	2.57	1,251.34	1,249.39	1,233.68	15.71	79.549		
800.00	2,798.92	2,937.56	2,936.95	7.48	9.98	-82.910	5.48	1,239.13	1,239.08	1,222.85	16.24	76.313		
900.00	2,898.83	3,029.98	3,028.76	7.74	10.32	-83.231	7.96	1,228.89	1,227.63	1,210.94	16.69	73.554		
00.000	2,998.74	3,137.12	3,135.23	8.01	10.71	-83.579	10.19	1,217.14	1,216.30	1,199.12	17.18	70.792		
100.00	3,098.65	3,240.45	3,237.86	8.28	11.08	-83.853	10.87	1,205.16	1,204.29	1,186.63	17.66	68.184		
200.00	3,198.56	3,322.00	3,318.92	8.56	11.38	-84.055	11.06	1,196.30	1,193.02	1,174.93	18.09	65.953		
300.00	3,298.47	3,404.43	3,400.98	8.84	11.68	-84.261	11.32	1,188.54	1,183.21	1,164.69	18.51	63.906		
400.00	3,398.39	3,484.20	3,480.50	9.13	11.97	-84.461	11.60	1,182.24	1,174.94	1,156.01	18.93	62.068		
500.00	3,498.30	3,618.66	3,614.52	9.41	12.46	-84.833	12.68	1,171.49	1,166.83	1,147.33	19.50	59.842		
600.00	3,598.21	3,708.50	3,703.97	9.70	12.79	-85.107	13.74	1,163.15	1,157.26	1,137.32	19.94	58.025		
700.00	3,698.12	3,819.58	3,814.48	9.99	13.20	-85.405	14.04	1,151.97	1,146.85	1,126.41	20.45	56.091		
800.00	3,798.03	3,905.74	3,900.26	10.29	13.52	-85.613	13.78	1,143.89	1,137.13	1,116.25	20.88	54.454		
900.00	3,897.94	4,027.88	4,021.82	10.58	13.97	-85.923	13.57	1,131.95	1,127.12	1,105.70	21.41	52.638		
000.00	3,997.85	4,137.47	4,130.62	10.88	14.38	-86.233	13.63	1,118.83	1,114.86	1,092.96	21.91	50.887		
100.00	4,097.76	4,223.30	4,215.88	11.18	14.70	-86.467	13.45	1,108.98	1,103.17	1,080.82	22.35	49.365		
200.00	4,197.68	4,313.65	4,305.76	11.48	15.04	-86.711	13.27	1,099.83	1,092.81	1,070.01	22.80	47.939		
300.00	4,297.59	4,422.29	4,413.83	11.78	15.45	-87.042	13.65	1,088.71	1,082.46	1,059.17	23.29	46.477		
400.00	4,397.50	4,521.36	4,512.27	12.08	15.82	-87.393	14.68	1,077.64	1,071.27	1,047.51	23.76	45.085		
,500.00	4,497.41	4,601.27	4,591.75	12.39	16.12	-87.689	15.76	1,069.43	1,061.11	1,036.93	24.18	43.881		
,600.00	4,597.32	4,687.99	4,678.18	12.69	16.44	-87.978	16.47	1,062.43	1,053.00	1,028.38	24.62	42.778		
700.00	4,697.23	4,787.56	4,777.43	13.00	16.81	-88.301	17.07	1,054.50	1,045.05	1,019.97	25.09	41.658		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database: Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Offset Des	sign: El	Campeon I	ed Com -	434H - OH	1 / 68223	- Surveys (H	H&P 474)						Offset Site Error:	0.00 usft
Survey Progr		76-MWD+HDG								Rule Assi	gned:		Offset Well Error:	1.00 usft
Refer Measured	rence Vertical	Off Measured	set Vertical	Semi N Reference	Major Axis Offset	Highside	Offset Wellbo	ore Centre	Dist Between	tance Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
4,800.00	4,797.14	4,906.65	4,896.10	13.31	17.25	(°) -88.726	18.33	1,044.56	1,036.92	1,011.31	25.61	40.485		
4,900.00	4,897.05	5,041.84	5,030.28	13.62	17.76	-89.314	20.65	1,028.30	1,025.08	998.91	26.17	39.168		
5,000.00	4,996.97	5,125.36	5,113.12	13.92	18.09	-89.678	21.88	1,017.81	1,012.84	986.23	26.61	38.061		
5,100.00	5,096.88	5,224.11	5,211.18	14.23	18.46	-90.107	23.26	1,006.21	1,001.47	974.39	27.08	36.976		
5,200.00	5,196.79	5,330.95	5,317.14	14.55	18.87	-90.630	25.42	992.66	989.33	961.75	27.58	35.872		
5,300.00	5,296.70	5,414.89	5,400.48	14.86	19.19	-91.029	26.89	982.77	978.09	950.07	28.02	34.906		
5 400 00	5 000 04	5 500 55	5 500 44	45.47	10.01	04.500	00.44	070.00	007.50	000.07	00.50	00.004		
5,400.00	5,396.61 5,496.52	5,523.55	5,508.44	15.17	19.61	-91.528 -92.238	28.41 31.59	970.63	967.50 954.13	938.97 925.07	28.52	33.921		
5,500.00 5,600.00		5,646.42 5,741.64	5,630.03	15.48	20.09	-92.236 -92.811		953.25 939.25	940.46		29.06	32.836		
	5,596.43		5,724.18	15.79	20.46		34.05			910.92	29.54	31.839		
5,700.00 5,800.00	5,696.34 5,796.26	5,834.05 5,927.72	5,815.66 5,908.48	16.11 16.42	20.83 21.19	-93.355 -93.886	36.10 37.79	926.24 913.81	927.42 915.15	897.40 884.66	30.01 30.49	30.900 30.013		
3,800.00	3,790.20	5,921.12	5,506.46	10.42	21.19	-93.000	37.79	913.01	913.13	004.00	30.49	30.013		
5,900.00	5,896.17	6,025.51	6,005.46	16.74	21.57	-94.420	39.11	901.29	903.32	872.34	30.98	29.157		
6,000.00	5,996.08	6,123.29	6,102.44	17.05	21.95	-94.946	40.11	888.87	891.60	860.13	31.47	28.329		
6,100.00	6,095.99	6,216.64	6,195.08	17.37	22.32	-95.435	40.76	877.44	880.31	848.35	31.96	27.548		
6,200.00	6,195.90	6,313.95	6,291.74	17.68	22.69	-95.925	41.14	866.22	869.70	837.25	32.45	26.802		
6,300.00	6,295.81	6,415.46	6,392.55	18.00	23.08	-96.476	41.87	854.27	859.01	826.05	32.96	26.064		
6,400.00	6,395.72	6,512.40	6,488.79	18.32	23.46	-97.040	42.91	842.67	848.31	814.85	33.46	25.353		
6,500.00	6,495.63	6,606.66	6,582.43	18.63	23.82	-97.570	43.59	831.94	838.15	804.20	33.96	24.682		
6,600.00	6,595.55	6,703.19	6,678.36	18.95	24.19	-98.147	44.73	821.31	828.58	794.11	34.47	24.040		
6,700.00	6,695.46	6,801.40	6,775.97	19.27	24.57	-98.784	46.46	810.52	819.29	784.30	34.99	23.416		
6,800.00	6,795.37	6,898.22	6,872.21	19.59	24.94	-99.415	48.07	800.08	810.27	774.76	35.51	22.817		
-,	-,	-,	-,											
6,900.00	6,895.28	6,994.07	6,967.53	19.91	25.31	-100.031	49.48	790.18	801.72	765.69	36.03	22.249		
7,000.00	6,995.19	7,089.66	7,062.65	20.23	25.67	-100.627	50.64	780.85	793.71	757.15	36.56	21.711		
7,100.00	7,095.10	7,192.02	7,164.53	20.54	26.06	-101.278	51.92	770.95	785.89	748.78	37.11	21.176		
7,200.00	7,195.01	7,298.34	7,270.23	20.86	26.47	-102.036	53.83	759.61	777.45	739.75	37.70	20.624		
7,300.00	7,294.92	7,395.21	7,366.47	21.18	26.84	-102.777	55.87	748.84	768.83	730.57	38.26	20.094		
7,400.00	7,394.84	7,488.81	7,459.55	21.50	27.20	-103.470	57.59	739.09	760.88	722.06	38.82	19.602		
7,500.00	7,494.75	7,585.02	7,555.29	21.82	27.57	-104.151	59.02	729.81	753.62	714.24	39.38	19.136		
7,600.00	7,594.66	7,683.30	7,653.15	22.14	27.94	-104.826	60.20	720.74	746.75	706.78	39.96	18.687		
7,700.00	7,694.57	7,784.55	7,753.98	22.46	28.32	-105.498	60.98	711.60	739.97	699.42	40.55	18.247		
7,800.00	7,794.48	7,888.67	7,857.53	22.78	28.72	-106.336	63.06	700.89	732.70	691.51	41.19	17.788		
7,900.00	7,894.39	7,986.11	7,954.34	23.10	29.10	-107.226	65.94	690.19	725.39	683.57	41.83	17.343		
8,000.00	7,994.30	8,079.82	8,047.52	23.42	29.46	-108.059	68.51	680.57	718.80	676.35	42.45	16.933		
8,100.00	8,094.21	8,173.15	8,140.43	23.75	29.81	-108.839	70.74	672.06	713.22	670.15	43.07	16.559		
8,200.00	8,194.13	8,267.16	8,234.11	24.07	30.16	-109.560	72.51	664.52	708.49	664.80	43.69	16.217		
8,300.00	8,294.04	8,355.85	8,322.60	24.39	30.49	-110.176	73.82	658.62	704.90	660.63	44.27	15.924		
8,400.00	8,393.95	8,437.78	8,404.43	24.71	30.78	-110.707	75.56	655.06	703.68	658.89	44.79	15.710		
8,400.03	8,393.97	8,437.80	8,404.45	24.71	30.78	-110.707	75.56	655.06	703.68	658.89	44.79	15.710 CC		
8,500.00	8,493.86	8,529.27	8,495.86	25.03	31.10	-111.279	78.12	652.64	704.36	658.99	45.37	15.526		
8,600.00	8,593.77	8,629.99	8,596.52	25.35	31.45	-111.873	80.80	650.58	705.56	659.56	46.00	15.340		
8,700.00	8,693.68	8,729.38	8,695.87	25.67	31.80	-112.404	82.87	648.86	706.79	660.18	46.61	15.164		
0.000	0.7	0.65= 5:	0.76:		07	440.55		0.4=	70	000 01		45.555		
8,800.00	8,793.59	8,827.86	8,794.32	26.00	32.14	-112.894	84.63	647.49	708.20	660.99	47.21	15.000		
8,900.00	8,893.50	8,926.85	8,893.30	26.32	32.48	-113.359	86.24	646.42	709.85	662.03	47.82	14.845		
9,000.00	8,993.42	9,026.71	8,993.14	26.64	32.82	-113.803	87.62	645.53	711.55	663.12	48.43	14.694		
9,100.00 9,200.00	9,093.33 9,193.24	9,125.34 9,223.08	9,091.77 9,189.50	26.96 27.29	33.16 33.49	-114.222 -114.616	88.86 90.02	644.81 644.46	713.37 715.48	664.35 665.87	49.02 49.61	14.551 14.421		
७,∠∪∪.∪∪	ಶ, 193.∠4	5,223.08	a, 10a.50	21.29	33.49	-114.616	90.02	044.40	110.46	005.67	49.01	14.421		
9,300.00	9,293.15	9,321.29	9,287.69	27.61	33.83	-115.009	91.34	644.32	717.91	667.71	50.21	14.300		
9,400.00	9,393.06	9,420.37	9,386.77	27.93	34.16	-115.394	92.67	644.39	720.53	669.73	50.80	14.183		
9,500.00	9,492.97	9,519.49	9,485.88	28.25	34.49	-115.748	93.77	644.72	723.27	671.88	51.39	14.074		
9,600.00	9,592.88	9,621.92	9,588.30	28.58	34.83	-116.096	94.73	645.16	726.01	674.02	52.00	13.963		
9,700.00	9,692.79	9,725.35	9,691.73	28.90	35.17	-116.440	95.32	645.19	728.25	675.63	52.62	13.841		
0.000.00	0.700.71	0.000.00	0.700.00	00.00	25.50	116 705	05.70	645.00	700.00	677.40	F0 00	40 707		
9,800.00	9,792.71	9,823.60	9,789.98	29.22	35.50	-116.765	95.79	645.09	730.33	677.13	53.20	13.727		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

urvey Prog	ram: 17	6-MWD+HDG	M							Rule Assi	aned:		Offset Site Error: Offset Well Error:	0.00 usf
Refe	rence	Off	set		laior Axis	III-de-C	Offset Wellbe	ore Centre		ance	_	0		,,,,,,,
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,900.00	9,892.62	9,924.02	9,890.40	29.55	35.83	-117.032	95.73	645.60	732.61	678.84	53.78	13.623		
0,000.00	9,992.53	10,025.68	9,992.06	29.87	36.15	-117.263	95.15	646.28	734.72	680.38	54.35	13.519		
0,100.00	10,092.44	10,128.25	10,094.62	30.19	36.48	-117.470	94.15	646.89	736.55	681.63	54.92	13.411		
10,200.00	10,192.35	10,229.91	10,196.27	30.52	36.81	-117.651	92.71	647.44	738.05	682.57	55.48	13.303		
10,300.00	10,292.26	10,328.62	10,294.97	30.84	37.13	-117.830	91.37	647.94	739.59	683.56	56.03	13.199		
0,400.00	10,392.17	10,429.27	10,395.61	31.16	37.46	-118.065	90.55	648.04	741.14	684.52	56.62	13.091		
10,500.00	10,492.08	10,528.92	10,495.27	31.49	37.81	-118.367	90.42	647.56	742.67	685.44	57.23	12.978		
10,600.00	10,592.00	10,628.08	10,594.42	31.81	38.15	-118.717	90.89	646.73	744.32	686.47	57.86	12.865		
10,700.00	10,691.91	10,727.23	10,693.57	32.13	38.50	-119.078	91.51	645.84	746.06	687.56	58.49	12.755		
10,800.00	10,791.82	10,827.09	10,793.42	32.46	38.85	-119.468	92.51	644.83	747.97	688.82	59.15	12.646		
10,900.00	10,891.73	10,930.87	10,897.17	32.78	39.21	-119.920	93.85	643.14	749.63	689.79	59.84	12.527		
11,000.00	10,991.64	11,031.57	10,997.84	33.11	39.57	-120.360	94.87	641.10	750.86	690.33	60.52	12.406		
11,100.00	11,091.55	11,133.57	11,099.82	33.43	39.93	-120.786	95.74	639.21	752.14	690.93	61.21	12.287		
11,200.00	11,191.46	11,234.61	11,200.85	33.75	40.28	-121.165	95.92	637.39	753.07	691.19	61.88	12.170		
11,300.00	11,291.37	11,332.47	11,298.68	34.08	40.63	-121.540	96.25	635.62	754.13	691.59	62.54	12.058		
11,400.00	11,391.29	11,430.65	11,396.83	34.40	40.98	-121.993	97.53	633.38	755.51	692.28	63.23	11.949		
11,500.00	11,491.20	11,518.54	11,484.71	34.73	41.28	-122.299	98.17	632.72	757.71	693.89	63.81	11.874		
11,600.00	11,591.11	11,609.63	11,575.79	35.05	41.58	-122.501	98.69	634.13	761.48	697.12	64.36	11.831		
11,700.00	11,691.02	11,710.40	11,676.54	35.38	41.90	-122.709	99.52	636.23	765.84	700.88	64.96	11.789		
11,800.00	11,790.93	11,812.92	11,779.04	35.70	42.24	-122.969	100.60	637.61	769.83	704.23	65.60	11.736		
11,900.00	11,890.84	11,909.28	11,875.38	36.03	42.56	-123.266	102.18	638.41	773.87	707.65	66.22	11.686		
11,907.54	11,898.38	11,917.00	11,883.10	36.05	42.59	-123.287	102.30	638.52	774.20	707.93	66.27	11.682		
12,000.00	11,990.80	12,007.55	11,973.63	36.33	42.89	-123.457	103.33	640.20	777.48	710.71	66.78	11.643		
12,028.24	12,019.04	12,035.54	12,001.61	36.36	42.98	46.532	103.53	640.87	778.19	711.31	66.88	11.636		
12,100.00	12,090.80	12,109.56	12,075.60	36.36	43.22	46.623	103.69	642.84	779.69	712.60	67.09	11.622		
12,200.00	12,190.80	12,225.81	12,191.58	36.36	43.58	47.130	99.55	648.51	780.85	713.53	67.32	11.599		
12,300.00	12,290.80	12,347.35	12,310.02	36.36	43.93	49.075	79.10	665.38	779.99	712.98	67.01	11.640		
12,400.00	12,390.80	12,726.52	12,599.01	36.37	44.60	66.241	-136.90	745.90	760.73	698.02	62.71	12.130		
12,500.00	12,490.80	12,920.00	12,663.93	36.37	44.69	80.529	-314.44	779.02	733.24	671.72	61.52	11.919		
12,528.24	12,519.04	12,920.00	12,663.93	36.37	44.69	80.529	-314.44	779.02	727.09	665.64	61.45	11.833		
12,550.00	12,540.79	12,920.00	12,663.93	36.40	44.69	-99.317	-314.44	779.02	723.13	661.74	61.39	11.779		
12,600.00	12,590.61	12,934.89	12,665.56	36.63	44.70	-98.769	-329.10	781.03	716.78	655.43	61.35	11.683		
12,650.00	12,639.89	12,945.21	12,666.58	36.95	44.70	-98.202	-339.27	782.49	714.44	653.12	61.33	11.650		
12,654.81	12,644.58	12,946.34	12,666.69	36.98	44.70	-98.117	-340.39	782.65	714.43	653.10	61.33	11.650 ES		
12,700.00	12,688.24	12,958.01	12,667.73	37.29	44.71	-97.084	-351.88	784.36	715.98	654.63	61.34	11.672		
12,750.00	12,735.30	12,973.01	12,668.91	37.62	44.73	-95.469	-366.66	786.64	721.15	659.74	61.41	11.743		
12,800.00	12,780.72	12,989.94	12,670.03	37.96	44.75	-93.418	-383.34	789.35	729.64	668.12	61.52	11.859		
12,850.00	12,824.15	13,019.00	12,671.39	38.29	44.80	-90.319	-411.94	794.28	741.17	679.46	61.71	12.010		
12,900.00	12,865.26	13,035.69	12,671.97	38.60	44.84	-87.863	-428.36	797.20	754.91	693.01	61.89	12.197		
12,950.00	12,903.73	13,073.58	12,673.21	38.90	44.92	-84.093	-465.69	803.60	770.20	708.04	62.16	12.390		
13,000.00	12,939.27	13,114.92	12,674.45	39.18	45.02	-80.316	-506.47	810.26	786.23	723.76	62.47	12.586		
13,050.00	12,971.62	13,156.16	12,675.46	39.43	45.14	-76.810	-547.21	816.59	802.47	739.66	62.81	12.777		
13,100.00	13,000.52	13,199.77	12,676.17	39.65	45.26	-73.536	-590.34	822.99	818.44	755.28	63.16	12.957		
13,150.00	13,025.76	13,235.92	12,676.49	39.85	45.38	-70.855	-626.11	828.23	833.92	770.42	63.50	13.132		
13,200.00	13,047.14	13,271.27	12,676.62	40.02	45.49	-68.516	-661.03	833.69	848.91	785.06	63.85	13.295		
13,250.00	13,064.50	13,303.00	12,676.59	40.15	45.60	-66.557	-692.33	838.89	863.16	798.96	64.21	13.443		
13,300.00	13,077.71	13,344.96	12,676.58	40.26	45.75	-64.810	-733.63	846.33	876.39	811.73	64.66	13.554		
13,350.00	13,086.67	13,382.86	12,676.81	40.33	45.89	-63.508	-770.81	853.69	888.44	823.32	65.11	13.644		
13,400.00	13,091.30	13,398.00	12,676.96	40.38	45.95	-62.485	-785.62	856.79	899.56	834.04	65.52	13.730		
13,428.24	13,092.00	13,440.42	12,677.13	40.39	46.13	-62.168	-827.06	865.87	904.71	838.81	65.90	13.729		
13,500.00	13,092.00	13,492.33	12,676.50	40.40	46.36	-62.466	-877.63	877.58	918.92	852.27	66.65	13.787		
3,600.00	13,092.00	13,587.00	12,672.97	40.43	46.78	-62.910	-969.37	900.65	941.46	873.63	67.83	13.880		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:
Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

urvey Prog	ıram: 17	6-MWD+HDG	M							Rule Assi	anod.		Offset Well Error:	1.00 usf
Refe	erence	Off	set		lajor Axis		Offset Wellbe	ore Centre		ance	_			1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,700.00	13,092.00	13,636.14	12,670.74	40.46	47.03	-63.144	-1,016.65	913.83	965.89	897.00	68.89	14.020		
3,800.00	13,092.00	13,756.28	12,668.56	40.50	47.67	-63.936	-1,131.58	948.73	992.32	921.91	70.41	14.094		
3,900.00	13,092.00	13,991.92	12,672.10	40.53	49.08	-65.269	-1,361.95	996.86	1,009.23	935.94	73.29	13.770		
14,000.00	13,092.00	14,234.37	12,659.95	40.58	50.66	-64.690	-1,603.25	1,001.15	1,011.24	934.53	76.71	13.182		
4,100.00	13,092.00	14,336.00	12,648.28	40.63	51.35	-63.856	-1,703.84	992.52	1,007.68	929.48	78.21	12.885		
4,200.00	13,092.00	14,408.78	12,640.50	40.69	51.88	-63.316	-1,776.02	987.53	1,005.44	926.09	79.35	12.671		
14,233.39	13,092.00	14,434.00	12,638.02	40.71	52.06	-63.155	-1,801.10	986.42	1,005.32	925.56	79.76	12.605		
14,300.00	13,092.00	14,495.39	12,635.48	40.76	52.53	-62.999	-1,862.39	985.97	1,005.54	924.75	80.80	12.445		
14,400.00	13,092.00	14,587.27	12,640.76	40.85	53.26	-63.359	-1,954.00	990.44	1,006.45	923.89	82.55	12.192		
14,500.00	13,092.00	14,665.08	12,644.75	40.95	53.90	-63.660	-2,031.57	995.04	1,008.67	924.55	84.12	11.991		
14,600.00	13,092.00	14,800.87	12,648.28	41.10	55.04	-64.020	-2,166.96	1,003.53	1,012.92	926.25	86.67	11.687		
14,611.75	13,092.00	14,786.91	12,647.82	41.12	54.92	-63.973	-2,153.03	1,002.45	1,012.61	926.14	86.47	11.710		
14,700.00	13,092.00	14,894.70	12,644.91	41.29	55.85	-63.807	-2,260.72	1,002.77	1,012.93	924.50	88.43	11.455		
14,800.00	13,092.00	14,980.92	12,640.08	41.57	56.60	-63.535	-2,346.80	1,002.51	1,014.29	924.24	90.05	11.264		
14,900.00	13,092.00	15,120.74	12,633.53	41.99	57.84	-63.122	-2,486.44	1,000.59	1,014.27	921.75	92.52	10.963		
15,000.00	13,092.00	15,215.97	12,631.25	42.60	58.71	-62.936	-2,581.62	998.74	1,012.77	918.40	94.36	10.733		
15,100.00	13,092.00	15,316.77	12,629.26	43.42	59.65	-62.766	-2,682.38	996.99	1,011.26	914.93	96.33	10.498		
15,200.00	13,092.00	15,416.01	12,629.06	44.43	60.60	-62.714	-2,781.62	996.37	1,009.94	911.60	98.34	10.270		
15,300.00	13,092.00	15,519.19	12,633.66	45.56	61.62	-62.961	-2,884.67	997.91	1,008.37	907.80	100.58	10.026		
15,400.00	13,092.00	15,611.27	12,639.29	46.76	62.55	-63.279	-2,976.55	1,000.08	1,006.87	904.18	102.69	9.805		
15,456.62	13,092.00	15,659.00	12,641.08	47.47	63.03	-63.387	-3,024.23	1,001.20	1,006.62	902.82	103.80	9.698		
15,500.00	13,092.00	15,698.02	12,642.28	48.01	63.43	-63.466	-3,063.22	1,002.27	1,006.71	902.02	104.69	9.616		
15,600.00	13,092.00	15,791.60	12,646.12	49.30	64.41	-63.734	-3,156.65	1,006.00	1,007.59	900.72	106.86	9.429		
15,700.00	13,092.00	15,902.41	12,649.59	50.61	65.57	-63.979	-3,267.33	1,009.79	1,008.45	899.09	109.36	9.221		
15,800.00	13,092.00	16,008.08	12,651.51	51.93	66.69	-64.084	-3,372.98	1,011.10	1,007.89	896.17	111.72	9.022		
15,850.90	13,092.00	16,053.54	12,651.56	52.61	67.17	-64.082	-3,418.44	1,011.37	1,007.69	894.94	112.75	8.937		
15,900.00	13,092.00	16,092.69	12,651.31	53.27	67.59	-64.072	-3,457.58	1,011.84	1,007.94	894.27	113.66	8.868		
16,000.00	13,092.00	16,175.39	12,650.07	54.61	68.49	-64.038	-3,540.25	1,013.80	1,009.85	894.29	115.57	8.738		
16,100.00	13,092.00	16,264.40	12,648.14	55.97	69.47	-63.999	-3,629.18	1,017.04	1,013.20	895.60	117.60	8.616		
16,200.00	13,092.00	16,371.35	12,645.31	57.33	70.66	-63.933	-3,736.01	1,021.20	1,017.01	897.03	119.97	8.477		
16,300.00	13,092.00	16,493.86	12,645.62	58.69	72.04	-64.018	-3,858.44	1,025.18	1,018.95	896.21	122.74	8.302		
16,400.00	13,092.00	16,642.89	12,647.88	60.06	73.72	-64.067	-4,007.39	1,023.97	1,016.33	890.44	125.89	8.073		
16,500.00	13,092.00	16,733.90	12,648.01	61.44	74.74	-63.991	-4,098.37	1,021.52	1,012.96	884.95	128.01	7.913		
16,600.00	13,092.00	16,831.05	12,646.37	62.81	75.85	-63.808	-4,195.46	1,018.48	1,010.04	879.86	130.18	7.759		
16,700.00	13,092.00	16,924.95	12,645.57	64.20	76.93	-63.691	-4,289.33	1,016.34	1,007.50	875.17	132.33	7.613		
16,800.00	13,092.00	17,008.84	12,644.61	65.58	77.91	-63.592	-4,373.20	1,015.16	1,005.93	871.60	134.33	7.488		
16,820.59	13,092.00	17,023.78	12,644.51	65.87	78.08	-63.584	-4,388.14	1,015.21	1,005.87	871.16	134.71	7.467		
16,900.00	13,092.00	17,082.48	12,644.62	66.97	78.77	-63.610	-4,446.83	1,016.54	1,006.73	870.53	136.20	7.391		
17,000.00	13,092.00	17,173.20	12,643.02	68.36	79.85	-63.573	-4,537.48	1,019.18	1,009.25	870.89	138.36	7.294		
17,100.00	13,092.00	17,266.00	12,639.25	69.75	80.97	-63.415	-4,630.18	1,021.37	1,012.34	871.86	140.48	7.206		
17,200.00	13,092.00	17,360.00	12,636.65	71.14	82.10	-63.358	-4,724.06	1,025.22	1,016.37	873.68	142.70	7.123		
17,300.00	13,092.00	17,496.11	12,636.79	72.54	83.76	-63.503	-4,859.99	1,032.01	1,020.31	874.36	145.95	6.991		
17,400.00	13,092.00	17,718.29	12,633.89	73.94	86.41	-62.915	-5,081.44	1,016.85	1,012.58	863.08	149.50	6.773		
17,500.00	13,092.00	17,793.34	12,633.51	75.34	87.30	-62.663	-5,156.02	1,008.63	1,002.29	850.83	151.46	6.617		
17,600.00	13,092.00	17,863.62	12,634.82	76.74	88.15	-62.595	-5,226.14	1,004.21	994.98	841.52	153.46	6.484		
17,700.00	13,092.00	17,927.00	12,636.46	78.14	88.92	-62.613	-5,289.48	1,002.35	990.55	835.21	155.34	6.377		
17,800.00	13,092.00	18,021.00	12,638.29	79.55	90.09	-62.672	-5,383.45	1,001.94	988.43	830.72	157.71	6.268		
17,888.75	13,092.00	18,094.02	12,637.82	80.79	91.00	-62.632	-5,456.47	1,002.06	988.00	828.46	159.54	6.193		
17,900.00	13,092.00	18,104.12	12,637.55	80.95	91.12	-62.615	-5,466.57	1,002.02	988.00	828.23	159.78	6.184		
18,000.00	13,092.00	18,192.78	12,635.58	82.36	92.23	-62.505	-5,555.19	1,002.54	988.69	826.80	161.89	6.107		
18,100.00	13,092.00	18,271.77	12,635.43	83.76	93.23	-62.547	-5,634.14	1,005.18	990.92	827.02	163.91	6.046		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	sign: El	Campeon I	ed Com -	434H - OH	/ 68223	- Surveys (F	I&P 474)						Offset Site Error:	0.00 usft
Survey Progr		6-MWD+HDG		Com: B	laior Avia		Officet Wells	oro Contro	Die	Rule Assi	igned:		Offset Well Error:	1.00 usft
Measured Depth	vertical Depth	Measured Depth	vertical Depth	Reference	lajor Axis Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	5.004		
18,300.00	13,092.00	18,437.06	12,630.68	86.58	95.34	-62.496	-5,799.09	1,013.99	1,001.30	833.41	167.89	5.964		
18,400.00	13,092.00	18,528.24	12,627.00	87.99	96.51	-62.467	-5,889.94	1,020.83	1,008.93	838.84	170.09	5.932		
18,500.00	13,092.00	18,707.51	12,629.95	89.40	98.83	-62.878	-6,068.67	1,032.58	1,013.49	838.65	174.85	5.797		
18,600.00	13,092.00	18,813.79	12,635.93	90.81	100.21	-63.249	-6,174.72	1,036.34	1,013.25	835.45	177.80	5.699		
18,700.00	13,092.00	18,918.65	12,640.92	92.23	101.56	-63.526	-6,279.44	1,038.34	1,011.95	831.30	180.64	5.602		
18,800.00	13,092.00	19,011.92	12,645.45	93.64	102.78	-63.793	-6,372.57	1,040.68	1,011.17	827.89	183.28	5.517		
18,900.00	13,092.00	19,108.55	12,649.67	95.06	104.04	-64.050	-6,469.07	1,043.30	1,010.83	824.85	185.98	5.435		
18,950.10	13,092.00	19,157.00	12,651.54	95.76	104.67	-64.166	-6,517.46	1,044.63	1,010.79	823.46	187.33	5.396		
19,000.00	13,092.00	19,198.78	12,652.70	96.47	105.21	-64.244	-6,559.21	1,045.79	1,010.99	822.49	188.51	5.363		
19,100.00	13,092.00	19,287.21	12,652.93	97.89	106.37	-64.296	-6,647.60	1,048.26	1,012.52	821.68	190.84	5.306		
19,200.00	13,092.00	19,383.65	12,652.47	99.30	107.63	-64.323	-6,744.00	1,051.24	1,014.64	821.32	193.32	5.249		
19,300.00	13,092.00	19,470.67	12,652.02	100.72	108.78	-64.356	-6,830.96	1,054.39	1,017.30	821.71	195.59	5.201		
19,400.00	13,092.00	19,543.75	12,651.52	102.14	109.74	-64.421	-6,903.90	1,058.81	1,022.18	824.69	197.49	5.176		
19,500.00	13,092.00	19,631.00	12,650.77	103.55	110.90	-64.556	-6,990.78	1,066.79	1,029.83	830.02	199.81	5.154		
19,600.00	13,092.00	19,793.58	12,648.94	104.97	113.06	-64.643	-7,152.94	1,075.85	1,034.65	830.61	204.04	5.071		
19,700.00	13,092.00	19,932.28	12,642.04	106.39	114.87	-64.167	-7,291.35	1,071.73	1,032.89	826.15	206.74	4.996		
19,800.00	13,092.00	20,039.84	12,637.89	107.81	116.27	-63.830	-7,398.74	1,067.42	1,030.11	821.10	209.00	4.929		
19,900.00	13,092.00	20,147.24	12,634.90	109.23	117.68	-63.547	-7,506.00	1,063.07	1,026.87	815.56	211.31	4.860		
20,000.00	13,092.00	20,261.31	12,634.91	110.65	119.17	-63.403	-7,619.98	1,058.41	1,022.33	808.51	213.82	4.781		
20,100.00	13,092.00	20,368.55	12,634.77	112.07	120.57	-63.226	-7,727.07	1,052.69	1,016.76	800.56	216.20	4.703		
20,200.00	13,092.00	20,473.18	12,635.20	113.49	121.94	-63.070	-7,831.53	1,046.74	1,010.64	792.07	218.57	4.624		
,							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,	.,					
20,300.00	13,092.00	20,566.41	12,636.38	114.91	123.17	-62.981	-7,924.62	1,041.89	1,004.58	783.65	220.93	4.547		
20,400.00	13,092.00	20,649.35	12,638.94	116.34	124.27	-63.027	-8,007.48	1,039.42	999.68	776.34	223.34	4.476		
20,500.00	13,092.00	20,749.74	12,642.98	117.76	125.61	-63.177	-8,107.78	1,038.19	995.90	769.83	226.08	4.405		
20,600.00	13,092.00	20,848.64	12,647.19	119.18	126.93	-63.333	-8,206.58	1,036.78	991.85	763.05	228.80	4.335		
20,700.00	13,092.00	20,912.00	12,650.39	120.60	127.78	-63.468	-8,269.85	1,036.21	988.60	757.64	230.96	4.280		
20,702.33	13,092.00	20,912.00	12,650.39	120.64	127.78	-63.468	-8,269.85	1,036.21	988.60	757.62	230.98	4.280 SF		
20,800.00	13,092.00	20,912.00	12,650.39	122.03	127.78	-63.468	-8,269.85	1,036.21	993.41	762.79	230.63	4.307		
20,900.00	13,092.00	20,912.00	12,650.39	123.45	127.78	-63.468	-8,269.85	1,036.21	1,008.17	779.78	228.39	4.414		
21,000.00	13,092.00	20,912.00	12,650.39	124.87	127.78	-63.468	-8,269.85	1,036.21	1,032.44	807.95	224.50	4.599		
21,100.00	13,092.00	20,912.00	12,650.39	126.30	127.78	-63.468	-8,269.85	1,036.21	1,065.59	846.30	219.29	4.859		
21,200.00	13,092.00	20,912.00	12,650.39	127.72	127.78	-63.468	-8,269.85	1,036.21	1,106.80	893.64	213.16	5.192		
21,300.00	13,092.00	20,912.00	12,650.39	129.15	127.78	-63.468	-8,269.85	1,036.21	1,155.22	948.75	206.48	5.595		
21,400.00	13,092.00	20,912.00	12,650.39	130.57	127.78	-63.468	-8,269.85	1,036.21	1,209.99	1,010.42	199.57	6.063		
		20,912.00												
21,500.00 21,600.00	13,092.00 13,092.00	20,912.00	12,650.39 12,650.39	132.00 133.42	127.78 127.78	-63.468 -63.468	-8,269.85 -8,269.85	1,036.21 1,036.21	1,270.28 1,335.34	1,077.60 1,149.35	192.68 185.99	6.593 7.179		
							0.000							
21,700.00	13,092.00	20,912.00	12,650.39	134.85	127.78	-63.468	-8,269.85	1,036.21	1,404.52	1,224.90	179.62	7.819		
21,800.00	13,092.00	20,912.00	12,650.39	136.27	127.78	-63.468	-8,269.85	1,036.21	1,477.23	1,303.59	173.64	8.507		
21,900.00	13,092.00	20,912.00	12,650.39	137.70	127.78	-63.468	-8,269.85	1,036.21	1,552.98	1,384.90	168.08	9.240		
22,000.00	13,092.00	20,912.00	12,650.39	139.12	127.78	-63.468	-8,269.85	1,036.21	1,631.34	1,468.41	162.94	10.012		
22,100.00	13,092.00	20,912.00	12,650.39	140.55	127.78	-63.468	-8,269.85	1,036.21	1,711.96	1,553.75	158.22	10.820		
22,200.00	13,092.00	20,912.00	12,650.39	141.98	127.78	-63.468	-8,269.85	1,036.21	1,794.53	1,640.64	153.89	11.661		
22,300.00	13,092.00	20,912.00	12,650.39	143.40	127.78	-63.468	-8,269.85	1,036.21	1,878.80	1,728.86	149.94	12.530		
22,400.00	13,092.00	20,912.00	12,650.39	144.83	127.78	-63.468	-8,269.85	1,036.21	1,964.54	1,818.20	146.34	13.425		
22,500.00	13,092.00	20,912.00	12,650.39	146.26	127.78	-63.468	-8,269.85	1,036.21	2,051.57	1,908.52	143.05	14.341		
22,600.00	13,092.00	20,912.00	12,650.39	147.69	127.78	-63.468	-8,269.85	1,036.21	2,139.74	1,999.68	140.06	15.278		
22,700.00	13,092.00	20,912.00	12,650.39	149.11	127.78	-63.468	-8,269.85	1,036.21	2,228.91	2,091.58	137.33	16.231		
							-6,269.65 -8.269.85							
22,728.24	13,092.00	20,912.00	12,650.39	149.52	127.78	-63.468	-0,209.85	1,036.21	2,254.25	2,117.65	136.60	16.503		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Survey Progra													Offset Site Error:	0.00 usft
Refere		6-MWD+HDGI Offs		Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	2.00	1.00	1.00	90.645	-14.88	1,322.08	1,322.17	(3.3.1.)	(3.2.1)			
100.00	100.00	100.38	102.38	1.08	1.01	90.651	-15.03	1,321.99	1,322.08	1,319.98	2.10	630.829		
200.00	200.00	202.56	204.56	1.60	1.06	90.670	-15.45	1,321.71	1,321.81	1,319.15	2.66	496.449		
300.00	300.00	304.40	306.40	2.01	1.24	90.686	-15.83	1,321.30	1,321.41	1,318.16	3.25	407.039		
400.00	400.00	404.06	406.05	2.35	1.48	90.718	-16.54	1,320.79	1,320.91	1,317.08	3.83	345.054		
500.00	500.00	505.78	507.77	2.65	1.76	90.735	-16.95	1,320.27	1,320.40	1,315.99	4.42	299.068		
600.00	600.00	603.03	605.02	2.93	2.06	90.767	-17.66	1,319.78	1,319.91	1,314.93	4.98	264.836		
700.00	700.00	701.50	703.48	3.18	2.37	90.813	-18.73	1,319.48	1,319.62	1,314.07	5.55	237.803		
800.00	800.00	806.91	808.89	3.41	2.72	90.852	-19.61	1,318.92	1,319.10	1,312.97	6.13	215.149		
900.00	900.00	904.09	906.06	3.64	3.04	90.876	-20.16	1,318.30	1,318.47	1,311.79	6.68	197.409		
1,000.00	1,000.00	999.80	1,001.77	3.85	3.37	90.901	-20.74	1,318.13	1,318.29	1,311.08	7.21	182.747		
1,100.00	1,100.00	1,102.95	1,104.92	4.05	3.72	90.941	-21.65	1,317.73	1,317.92	1,310.15	7.77	169.642		
1,167.98	1,167.98	1,166.02	1,167.98	4.18	3.94	90.968	-22.26	1,317.58	1,317.77	1,309.65	8.12	162.342		
1,200.00	1,200.00	1,194.57	1,196.53	4.24	4.04	90.980	-22.55	1,317.61	1,317.81	1,309.53	8.28	159.215		
1,300.00	1,300.00	1,283.92	1,285.87	4.43	4.34	91.022	-23.52	1,318.19	1,318.48	1,309.71	8.77	150.389		
1,400.00	1,400.00	1,378.00	1,379.94	4.61	4.66	91.076	-24.77	1,319.48	1,319.86	1,310.60	9.27	142.441		
1,500.00	1,500.00	1,505.89	1,507.80	4.78	5.10	91.155	-26.62	1,320.55	1,320.84	1,310.96	9.88	133.667		
1,600.00	1,599.98	1,621.37	1,623.26	4.98	5.51	-78.851	-28.81	1,318.98	1,319.16	1,308.76	10.40	126.785		
1,620.70	1,620.67	1,641.54	1,643.41	4.99	5.58	-78.877	-29.18	1,318.62	1,318.65	1,308.17	10.48	125.855		
1,700.00	1,699.89	1,718.81	1,720.66	5.07	5.85	-78.954	-30.58	1,317.32	1,316.69	1,305.88	10.81	121.782		
1,800.00	1,799.81	1,816.53	1,818.35	5.23	6.20	-79.052	-32.36	1,315.83	1,314.39	1,303.11	11.28	116.520		
1,900.00	1,899.72	1,913.99	1,915.79	5.41	6.54	-79.150	-34.12	1,314.51	1,312.27	1,300.51	11.76	111.629		
2,000.00	1,999.63	2,011.51	2,013.29	5.60	6.89	-79.243	-36.01	1,313.41	1,310.38	1,298.15	12.23	107.133		
2,100.00	2,099.54	2,115.78	2,117.53	5.80	7.26	-79.345	-37.98	1,312.18	1,308.45	1,295.72	12.73	102.781		
2,200.00	2,199.45	2,223.22	2,224.94	6.02	7.64	-79.457	-39.87	1,310.33	1,305.96	1,292.72	13.24	98.642		
2,300.00	2,299.36	2,322.58	2,324.27	6.24	7.99	-79.572	-41.33	1,308.30	1,303.17	1,289.45	13.72	94.988		
2,400.00	2,399.27	2,417.70	2,419.36	6.47	8.33	-79.686	-42.69	1,306.66	1,300.68	1,286.50	14.18	91.697		
2,500.00	2,499.18	2,513.87	2,515.51	6.72	8.68	-79.797	-44.14	1,305.31	1,298.54	1,283.89	14.65	88.614		
2,600.00	2,599.10	2,609.53	2,611.15	6.96	9.02	-79.912	-45.51	1,304.25	1,296.69	1,281.57	15.12	85.752		
2,700.00	2,699.01	2,703.74	2,705.35	7.22	9.35	-80.029	-46.76	1,303.57	1,295.23	1,279.65	15.58	83.118		
2,800.00	2,798.92	2,797.29	2,798.90	7.48	9.69	-80.148	-47.97	1,303.34	1,294.26	1,278.22	16.04	80.687		
2,900.00	2,898.83	2,901.83	2,903.43	7.74	10.06	-80.281	-49.29	1,303.36	1,293.57	1,277.03	16.54	78.227		
3,000.00	2,998.74	3,022.31	3,023.89	8.01	10.49	-80.439	-50.75	1,302.05	1,291.78	1,274.69	17.09	75.601		
3,100.00	3,098.65	3,116.70	3,118.26	8.28	10.82	-80.558	-51.99	1,300.35	1,289.28	1,271.73	17.55	73.476		
3,200.00	3,198.56	3,214.74	3,216.28	8.56	11.17	-80.685	-53.24	1,298.96	1,287.16	1,269.14	18.02	71.432		
3,300.00	3,298.47	3,314.00	3,315.53	8.84	11.52	-80.843	-53.83	1,297.52	1,285.02	1,266.53	18.49	69.492		
3,400.00	3,398.39	3,408.00	3,409.52	9.13	11.86	-81.008	-54.07	1,296.35	1,283.12	1,264.18	18.94	67.732		
3,500.00	3,498.30	3,491.07	3,492.59	9.41	12.14	-81.151	-54.32	1,296.16	1,282.24	1,262.89	19.35	66.262		
3,517.97	3,516.25	3,506.45	3,507.97	9.46	12.19	-81.178	-54.35	1,296.25	1,282.22	1,262.80	19.42	66.009		
3,600.00	3,598.21	3,583.57	3,585.08	9.70	12.45	-81.322	-54.32	1,296.89	1,282.38	1,262.60	19.78	64.835		
3,700.00	3,698.12	3,705.11	3,706.62	9.99	12.87	-81.550	-54.29	1,297.12	1,281.94	1,261.62	20.31	63.104		
3,800.00	3,798.03	3,799.76	3,801.27	10.29	13.20	-81.707	-54.72	1,296.71	1,280.88	1,260.11	20.77	61.669		
3,900.00	3,897.94	3,897.19	3,898.69	10.58	13.55	-81.859	-55.40	1,296.58	1,280.12	1,258.89	21.24	60.282		
4,000.00	3,997.85	3,994.61 4,093.48	3,996.11	10.88	13.90	-82.008 -82.158	-56.14 -56.91	1,296.64	1,279.57	1,257.87	21.70	58.969 57.712		
4,100.00 4,200.00	4,097.76 4,197.68	4,093.48 4,209.14	4,094.98 4,210.64	11.18 11.48	14.24 14.66	-82.158 -82.327	-56.91 -57.97	1,296.91 1,296.73	1,279.23 1,278.50	1,257.06 1,255.81	22.17 22.69	57.712 56.339		
4,300.00	4,297.59	4,316.82	4,318.28	11.78	15.04	-82.451	-59.78	1,295.00	1,276.24	1,253.05	23.19	55.024		
4,400.00	4,297.59	4,406.17	4,407.62	12.08	15.36	-82.544	-61.49	1,293.00	1,274.44	1,250.81	23.63	53.927		
4,500.00	4,497.41	4,494.64	4,496.07	12.39	15.68	-82.636	-63.15	1,293.74	1,273.57	1,249.50	24.06	52.922		
4,600.00	4,597.32	4,595.19	4,596.60	12.69	16.03	-82.746	-64.88	1,294.15	1,273.36	1,248.82	24.54	51.893		
4,700.00	4,697.23	4,703.53	4,704.91	13.00	16.42	-82.833	-67.49	1,293.89	1,272.46	1,247.42	25.04	50.813		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

	sign: El	Campeon F	-ed Com -	514H - OH	/ 68224	- Suveys (H	&P 474)						Offset Site Error:	0.00 usft
Survey Progra Refer		6-MWD+HDGI Off		Semi N	lajor Axis		Offset Wellbe	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,900.00	4,897.05	4,907.61	4,908.87	13.62	17.15	-82.945	-73.70	1,290.98	1,268.23	1,242.22	26.01	48.763		
5,000.00	4,996.97	5,023.04	5,024.22	13.92	17.57	-82.981	-77.79	1,289.67	1,266.44	1,239.90	26.54	47.721		
5,100.00	5,096.88	5,150.85	5,151.85	14.23	18.03	-82.977	-83.43	1,285.92	1,262.79	1,235.68	27.11	46.588		
5,200.00	5,196.79	5,273.20	5,273.89	14.55	18.48	-82.961	-89.23	1,279.55	1,256.78	1,229.13	27.65	45.455		
5,300.00	5,296.70	5,386.17	5,386.50	14.86	18.88	-82.950	-94.56	1,272.29	1,249.60	1,221.44	28.16	44.373		
5,400.00	5,396.61	5,480.81	5,480.80	15.17	19.23	-82.929	-99.29	1,265.86	1,242.05	1,213.42	28.63	43.390		
5,500.00	5,496.52	5,575.72	5,575.39	15.48	19.57	-82.895	-104.29	1,259.86	1,234.95	1,205.86	29.09	42.451		
5,600.00	5,596.43	5,680.53	5,679.85	15.79	19.95	-82.867	-109.61	1,253.26	1,227.88	1,198.30	29.58	41.506		
5,700.00	5,696.34	5,796.66	5,795.56	16.11	20.37	-82.901	-114.17	1,244.47	1,219.56	1,189.46	30.10	40.518		
5,800.00	5,796.26	5,885.55	5,884.15	16.42	20.70	-82.942	-117.36	1,237.83	1,211.39	1,180.84	30.54	39.660		
5,900.00	5,896.17	5,984.10	5,982.39	16.74	21.05	-82.980	-121.03	1,231.01	1,203.77	1,172.76	31.01	38.813		
6,000.00	5,996.08	6,086.34	6,084.30	17.05	21.42	-83.061	-123.99	1,223.46	1,195.72	1,164.23	31.49	37.971		
6,100.00	6,095.99	6,172.34	6,170.11	17.37	21.73	-83.202	-124.99	1,217.69	1,188.44	1,156.52	31.92	37.235		
6,200.00	6,195.90	6,262.04	6,259.65	17.68	22.05	-83.378	-125.39	1,212.48	1,182.13	1,149.78	32.35	36.543		
6,300.00	6,295.81	6,351.85	6,349.36	18.00	22.36	-83.580	-125.28	1,208.01	1,176.68	1,143.91	32.78	35.901		
6,400.00	6,395.72	6,442.30	6,439.72	18.32	22.68	-83.809	-124.61	1,204.19	1,172.05	1,138.85	33.20	35.302		
6,500.00	6,495.63	6,527.00	6,524.37	18.63	22.98	-84.015	-124.14	1,201.40	1,168.37	1,134.77	33.60	34.768		
6,600.00	6,595.55	6,622.00	6,619.35	18.95	23.31	-84.224	-124.00	1,199.32	1,165.76	1,131.71	34.04	34.244		
6,700.00	6,695.46	6,716.00	6,713.33	19.27	23.64	-84.432	-123.84	1,197.74	1,163.67	1,129.19	34.48	33.752		
6,800.00	6,795.37	6,802.51	6,799.83	19.59	23.93	-84.641	-123.31	1,196.78	1,162.23	1,127.35	34.87	33.326		
6,842.88	6,838.21	6,836.39	6,833.71	19.72	24.05	-84.730	-122.91	1,196.74	1,162.05	1,127.02	35.03	33.174		
6,900.00	6,895.28	6,880.51	6,877.82	19.91	24.19	-84.859	-122.12	1,197.09	1,162.37	1,127.14	35.23	32.996		
7,000.00	6,995.19	6,973.98	6,971.25	20.23	24.49	-85.154	-119.89	1,198.79	1,164.01	1,128.38	35.63	32.669		
7,100.00	7,095.10	7,073.52	7,070.74	20.54	24.82	-85.462	-117.62	1,200.63	1,165.72	1,129.66	36.06	32.331		
7,200.00	7,195.01	7,176.35	7,173.54	20.86	25.15	-85.787	-115.14	1,202.45	1,167.40	1,130.91	36.49	31.988		
7,300.00	7,294.92	7,273.16	7,270.29	21.18	25.47	-86.111	-112.42	1,204.04	1,169.04	1,132.13	36.91	31.672		
7,400.00	7,394.84	7,364.37	7,361.43	21.50	25.77	-86.427	-109.55	1,205.98	1,171.23	1,133.92	37.31	31.395		
7,500.00	7,494.75	7,460.34	7,457.33	21.82	26.09	-86.748	-106.71	1,208.60	1,174.03	1,136.31	37.72	31.125		
7,600.00	7,594.66	7,560.64	7,557.56	22.14	26.42	-87.064	-104.08	1,211.50	1,177.00	1,138.85	38.15	30.849		
7,700.00	7,694.57	7,668.79	7,665.64	22.46	26.77	-87.389	-101.57	1,214.25	1,179.62	1,141.00	38.62	30.544		
7,800.00	7,794.48	7,774.83	7,771.63	22.78	27.12	-87.707	-99.19	1,216.23	1,181.59	1,142.51	39.08	30.236		
7,900.00	7,894.39	7,876.77	7,873.54	23.10	27.46	-88.009	-96.99	1,217.90	1,183.35	1,143.83	39.52	29.940		
8,000.00	7,994.30	7,984.80	7,981.54	23.42	27.82	-88.315	-95.02	1,219.13	1,184.60	1,144.61	39.99	29.621		
8,100.00	8,094.21	8,091.09	8,087.81	23.75	28.18	-88.633	-92.82	1,219.69	1,185.32	1,144.86	40.46	29.299		
8,200.00	8,194.13	8,196.51	8,193.20	24.07	28.54	-88.944	-90.80	1,219.67	1,185.50	1,144.58	40.92	28.972		
8,300.00	8,294.04	8,299.12	8,295.80	24.39	28.88	-89.232	-89.19	1,219.36	1,185.38	1,144.01	41.37	28.650		
8,400.00	8,393.95	8,397.99	8,394.66	24.71	29.22	-89.501	-87.82	1,218.99	1,185.20	1,143.38	41.82	28.342		
8,500.00	8,493.86	8,499.58	8,496.24	25.03	29.57	-89.768	-86.62	1,218.69	1,185.07	1,142.80	42.27	28.035		
8,582.04	8,575.83	8,579.14	8,575.80	25.29	29.84	-89.972	-85.77	1,218.43	1,184.96	1,142.33	42.63	27.795		
8,600.00	8,593.77	8,596.37	8,593.03	25.35	29.90	-90.017	-85.57	1,218.41	1,184.96	1,142.25	42.71	27.745		
8,700.00	8,693.68	8,692.02	8,688.67	25.67	30.22	-90.260	-84.56	1,218.46	1,185.22	1,142.07	43.14	27.472		
8,800.00	8,793.59	8,790.28	8,786.92	26.00	30.55	-90.500	-83.64	1,218.79	1,185.75	1,142.16	43.58	27.206		
8,900.00	8,893.50	8,888.47	8,885.11	26.32	30.89	-90.740	-82.70	1,219.25	1,186.43	1,142.40	44.03	26.948		
9,000.00	8,993.42	8,984.00	8,980.63	26.64	31.21	-90.981	-81.61	1,219.85	1,187.33	1,142.87	44.46	26.706		
9,100.00	9,093.33	9,082.55	9,079.17	26.96	31.54	-91.234	-80.33	1,220.69	1,188.50	1,143.59	44.91	26.466		
9,200.00	9,193.24	9,184.97	9,181.58	27.29	31.89	-91.490	-79.11	1,221.59	1,189.70	1,144.33	45.37	26.223		
9,300.00	9,293.15	9,288.87	9,285.47	27.61	32.24	-91.752	-77.92	1,222.16	1,190.59	1,144.75	45.84	25.974		
9,400.00	9,393.06	9,387.73	9,384.32	27.93	32.58	-92.003	-76.75	1,222.61	1,191.41	1,145.13	46.29	25.739		
9,500.00	9,492.97	9,487.28	9,483.87	28.25	32.92	-92.253	-75.59	1,223.14	1,192.34	1,145.60	46.74	25.508		
9,600.00	9,592.88	9,591.85	9,588.43	28.58	33.28	-92.509	-74.53	1,223.61	1,193.17	1,145.95	47.22	25.268		
9,700.00	9,692.79	9,701.50	9,698.08	28.90	33.66	-92.764	-73.86	1,223.41	1,193.32	1,145.60	47.72	25.007		
	9,792.71	9,802.76	9,799.34	29.22	34.01	-92.974	-73.89	1,222.79	1,192.92	1,144.73	48.19	24.753		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g			314H - UH	1 00224	- Suveys (H&	4/4)						Offset Site Error:	0.00 usft
Survey Prog	ram: 17 rence	6-MWD+HDG	M set	Somi N	laior Axis		Offset Wellb	ore Centre	Diet	Rule Assi ance	gned:		Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,900.00	9,892.62	9,905.27	9,901.84	29.55	34.38	-93.169	-74.28	1,222.24	1,192.55	1,143.87	48.67	24.501		
10,000.00	9,992.53	10,008.40	10,004.97	29.87	34.74	-93.350	-75.05	1,221.45	1,191.87	1,142.71	49.16	24.246		
10,100.00	10,092.44	10,107.39	10,103.94	30.19	35.09	-93.516	-75.97	1,220.63	1,191.09	1,141.47	49.63	24.001		
10,200.00	10,192.35	10,215.25	10,211.80	30.52	35.48	-93.714	-76.70	1,219.39	1,190.09	1,139.96	50.13	23.741		
10,300.00	10,292.26	10,320.95	10,317.47	30.84	35.85	-93.956	-76.62	1,217.28	1,188.45	1,137.82	50.62	23.476		
10,400.00	10,392.17	10,420.31	10,416.81	31.16	36.20	-94.196	-76.37	1,215.04	1,186.62	1,135.52	51.10	23.222		
10,500.00	10,492.08	10,519.76	10,516.24	31.49	36.55	-94.448	-75.83	1,212.91	1,184.99	1,133.41	51.58	22.976		
10,600.00	10,592.00	10,625.26	10,621.71	31.81	36.93	-94.702	-75.69	1,210.24	1,182.90	1,130.83	52.08	22.715		
10,700.00	10,691.91	10,723.95	10,720.37	32.13	37.28	-94.888	-76.60	1,208.02	1,180.84	1,128.29	52.55	22.471		
10,800.00	10,791.82	10,828.61	10,824.98	32.46	37.65	-95.044	-78.42	1,205.75	1,178.66	1,125.61	53.05	22.220		
10,900.00	10,891.73	10,923.06	10,919.39	32.78	37.99	-95.175	-80.34	1,203.51	1,176.23	1,122.72	53.50	21.985		
11,000.00	10,991.64	11,012.87	11,009.17	33.11	38.31	-95.295	-82.03	1,202.26	1,174.77	1,120.83	53.94	21.779		
11,100.00	11,091.55	11,109.03	11,105.32	33.43	38.65	-95.439	-83.40	1,201.37	1,173.88	1,119.48	54.41	21.576		
11,200.00	11,191.46	11,208.76	11,205.04	33.75	39.00	-95.594	-84.68	1,200.54	1,173.15	1,118.26	54.88	21.375		
11,300.00	11,291.37	11,311.88	11,308.13	34.08	39.37	-95.733	-86.44	1,199.69	1,172.31	1,116.93	55.38	21.170		
11,400.00	11,391.29	11,411.34	11,407.57	34.40	39.72	-95.864	-88.29	1,198.68	1,171.25	1,115.40	55.85	20.970		
11,500.00	11,491.20	11,505.96	11,502.16	34.73	40.06	-95.959	-90.55	1,198.15	1,170.49	1,114.18	56.31	20.787		
11,600.00	11,591.11	11,606.87	11,603.03	35.05	40.41	-96.028	-93.50	1,198.06	1,170.04	1,113.26	56.78	20.605		
11,700.00	11,691.02	11,712.33	11,708.44	35.38	40.78	-96.091	-96.87	1,197.67	1,169.25	1,111.97	57.28	20.414		
11,800.00	11,790.93	11,816.73	11,812.75	35.70	41.16	-96.125	-100.90	1,197.00	1,168.01	1,110.25	57.76	20.221		
11,900.00	11,890.84	11,910.00	11,905.95	36.03	41.49	-96.146	-104.68	1,196.45	1,166.77	1,108.56	58.21	20.044		
11,907.54	11,898.38	11,919.48	11,915.42	36.05	41.52	-96.148	-105.05	1,196.42	1,166.69	1,108.44	58.25	20.028		
12,000.00	11,990.80	12,005.63	12,001.52	36.33	41.82	-96.091	-108.26	1,196.28	1,165.85	1,107.21	58.64	19.880		
12,028.24	12,019.04	12,034.73	12,030.59	36.36	41.93	73.941	-109.27	1,196.28	1,165.60	1,106.85	58.75	19.841		
12,100.00	12,090.80	12,108.63	12,104.46	36.36	42.19	74.058	-111.77	1,196.17	1,164.82	1,105.83	58.99	19.746		
12,200.00	12,190.80	12,207.29	12,203.06	36.36	42.54	74.202	-114.91	1,195.80	1,163.59	1,104.27	59.33	19.614		
12,300.00	12,290.80	12,298.75	12,294.49	36.36	42.86	74.298	-116.97	1,195.73	1,162.91	1,103.27	59.64	19.498		
12,400.00	12,390.80	12,401.76	12,397.49	36.37	43.22	74.373	-118.51	1,195.85	1,162.62	1,102.62	60.01	19.375		
12,500.00	12,490.80	12,621.95	12,612.10	36.37	44.00	76.370	-159.98	1,196.77	1,159.38	1,098.70	60.68	19.105		
12,528.24	12,519.04	12,641.60	12,630.05	36.37	44.07	76.758	-167.98	1,196.82	1,156.55	1,095.83	60.72	19.049		
12,550.00	12,540.79	12,660.00	12,646.61	36.40	44.14	-102.507	-175.97	1,197.11	1,154.63	1,093.87	60.76	19.003		
12,600.00	12,590.61	12,682.69	12,666.80	36.63	44.22	-102.380	-186.30	1,197.85	1,151.60	1,090.74	60.87	18.921		
12,648.20	12,638.13	12,707.00	12,688.19	36.94	44.30	-102.083	-197.78	1,199.17	1,150.64	1,089.63	61.01	18.859 CC		
12,650.00	12,639.89	12,707.00	12,688.19	36.95	44.30	-102.083	-197.78	1,199.17	1,150.64	1,089.63	61.02	18.858		
12,700.00	12,688.24	12,751.57	12,726.80	37.29	44.45	-101.420	-219.80	1,202.37	1,151.31	1,090.05	61.26	18.795		
12,750.00	12,735.30	12,794.17	12,763.02	37.62	44.60	-100.775	-241.96	1,205.92	1,153.22	1,091.70	61.53	18.743		
12,800.00	12,780.72	12,878.17	12,829.92	37.96	44.89	-99.634	-292.00	1,213.39	1,155.58	1,093.62	61.96	18.651		
12,850.00	12,824.15	13,025.24	12,922.66	38.29	45.39	-96.970	-405.10	1,222.02	1,154.88	1,092.06	62.81	18.386		
12,900.00	12,865.26	13,073.38	12,946.57	38.60	45.56	-96.021	-446.81	1,224.06	1,154.05	1,090.82	63.23	18.251		
12,935.59	12,892.93	13,109.11	12,962.35	38.81	45.68	-95.290	-478.82	1,225.72	1,153.90	1,090.34	63.56	18.154		
12,950.00	12,903.73	13,123.71	12,968.13	38.90	45.73	-94.977	-492.22	1,226.43	1,153.92	1,090.23	63.70	18.116		
13,000.00	12,939.27	13,172.60	12,984.48	39.18	45.90	-93.872	-538.20	1,228.92	1,154.38	1,090.20	64.18	17.985		
13,050.00	12,971.62	13,227.25	12,996.26	39.43	46.08	-92.510	-591.43	1,231.76	1,155.32	1,090.57	64.75	17.843		
13,100.00	13,000.52	13,253.08	12,999.17	39.65	46.16	-91.715	-617.05	1,233.26	1,157.08	1,092.01	65.07	17.782		
13,150.00	13,025.76	13,281.37	13,000.87	39.85	46.25	-90.779	-645.21	1,235.38	1,160.13	1,094.68	65.45	17.726		
13,200.00	13,047.14	13,325.47	13,002.63	40.02	46.40	-89.546	-689.13	1,238.94	1,163.94	1,097.96	65.98	17.641		
13,250.00	13,064.50	13,370.00	13,004.17	40.15	46.54	-88.447	-733.48	1,242.60	1,168.05	1,101.52	66.53	17.556		
13,300.00	13,077.71	13,411.98	13,004.97	40.26	46.70	-87.510	-775.30	1,246.19	1,172.39	1,105.29	67.11	17.471		
13,350.00	13,086.67	13,453.48	13,004.69	40.33	46.86	-86.685	-816.63	1,249.92	1,176.95	1,109.26	67.69	17.387		
13,400.00	13,091.30	13,499.00	13,003.15	40.38	47.03	-85.957	-861.92	1,254.23	1,181.63	1,113.31	68.33	17.294		
13,428.24	13,092.00	13,518.02	13,002.25	40.39	47.11	-85.634	-880.82	1,256.12	1,184.30	1,115.65	68.65	17.252		
13,500.00	13,092.00	13,575.66	12,999.66	40.40	47.36	-85.530	-938.07	1,262.30	1,191.53	1,121.96	69.56	17.129		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	sign: El												Offset Site Error:	0.00 usf
Survey Prog	ram: 17 erence	6-MWD+HDG	M set	Semi M	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
13,600.00	13,092.00	13,753.99	12,992.63	40.43	48.19	-85.241	-1,115.63	1,276.48	1,198.75	1,126.96	71.80	16.696		
13,700.00	13,092.00	13,926.78	12,987.57	40.46	49.11	-85.001	-1,288.29	1,278.51	1,198.77	1,124.52	74.25	16.145		
13,800.00	13,092.00	14,030.31	12,986.79	40.50	49.70	-84.952	-1,391.81	1,276.76	1,196.17	1,120.21	75.97	15.746		
13,900.00	13,092.00	14,122.78	12,987.58	40.53	50.26	-84.983	-1,484.27	1,276.00	1,194.32	1,116.71	77.60	15.390		
14,000.00	13,092.00	14,213.03	12,987.99	40.58	50.83	-84.998	-1,574.52	1,275.72	1,193.02	1,113.75	79.27	15.049		
14,063.95	13,092.00	14,267.37	12,988.47	40.61	51.19	-85.020	-1,628.86	1,276.04	1,192.74	1,112.41	80.33	14.848		
14,100.00	13,092.00	14,296.05	12,988.83	40.63	51.39	-85.038	-1,657.53	1,276.44	1,192.85	1,111.94	80.91	14.742		
14,200.00	13,092.00	14,372.44	12,990.17	40.69	51.92	-85.107	-1,733.88	1,278.44	1,194.38	1,111.85	82.53	14.473		
14,300.00	13,092.00	14,451.18	12,991.97	40.76	52.48	-85.207	-1,812.50	1,282.41	1,198.16	1,113.95	84.21	14.227		
14,400.00	13,092.00	14,611.85	12,989.01	40.85	53.70	-85.072	-1,973.05	1,285.63	1,198.97	1,111.99	86.98	13.785		
14,500.00	13,092.00	14,710.05	12,985.05	40.95	54.47	-84.879	-2,071.18	1,285.49	1,198.23	1,109.24	88.99	13.464		
14,549.36	13,092.00	14,753.09	12,983.83	41.02	54.82	-84.820	-2,114.20	1,285.66	1,198.08	1,108.15	89.93	13.322		
14,600.00	13,092.00	14,795.86	12,982.95	41.10	55.17	-84.778	-2,156.96	1,286.14	1,198.24	1,107.36	90.88	13.184		
14,700.00	13,092.00	14,891.42	12,981.34	41.29	55.97	-84.705	-2,252.49	1,287.83	1,199.20	1,106.27	92.94	12.904		
14,800.00	13,092.00	14,995.24	12,979.40	41.57	56.85	-84.616	-2,356.27	1,289.60	1,200.11	1,104.98	95.13	12.616		
14,900.00	13,092.00	15,098.50	12,978.91	41.99	57.77	-84.595	-2,459.52	1,291.13	1,200.68	1,103.32	97.36	12.332		
15,000.00	13,092.00	15,195.00	12,979.40	42.60	58.64	-84.620	-2,556.01	1,292.42	1,201.01	1,101.49	99.52	12.068		
15,100.00	13,092.00	15,289.00	12,980.03	43.42	59.50	-84.654	-2,649.99	1,294.22	1,201.90	1,100.22	101.68	11.821		
15,200.00	13,092.00	15,376.16	12,979.55	44.43	60.32	-84.638	-2,737.11	1,296.70	1,203.81	1,100.04	103.76	11.602		
15,300.00	13,092.00	15,477.33	12,978.97	45.56	61.30	-84.621	-2,838.23	1,299.93	1,206.09	1,100.02	106.07	11.371		
15,400.00	13,092.00	15,564.47	12,979.55	46.76	62.15	-84.659	-2,925.30	1,303.22	1,208.82	1,100.62	108.20	11.172		
15,500.00	13,092.00	15,662.68	12,979.93	48.01	63.13	-84.692	-3,023.41	1,307.52	1,212.19	1,101.67	110.52	10.969		
15,600.00	13,092.00	15,765.22	12,979.39	49.30	64.16	-84.681	-3,125.86	1,311.84	1,215.47	1,102.56	112.91	10.765		
15,700.00	13,092.00	15,859.82	12,978.03	50.61	65.14	-84.631	-3,220.37	1,315.86	1,218.88	1,103.67	115.21	10.580		
15,800.00	13,092.00	15,954.19	12,976.47	51.93	66.13	-84.574	-3,314.62	1,320.28	1,222.74	1,105.21	117.52	10.404		
15,900.00	13,092.00	16,050.32	12,974.23	53.27	67.15	-84.487	-3,410.60	1,325.20	1,227.09	1,107.22	119.87	10.237		
16,000.00	13,092.00	16,203.87	12,971.62	54.61	68.80	-84.380	-3,564.05	1,329.69	1,229.16	1,106.06	123.10	9.985		
16,100.00	13,092.00	16,319.01	12,970.85	55.97	70.04	-84.339	-3,679.18	1,329.82	1,228.35	1,102.60	125.75	9.768		
16,200.00	13,092.00	16,440.32	12,971.67	57.33	71.38	-84.365	-3,800.47	1,328.34	1,226.07	1,097.58	128.49	9.542		
16,300.00	13,092.00	16,536.68	12,976.01	58.69	72.45	-84.558	-3,896.72	1,327.16	1,223.45	1,092.51	130.94	9.343		
16,400.00	13,092.00	16,649.99	12,978.68	60.06	73.72	-84.667	-4,009.97	1,324.71	1,220.11	1,086.50	133.61	9.132		
16,500.00	13,092.00	16,749.20	12,979.65	61.44	74.84	-84.696	-4,109.14	1,322.01	1,216.34	1,080.24	136.10	8.937		
16,600.00	13,092.00	16,844.67	12,979.72	62.81	75.93	-84.686	-4,204.57	1,319.60	1,212.86	1,074.30	138.56	8.753		
16,700.00	13,092.00	16,962.53	12,976.90	64.20	77.28	-84.532	-4,322.35	1,316.17	1,209.31	1,068.03	141.28	8.560		
16,800.00	13,092.00	17,094.11	12,972.62	65.58	78.80	-84.290	-4,453.65	1,308.91	1,203.15	1,059.05	144.10	8.350		
16,900.00	13,092.00	17,150.69	12,971.73	66.97	79.46	-84.233	-4,510.17	1,306.44	1,197.82	1,051.63	146.18	8.194		
17,000.00	13,092.00	17,212.68	12,971.88	68.36	80.19	-84.234	-4,572.15	1,305.67	1,195.60	1,047.35	148.25	8.065		
17,019.26	13,092.00	17,224.55	12,971.89	68.63	80.33	-84.234	-4,584.02	1,305.75	1,195.54	1,046.90	148.64	8.043		
17,100.00	13,092.00	17,273.00	12,971.74	69.75	80.91	-84.230	-4,632.46	1,306.81	1,196.59	1,046.39	150.20	7.967		
17,200.00	13,092.00	17,347.30	12,971.85	71.14	81.80	-84.248	-4,706.67	1,310.29	1,200.29	1,047.96	152.33	7.880		
17,300.00	13,092.00	17,489.68	12,972.84	72.54	83.51	-84.320	-4,848.87	1,316.96	1,204.17	1,048.49	155.68	7.735		
17,400.00	13,092.00	17,613.08	12,973.46	73.94	85.01	-84.348	-4,972.27	1,317.85	1,203.73	1,045.09	158.63	7.588		
17,500.00	13,092.00	17,719.99	12,973.51	75.34	86.31	-84.347	-5,079.18	1,318.13	1,203.04	1,041.71	161.34	7.457		
17,570.37	13,092.00	17,775.93	12,972.90	76.32	86.99	-84.315	-5,135.11	1,318.04	1,202.39	1,039.43	162.97	7.378		
17,600.00	13,092.00	17,794.95	12,972.66	76.74	87.22	-84.304	-5,154.13	1,318.28	1,202.52	1,038.94	163.58	7.351		
17,700.00	13,092.00	17,863.44	12,971.94	78.14	88.07	-84.278	-5,222.58	1,320.50	1,204.83	1,039.16	165.67	7.273		
17,800.00	13,092.00	17,950.33	12,973.74	79.55	89.15	-84.382	-5,309.31	1,325.39	1,209.22	1,041.15	168.08	7.195		
17,900.00	13,092.00	18,094.26	12,979.19	80.95	90.95	-84.656	-5,453.02	1,330.69	1,211.38	1,039.84	171.55	7.062		
18,000.00	13,092.00	18,187.29	12,982.52	82.36	92.12	-84.819	-5,545.97	1,332.81	1,212.39	1,038.27	174.11	6.963		
18,100.00	13,092.00	18,280.01	12,984.97	83.76	93.29	-84.942	-5,638.61	1,335.73	1,214.32	1,037.65	176.67	6.873		
18,200.00	13,092.00	18,414.22	12,987.61	85.17	94.98	-85.073	-5,772.76	1,338.71	1,215.53	1,035.64	179.89	6.757		
18,300.00	13,092.00	18,513.64	12,988.05	86.58	96.23	-85.092	-5,872.17	1,339.20	1,215.02	1,032.47	182.55	6.656		





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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

urvey Progr	ram: 17	6-MWD+HDG	M							Rule Assi	gned:		Offset Well Error:	1.00 us
	rence Vertical Depth (usft)	Off Measured Depth (usft)	set Vertical Depth (usft)	Semi M Reference (usft)	lajor Axis Offset (usft)	Highside Toolface (°)	Offset Wellbo +N/-S (usft)	+E/-W (usft)	Dist Between Centres (usft)	tance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
18,400.00	13,092.00	18,618.00	12,987.84	87.99	97.55	-85.078	-5,976.53	1,339.33	1,214.20	1,028.93	185.27	6.554		
18,500.00	13,092.00	18,735.85	12,987.44	89.40	99.05	-85.053	-6,094.37	1,338.79	1,212.87	1,024.70	188.17	6.446		
18,600.00	13,092.00	18,830.92	12,987.19	90.81	100.26	-85.029	-6,189.42	1,336.80	1,209.89	1,019.11	190.78	6.342		
18,700.00	13,092.00	18,920.13	12,987.54	92.23	101.40	-85.042	-6,278.63	1,336.81	1,208.84	1,015.51	193.33	6.253		
18,800.00	13,092.00	19,041.07	12,985.27	93.64	102.95	-84.923	-6,399.53	1,335.14	1,206.64	1,010.39	196.25	6.148		
18,900.00	13,092.00	19,144.63	12,981.06	95.06	104.28	-84.708	-6,502.97	1,332.49	1,203.50	1,004.55	198.95	6.049		
19,000.00	13,092.00	19,247.31	12,977.98	96.47	105.60	-84.546	-6,605.57	1,329.80	1,200.22	998.58	201.64	5.952		
19,100.00	13,092.00	19,331.34	12,977.38	97.89	106.68	-84.506	-6,689.58	1,328.17	1,197.40	993.26	204.15	5.865		
19,200.00	13,092.00	19,418.17	12,976.96	99.30	107.80	-84.480	-6,776.40	1,327.67	1,195.91	989.24	206.67	5.787		
19,300.00	13,092.00	19,522.37	12,977.40	100.72	109.16	-84.496	-6,880.60	1,327.71	1,194.96	985.52	209.44	5.705		
19,400.00	13,092.00	19,616.09	12,979.91	102.14	110.39	-84.612	-6,974.28	1,327.73	1,193.77	981.68	212.09	5.629		
19,500.00	13,092.00	19,728.71	12,982.03	103.55	111.86	-84.708	-7,086.88	1,327.70	1,192.63	977.63	215.00	5.547		
19,572.03	13,092.00	19,778.53	12,981.92	104.58	112.52	-84.701	-7,136.69	1,327.70	1,191.96	975.31	216.65	5.502		
19,600.00	13,092.00	19,797.83	12,981.76	104.97	112.77	-84.694	-7,155.99	1,327.94	1,192.06	974.79	217.27	5.486		
19,700.00	13,092.00	19,882.48	12,980.79	106.39	113.88	-84.653	-7,240.62	1,330.08	1,193.68	973.95	219.73	5.433		
19,800.00	13,092.00	19,976.47	12,980.28	107.81	115.13	-84.638	-7,334.55	1,333.07	1,195.94	973.60	222.34	5.379		
19,900.00	13,092.00	20,077.57	12,979.18	109.23	116.47	-84.597	-7,435.58	1,336.56	1,198.53	973.43	225.09	5.325		
20,000.00	13,092.00	20,175.44	12,977.36	110.65	117.77	-84.520	-7,533.39	1,339.70	1,200.94	973.16	227.78	5.272		
20,100.00	13,092.00	20,293.38	12,974.89	112.07	119.34	-84.413	-7,651.25	1,343.06	1,203.06	972.24	230.82	5.212		
20,200.00	13,092.00	20,391.26	12,973.85	113.49	120.64	-84.369	-7,749.11	1,345.04	1,204.22	970.70	233.52	5.157		
20,300.00	13,092.00	20,492.43	12,972.30	114.91	121.99	-84.301	-7,850.24	1,347.15	1,205.49	969.22	236.27	5.102		
20,400.00	13,092.00	20,614.44	12,968.21	116.34	123.62	-84.108	-7,972.18	1,348.34	1,205.86	966.55	239.31	5.039		
20,500.00	13,092.00	20,727.47	12,964.76	117.76	125.12	-83.934	-8,085.15	1,347.39	1,204.34	962.16	242.19	4.973		
20,600.00	13,092.00	20,826.67	12,962.01	119.18	126.45	-83.794	-8,184.30	1,346.40	1,202.69	957.81	244.88	4.911		
20,700.00	13,092.00	20,918.00	12,960.06	120.60	127.67	-83.693	-8,275.61	1,345.55	1,201.08	953.59	247.49	4.853		
20,711.06	13,092.00	20,918.00	12,960.06	120.76	127.67	-83.693	-8,275.61	1,345.55	1,201.02	953.39	247.63	4.850 ES, SF	:	
20,800.00	13,092.00	20,918.00	12,960.06	122.03	127.67	-83.693	-8,275.61	1,345.55	1,204.31	956.19	248.13	4.854		
20,900.00	13,092.00	20,918.00	12,960.06	123.45	127.67	-83.693	-8,275.61	1,345.55	1,215.80	968.48	247.32	4.916		
21,000.00	13,092.00	20,918.00	12,960.06	124.87	127.67	-83.693	-8,275.61	1,345.55	1,235.29	990.14	245.16	5.039		
21,100.00	13,092.00	20,918.00	12,960.06	126.30	127.67	-83.693	-8,275.61	1,345.55	1,262.43	1,020.61	241.82	5.221		
21,200.00	13,092.00	20,918.00	12,960.06	127.72	127.67	-83.693	-8,275.61	1,345.55	1,296.74	1,059.21	237.52	5.459		
21,300.00	13,092.00	20,918.00	12,960.06	129.15	127.67	-83.693	-8,275.61	1,345.55	1,337.65	1,105.15	232.50	5.753		
21,400.00	13,092.00	20,918.00	12,960.06	130.57	127.67	-83.693	-8,275.61	1,345.55	1,384.59	1,157.61	226.98	6.100		
21,500.00	13,092.00	20,918.00	12,960.06	130.57	127.67	-83.693	-8,275.61	1,345.55	1,436.97	1,215.80	221.17	6.497		
21,600.00	13,092.00	20,918.00	12,960.06	133.42	127.67	-83.693	-8,275.61	1,345.55	1,494.21	1,278.97	215.24	6.942		
21,700.00	13,092.00	20,918.00	12,960.06	134.85	127.67	-83.693	-8,275.61	1,345.55	1,555.78	1,346.46	209.32	7.432		
21 800 00	13,092.00	20,918.00	12,960.06	136.27	127.67	-83.693	_0 275 61	1 3/5 55	1 621 10	1 /17 66	203.53	7.965		
21,800.00 21,900.00	13,092.00	20,918.00	12,960.06	130.27	127.67	-83.693	-8,275.61 -8,275.61	1,345.55 1,345.55	1,621.19 1,689.98	1,417.66 1,492.06	197.92	8.539		
22,000.00	13,092.00	20,918.00	12,960.06	137.70	127.67	-83.693	-8,275.61	1,345.55	1,761.77	1,569.20	197.92	9.149		
22,100.00 22,200.00	13,092.00 13,092.00	20,918.00 20,918.00	12,960.06 12,960.06	140.55 141.98	127.67 127.67	-83.693 -83.693	-8,275.61 -8,275.61	1,345.55 1,345.55	1,836.20 1,912.96	1,648.72 1,730.29	187.47 182.67	9.794 10.472		
		20,918.00												
22,300.00	13,092.00		12,960.06	143.40	127.67	-83.693	-8,275.61	1,345.55	1,991.78	1,813.62	178.16	11.180		
22,400.00	13,092.00	20,918.00	12,960.06	144.83	127.67	-83.693	-8,275.61	1,345.55	2,072.43	1,898.50	173.94	11.915		
22,500.00	13,092.00	20,918.00	12,960.06	146.26	127.67	-83.693	-8,275.61	1,345.55	2,154.71	1,984.72	169.99	12.676		
22,600.00 22,700.00	13,092.00 13,092.00	20,918.00 20,918.00	12,960.06 12,960.06	147.69 149.11	127.67 127.67	-83.693 -83.693	-8,275.61 -8,275.61	1,345.55 1,345.55	2,238.43 2,323.43	2,072.12 2,160.55	166.31 162.88	13.459 14.264		
,. 55.00	.0,002.00	20,010.00	,000.00	170.11		55.555	0,210.01	.,0 10.00	_,0_0.70	_,	. 52.00			







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

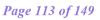
Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

													Offset Site Error:	0.00 usf
Survey Progra Refer		MWD+HRGM Off	set	Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	1.00	1.00	-90.470	-10.33	-1,260.20	1,260.24	(,	()			
100.00	100.00	100.00	100.00	1.08	1.08	-90.470	-10.33	-1,260.20	1,260.24	1,258.07	2.17	581.213		
200.00	200.00	200.00	200.00	1.60	1.60	-90.470	-10.33	-1,260.20	1,260.24	1,257.05	3.20	394.168		
300.00	300.00	300.00	300.00	2.01	2.01	-90.470	-10.33	-1,260.20	1,260.24	1,256.22	4.02	313.556		
400.00	400.00	400.00	400.00	2.35	2.35	-90.470	-10.33	-1,260.20	1,260.24	1,255.54	4.71	267.841		
500.00	500.00	500.00	500.00	2.65	2.65	-90.470	-10.33	-1,260.20	1,260.24	1,254.93	5.31	237.414		
600.00	600.00	600.00	600.00	2.93	2.93	-90.470	-10.33	-1,260.20	1,260.24	1,254.39	5.85	215.282		
700.00	700.00	700.00	700.00	3.18	3.18	-90.470	-10.33	-1,260.20	1,260.24	1,253.89	6.36	198.241		
800.00	800.00	800.00	800.00	3.41	3.41	-90.470	-10.33	-1,260.20	1,260.24	1,253.42	6.83	184.591		
900.00	900.00	900.00	900.00	3.64	3.64	-90.470	-10.33	-1,260.20	1,260.24	1,252.97	7.27	173.333		
1,000.00	1,000.00	1,000.00	1,000.00	3.85	3.85	-90.470	-10.33	-1,260.20	1,260.24	1,252.55	7.69	163.839		
1,100.00	1,100.00	1,100.00	1,100.00	4.05	4.05	-90.470	-10.33	-1,260.20	1,260.24	1,252.15	8.09	155.688		
1,200.00	1,200.00	1,200.00	1,200.00	4.24	4.24	-90.470	-10.33	-1,260.20	1,260.24	1,251.76	8.48	148.588		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.470	-10.33	-1,260.20	1,260.24	1,251.39	8.85	142.331		
1,400.00	1,400.00	1,400.00	1,400.00	4.61	4.61	-90.470	-10.33	-1,260.20	1,260.24	1,251.03	9.21	136.760		
1,500.00	1,500.00	1,500.00	1,500.00	4.78	4.78	-90.470	-10.33	-1,260.20	1,260.24	1,250.68	9.56	131.757 CC, E	S	
1,600.00	1,599.98	1,570.60	1,570.59	4.98	4.96	99.558	-10.62	-1,261.02	1,261.70	1,251.84	9.85	128.026		
1,620.70	1,620.67	1,585.20	1,585.19	4.99	4.99	99.564	-10.75	-1,261.39	1,262.36	1,252.47	9.89	127.614		
1,700.00	1,699.89	1,645.76	1,645.70	5.07	5.08	99.642	-11.55	-1,263.65	1,265.85	1,255.82	10.03	126.159		
1,800.00	1,799.81	1,745.60	1,745.44	5.23	5.22	99.763	-13.06	-1,267.92	1,270.84	1,260.55	10.29	123.508		
1,900.00	1,899.72	1,845.44	1,845.18	5.41	5.39	99.882	-14.57	-1,272.19	1,275.84	1,265.25	10.59	120.477		
2,000.00	1,999.63	1,945.28	1,944.91	5.60	5.59	100.000	-16.07	-1,276.46	1,280.85	1,269.94	10.91	117.433		
2,100.00	2,099.54	2,045.12	2,044.65	5.80	5.79	100.117	-17.58	-1,280.72	1,285.86	1,274.62	11.23	114.451		
2,200.00	2,199.45	2,144.96	2,144.39	6.02	6.01	100.234	-19.09	-1,284.99	1,290.87	1,279.30	11.57	111.548		
2,300.00	2,299.36	2,244.80	2,244.12	6.24	6.24	100.349	-20.60	-1,289.26	1,295.89	1,283.97	11.92	108.732		
2,400.00	2,399.27	2,344.64	2,343.86	6.47	6.48	100.464	-22.11	-1,293.52	1,300.92	1,288.64	12.27	106.010		
2,500.00	2,499.18	2,444.48	2,443.60	6.72	6.72	100.578	-23.62	-1,297.79	1,305.95	1,293.31	12.63	103.385		
2,600.00	2,599.10	2,544.32	2,543.34	6.96	6.98	100.691	-25.12	-1,302.06	1,310.98	1,297.98	13.00	100.859		
2,700.00	2,699.01	2,644.16	2,643.07	7.22	7.23	100.803	-26.63	-1,306.32	1,316.02	1,302.65	13.37	98.431		
2,800.00	2,798.92	2,744.00	2,742.81	7.48	7.50	100.914	-28.14	-1,310.59	1,321.07	1,307.32	13.75	96.101		
2,900.00	2,898.83	2,843.84	2,842.55	7.74	7.77	101.024	-29.65	-1,314.86	1,326.12	1,311.99	14.13	93.866		
3,000.00	2,998.74	2,943.68	2,942.29	8.01	8.04	101.134	-31.16	-1,319.13	1,331.17	1,316.66	14.51	91.725		
3,100.00	3,098.65	3,043.52	3,042.02	8.28	8.32	101.243	-32.66	-1,323.39	1,336.23	1,321.33	14.90	89.672		
3,200.00	3,198.56	3,143.36	3,141.76	8.56	8.60	101.350	-34.17	-1,327.66	1,341.30	1,326.01	15.29	87.706		
3,300.00	3,298.47	3,243.20	3,241.50	8.84	8.89	101.457	-35.68	-1,331.93	1,346.37	1,330.68	15.69	85.822		
3,400.00	3,398.39	3,343.04	3,341.23	9.13	9.18	101.564	-37.19	-1,336.19	1,351.44	1,335.36	16.09	84.017		
3,500.00	3,498.30	3,442.88	3,440.97	9.41	9.47	101.669	-38.70	-1,340.46	1,356.52	1,340.04	16.49	82.287		
3,600.00	3,598.21	3,542.72	3,540.71	9.70	9.77	101.774	-40.20	-1,344.73	1,361.61	1,344.72	16.89	80.629		
3,700.00	3,698.12	3,642.56	3,640.45	9.99	10.06	101.878	-41.71	-1,348.99	1,366.69	1,349.40	17.29	79.039		
3,800.00	3,798.03	3,742.40	3,740.18	10.29	10.36	101.981	-43.22	-1,353.26	1,371.79	1,354.09	17.70	77.514		
3,900.00	3,897.94	3,842.24	3,839.92	10.58	10.66	102.083	-44.73	-1,357.53	1,376.88	1,358.78	18.11	76.050		
4,000.00	3,997.85	3,942.08	3,939.66	10.88	10.96	102.185	-46.24	-1,361.80	1,381.98	1,363.47	18.51	74.644		
4,100.00	4,097.76	4,041.92	4,039.40	11.18	11.27	102.286	-47.74	-1,366.06	1,387.09	1,368.16	18.93	73.294		
4,200.00	4,197.68	4,141.76	4,139.13	11.48	11.58	102.386	-49.25	-1,370.33	1,392.20	1,372.86	19.34	71.996		
4,300.00	4,297.59	4,241.60	4,238.87	11.78	11.88	102.485	-50.76	-1,374.60	1,397.31	1,377.56	19.75	70.748		
4,400.00	4,397.50	4,341.44	4,338.61	12.08	12.19	102.584	-52.27	-1,378.86	1,402.43	1,382.27	20.17	69.547		
4,500.00	4,497.41	4,441.28	4,438.34	12.39	12.50	102.682	-53.78	-1,383.13	1,407.55	1,386.97	20.58	68.392		
4,600.00	4,597.32	4,541.12	4,538.08	12.69	12.81	102.779	-55.28	-1,387.40	1,412.68	1,391.68	21.00	67.279		
4,700.00	4,697.23	4,640.96	4,637.82	13.00	13.12	102.875	-56.79	-1,391.67	1,417.81	1,396.39	21.42	66.206		
4,800.00	4,797.14	4,740.80	4,737.56	13.31	13.44	102.971	-58.30	-1,395.93	1,422.94	1,401.11	21.83	65.172		
4,900.00	4,897.05	4,840.64	4,837.29	13.62	13.75	103.066	-59.81	-1,400.20	1,428.08	1,405.83	22.25	64.174		
		4,940.48						-1,404.47						







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De		MAID LIDOC											Offset Site Error:	0.00 usf
Survey Prog Refe	ram: 0-l erence	MWD+HRGM Off	set	Semi N	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.00	5,096.88	5,040.32	5,036.77	14.23	14.38	103.255	-62.82	-1,408.73	1,438.37	1,415.28	23.09	62.282		
5,200.00	5,196.79	5,140.16	5,136.51	14.55	14.70	103.348	-64.33	-1,413.00	1,443.52	1,420.00	23.52	61.384		
5,300.00	5,296.70	5,240.00	5,236.24	14.86	15.01	103.440	-65.84	-1,417.27	1,448.67	1,424.74	23.94	60.516		
5,400.00	5,396.61	5,339.84	5,335.98	15.17	15.33	103.532	-67.35	-1,421.53	1,453.83	1,429.47	24.36	59.677		
5,500.00	5,496.52	5,439.68	5,435.72	15.48	15.65	103.623	-68.86	-1,425.80	1,458.99	1,434.21	24.79	58.865		
5,600.00	5,596.43	5,539.52	5,535.45	15.79	15.97	103.714	-70.36	-1,430.07	1,464.16	1,438.95	25.21	58.079		
5,700.00	5,696.34	5,639.36	5,635.19	16.11	16.29	103.804	-71.87	-1,434.34	1,469.33	1,443.69	25.63	57.318		
5,800.00	5,796.26	5,739.20	5,734.93	16.42	16.61	103.893	-73.38	-1,438.60	1,474.50	1,448.44	26.06	56.580		
5,900.00	5,896.17	5,839.04	5,834.67	16.74	16.93	103.981	-74.89	-1,442.87	1,479.67	1,453.19	26.49	55.866		
6,000.00	5,996.08	5,938.88	5,934.40	17.05	17.25	104.069	-76.40	-1,447.14	1,484.85	1,457.94	26.91	55.173		
6,100.00	6,095.99	6,038.72	6,034.14	17.37	17.57	104.157	-77.91	-1,451.40	1,490.03	1,462.69	27.34	54.501		
6,200.00	6,195.90	6,138.56	6,133.88	17.68	17.89	104.244	-79.41	-1,455.67	1,495.22	1,467.45	27.77	53.849		
6,300.00	6,295.81	6,238.40	6,233.62	18.00	18.21	104.330	-80.92	-1,459.94	1,500.41	1,472.21	28.20	53.215		
6,400.00	6,395.72	6,338.24	6,333.35	18.32	18.53	104.415	-82.43	-1,464.20	1,505.60	1,476.98	28.62	52.600		
6,500.00	6,495.63	6,438.08	6,433.09	18.63	18.85	104.500	-83.94	-1,468.47	1,510.80	1,481.75	29.05	52.003		
6,600.00	6,595.55	6,537.92	6,532.83	18.95	19.18	104.585	-85.45	-1,472.74	1,516.00	1,486.52	29.48	51.422		
6,700.00	6,695.46	6,637.76	6,632.56	19.27	19.50	104.669	-86.95	-1,477.01	1,521.20	1,491.29	29.91	50.857		
6,800.00	6,795.37	6,737.60	6,732.30	19.59	19.82	104.752	-88.46	-1,481.27	1,526.41	1,496.06	30.34	50.308		
6,900.00	6,895.28	6,837.44	6,832.04	19.91	20.15	104.835	-89.97	-1,485.54	1,531.61	1,500.84	30.77	49.774		
7,000.00	6,995.19	6,937.28	6,931.78	20.23	20.47	104.917	-91.48	-1,489.81	1,536.83	1,505.62	31.20	49.254		
7,100.00	7,095.10	7,037.12	7,031.51	20.54	20.80	104.998	-92.99	-1,494.07	1,542.04	1,510.41	31.63	48.747		
7,200.00	7,195.01	7,136.96	7,131.25	20.86	21.12	105.079	-94.49	-1,498.34	1,547.26	1,515.20	32.06	48.254		
7,300.00	7,294.92	7,236.80	7,230.99	21.18	21.45	105.160	-96.00	-1,502.61	1,552.48	1,519.99	32.50	47.774		
7,400.00	7,394.84	7,336.64	7,330.73	21.50	21.77	105.240	-97.51	-1,506.87	1,557.71	1,524.78	32.93	47.305		
7,500.00	7,494.75	7,436.48	7,430.46	21.82	22.10	105.319	-99.02	-1,511.14	1,562.93	1,529.57	33.36	46.849		
7,600.00	7,594.66	7,536.32	7,530.20	22.14	22.42	105.398	-100.53	-1,515.41	1,568.16	1,534.37	33.79	46.404		
7,700.00	7,694.57	7,636.16	7,629.94	22.46	22.75	105.476	-102.03	-1,519.68	1,573.40	1,539.17	34.23	45.969		
7,800.00	7,794.48	7,736.00	7,729.67	22.78	23.07	105.554	-103.54	-1,523.94	1,578.63	1,543.97	34.66	45.546		
7,900.00	7,894.39	7,835.84	7,829.41	23.10	23.40	105.632	-105.05	-1,528.21	1,583.87	1,548.78	35.09	45.132		
8,000.00	7,994.30	7,935.68	7,929.15	23.42	23.72	105.708	-106.56	-1,532.48	1,589.12	1,553.59	35.53	44.728		
8,100.00	8,094.21	8,035.52	8,028.89	23.75	24.05	105.785	-108.07	-1,536.74	1,594.36	1,558.40	35.96	44.334		
8,200.00	8,194.13	8,135.36	8,128.62	24.07	24.38	105.861	-109.57	-1,541.01	1,599.61	1,563.21	36.40	43.949		
8,300.00	8,294.04	8,235.20	8,228.36	24.39	24.70	105.936	-111.08	-1,545.28	1,604.86	1,568.03	36.83	43.572		
8,400.00	8,393.95	8,335.04	8,328.10	24.71	25.03	106.011	-112.59	-1,549.55	1,610.11	1,572.84	37.27	43.205		
8,500.00	8,493.86	8,434.88	8,427.84	25.03	25.36	106.085	-114.10	-1,553.81	1,615.37	1,577.66	37.70	42.845		
8,600.00	8,593.77	8,534.72	8,527.57	25.35	25.68	106.159	-115.61	-1,558.08	1,620.63	1,582.49	38.14	42.493		
8,700.00	8,693.68	8,634.56	8,627.31	25.67	26.01	106.232	-117.11	-1,562.35	1,625.89	1,587.31	38.57	42.150		
8,800.00	8,793.59	8,734.39	8,727.05	26.00	26.34	106.305	-118.62	-1,566.61	1,631.15	1,592.14	39.01	41.813		
8,900.00	8,893.50	8,834.23	8,826.79	26.32	26.67	106.378	-120.13	-1,570.88	1,636.42	1,596.97	39.45	41.484		
9,000.00	8,993.42	8,934.07	8,926.52	26.64	26.99	106.450	-121.64	-1,575.15	1,641.69	1,601.80	39.88	41.162		
9,100.00	9,093.33	9,033.91	9,026.26	26.96	27.32	106.521	-123.15	-1,579.41	1,646.96	1,606.64	40.32	40.847		
9,200.00	9,193.24	9,133.75	9,126.00	27.29	27.65	106.592	-124.65	-1,583.68	1,652.23	1,611.48	40.76	40.538		
9,300.00	9,293.15	9,233.59	9,225.73	27.61	27.98	106.663	-126.16	-1,587.95	1,657.51	1,616.31	41.19	40.236		
9,400.00	9,393.06	9,333.43	9,325.47	27.93	28.30	106.733	-127.67	-1,592.22	1,662.79	1,621.16	41.63	39.940		
9,500.00	9,492.97	9,433.27	9,425.21	28.25	28.63	106.803	-129.18	-1,596.48	1,668.07	1,626.00	42.07	39.649		
9,600.00	9,592.88	9,533.11	9,524.95	28.58	28.96	106.872	-130.69	-1,600.75	1,673.35	1,630.85	42.51	39.365		
9,700.00	9,692.79	9,632.95	9,624.68	28.90	29.29	106.941	-132.20	-1,605.02	1,678.64	1,635.69	42.95	39.086		
9,800.00	9,792.71	9,732.79	9,724.42	29.22	29.62	107.009	-133.70	-1,609.28	1,683.93	1,640.54	43.39	38.813		
9,900.00	9,892.62	9,832.63	9,824.16	29.55	29.95	107.077	-135.21	-1,613.55	1,689.22	1,645.40	43.82	38.545		
10,000.00	9,992.53	9,932.47	9,923.90	29.87	30.27	107.145	-136.72 -138.23	-1,617.82 -1,622.08	1,694.52	1,650.25	44.26	38.283		
10,100.00	10,092.44	10,032.31	10,023.63	30.19	30.60	107.212	-138.23	-1,022.08	1,699.81	1,655.11	44.70	38.025		
10,200.00	10,192.35	10,132.15	10,123.37	30.52	30.93	107.279	-139.74	-1,626.35	1,705.11	1,659.97	45.14	37.772		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

		### . I . T. C.											Offset Site Error:	0.00 usf
Survey Prog Refe	ram: 0-l erence	MWD+HRGM Off	set	Semi M	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,300.00	10,292.26	10,231.99	10,223.11	30.84	31.26	107.345	-141.24	-1,630.62	1,710.41	1,664.83	45.58	37.524		
10,400.00	10,392.17	10,331.83	10,322.84	31.16	31.59	107.411	-142.75	-1,634.89	1,715.71	1,669.69	46.02	37.281		
10,500.00	10,492.08	10,431.67	10,422.58	31.49	31.92	107.476	-144.26	-1,639.15	1,721.02	1,674.56	46.46	37.042		
10,600.00	10,592.00	10,531.51	10,522.32	31.81	32.25	107.541	-145.77	-1,643.42	1,726.33	1,679.42	46.90	36.808		
10,700.00	10,691.91	10,631.35	10,622.06	32.13	32.58	107.606	-147.28	-1,647.69	1,731.64	1,684.29	47.34	36.577		
10,800.00	10,791.82	10,731.19	10,721.79	32.46	32.90	107.670	-148.78	-1,651.95	1,736.95	1,689.17	47.78	36.351		
10,900.00	10,891.73	10,831.03	10,821.53	32.78	33.23	107.734	-150.29	-1,656.22	1,742.26	1,694.04	48.22	36.129		
11,000.00	10,991.64	10,930.87	10,921.27	33.11	33.56	107.798	-151.80	-1,660.49	1,747.58	1,698.91	48.66	35.911		
11,100.00	11,091.55	11,030.71	11,021.01	33.43	33.89	107.861	-153.31	-1,664.75	1,752.90	1,703.79	49.11	35.697		
11,200.00	11,191.46	11,130.55	11,120.74	33.75	34.22	107.924	-154.82	-1,669.02	1,758.22	1,708.67	49.55	35.486		
11,300.00	11,291.37	11,230.39	11,220.48	34.08	34.55	107.986	-156.32	-1,673.29	1,763.54	1,713.55	49.99	35.279		
11,400.00	11,391.29	11,330.23	11,320.22	34.40	34.88	108.048	-157.83	-1,677.56	1,768.86	1,718.43	50.43	35.076		
11,500.00	11,491.20	11,430.07	11,419.95	34.73	35.21	108.110	-159.34	-1,681.82	1,774.19	1,723.32	50.87	34.878		
11,600.00	11,591.11	11,601.29	11,591.11	35.05	35.53	108.277	-160.54	-1,685.21	1,777.26	1,725.96	51.29	34.649		
11,700.00	11,691.02	11,701.20	11,691.02	35.38	35.54	108.406	-160.54	-1,685.21	1,778.58	1,727.13	51.46	34.564		
11,800.00	11,790.93	11,801.11	11,790.93	35.70	35.56	108.534	-160.54	-1,685.21	1,779.92	1,728.29	51.63	34.477		
11,900.00	11,890.84	11,901.02	11,890.84	36.03	35.58	108.663	-160.54	-1,685.21	1,781.26	1,729.46	51.80	34.387		
11,907.54	11,898.38	11,908.55	11,898.38	36.05	35.58	108.672	-160.54	-1,685.21	1,781.37	1,729.55	51.81	34.380		
12,000.00	11,990.80	12,000.98	11,990.80	36.33	35.60	108.760	-160.54	-1,685.21	1,782.14	1,730.18	51.96	34.301		
12,028.24	12,019.04	12,029.22	12,019.04	36.36	35.60	-81.249	-160.54	-1,685.21	1,782.18	1,730.21	51.97	34.293		
12,100.00	12,090.80	12,128.00	12,117.74	36.36	35.66	-81.329	-163.06	-1,685.18	1,781.98	1,730.03	51.95	34.305		
12,200.00	12,190.80	12,314.57	12,297.40	36.36	35.99	-82.831	-210.21	-1,684.71	1,778.01	1,726.18	51.82	34.308		
12,300.00	12,290.80	12,460.04	12,421.36	36.36	36.31	-85.255	-285.60	-1,683.96	1,771.06	1,719.29	51.76	34.215		
12,400.00	12,390.80	12,564.03	12,496.34	36.37	36.54	-87.584	-357.45	-1,683.24	1,764.19	1,712.38	51.81	34.053		
12,500.00	12,490.80	12,637.57	12,540.91	36.37	36.72	-89.485	-415.87	-1,682.66	1,759.67	1,707.73	51.94	33.879		
12,528.24	12,519.04	12,654.29	12,549.98	36.37	36.76	-89.942	-429.92	-1,682.52	1,759.02	1,707.03	51.98	33.839		
12,550.00	12,540.79	12,666.56	12,556.36	36.40	36.78	90.301	-440.39	-1,682.41	1,758.73	1,706.70	52.03	33.803		
12,571.78	12,562.53	12,678.74	12,562.48	36.50	36.81	89.979	-450.93	-1,682.31	1,758.64	1,706.54	52.10	33.758		
12,600.00	12,590.61	12,694.42	12,570.03	36.63	36.85	89.543	-464.67	-1,682.17	1,758.79	1,706.60	52.19	33.701		
12,650.00	12,639.89	12,721.91	12,582.34	36.95	36.92	88.721	-489.25	-1,681.93	1,759.78	1,707.39	52.39	33.588		
12,700.00	12,688.24	12,750.00	12,593.68	37.29	36.99	87.822	-514.94	-1,681.67	1,761.63	1,708.99	52.64	33.464		
12,750.00	12,735.30	12,776.08	12,603.08	37.62	37.05	86.921	-539.26	-1,681.43	1,764.23	1,711.30	52.93	33.331		
12,800.00	12,780.72	12,800.00	12,610.72	37.96	37.11	86.026	-561.93	-1,681.20	1,767.51	1,714.26	53.25	33.194		
12,850.00	12,824.15	12,829.46	12,618.81	38.29	37.18	84.971	-590.25	-1,680.92	1,771.35	1,717.72	53.63	33.031		
12,900.00	12,865.26	12,850.00	12,623.59	38.60	37.23	84.090	-610.22	-1,680.72	1,775.68	1,721.68	54.00	32.883		
12,950.00	12,903.73	12,882.29	12,629.64	38.90	37.31	82.954	-641.94	-1,680.40	1,780.37	1,725.91	54.46	32.690		
13,000.00	12,939.27	12,900.00	12,632.20	39.18	37.36	82.106	-659.46	-1,680.23	1,785.38	1,730.50	54.88	32.534		
13,050.00	12,971.62	12,934.74	12,635.64	39.43	37.45	80.953	-694.02	-1,679.88	1,790.52	1,735.10	55.41	32.312		
13,100.00	13,000.52	12,960.85	12,636.84	39.65	37.51	79.985	-720.10	-1,679.62	1,795.78	1,739.85	55.92	32.112		
13,150.00	13,025.76	12,995.51	12,637.00	39.85	37.60	78.928	-754.75	-1,679.28	1,800.99	1,744.48	56.50	31.874		
13,200.00	13,047.14	13,040.69	12,637.00	40.02	37.74	77.860	-799.93	-1,678.83	1,805.71	1,748.53	57.18	31.580		
13,250.00	13,064.50	13,087.56	12,637.00	40.15	37.88	76.963	-846.80	-1,678.36	1,809.71	1,751.84	57.88	31.269		
13,300.00	13,077.71	13,135.77	12,637.00	40.26	38.05	76.264	-895.01	-1,677.88	1,812.86	1,754.26	58.60	30.934		
13,350.00	13,086.67	13,184.94	12,637.00	40.33	38.22	75.781	-944.18	-1,677.39	1,815.05	1,755.70	59.35	30.583		
13,400.00	13,091.30	13,234.71	12,637.00	40.38	38.42	75.530	-993.94	-1,676.89	1,816.18	1,756.07	60.11	30.214		
13,428.24	13,092.00	13,262.94	12,637.00	40.39	38.53	75.493	-1,022.17	-1,676.61	1,816.35	1,755.81	60.54	30.002		
13,500.00	13,092.00	13,334.70	12,637.00	40.40	38.85	75.493	-1,093.93	-1,675.89	1,816.32	1,754.66	61.66	29.457		
13,600.00	13,092.00	13,434.70	12,637.00	40.43	39.33	75.492	-1,193.92	-1,674.89	1,816.29	1,752.99	63.30	28.695		
13,700.00	13,092.00	13,534.70	12,637.00	40.46	39.86	75.492	-1,293.92	-1,673.89	1,816.25	1,751.24	65.02	27.935		
13,800.00	13,092.00	13,634.70	12,637.00	40.50	40.44	75.492	-1,393.91	-1,672.90	1,816.22	1,749.41	66.81	27.185		
13,900.00	13,092.00	13,734.70	12,637.00	40.53	41.06	75.491	-1,493.91	-1,671.90	1,816.19	1,747.51	68.67	26.447		
14,000.00	13,092.00	13,834.70	12,637.00	40.58	41.74	75.491	-1,593.90	-1,670.90	1,816.15	1,745.56	70.60	25.726		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

No. Processor	-		MMD.LIDOM								Dul. 1			Offset Site Error:	0.00 usf
Purple P				set	Semi M	ajor Axis		Offset Wellb	ore Centre	Dist		gned:		Offset Well Error:	1.00 usf
1,40,200 1,50,200		Depth	Depth	Depth			Toolface			Centres	Ellipses	Separation	•	Warning	
1,300.00 1,300.00 1,415.47 1,2257.00 40.00 4.07 4.07 4.07 4.07 4.07 4.08 1,999.98 1,989.98 1,889.90 1,889.90 1,989.98 1,889.90 1,989.98 1,889.90 1,989.98 1,889.90 1,989.98 1,889.90 1,989.98 1,889.90 1,989.90 1,	14,100.00		13,934.70	12,637.00	40.63	42.45	75.491	-1,693.90	-1,669.90	1,816.12	1,743.54	72.57			
1,400.00 1,000.00 1,424.70 1,255.70 40.50 44.50 47.50 7,400 2,000.00 1,800.00 1,800.00 1,700.00 23.30 23.30 23.30 23.30 24.40 24.60 24.5	14,200.00	13,092.00	14,034.70	12,637.00	40.69	43.21	75.491	-1,793.89	-1,668.90	1,816.08	1,741.48	74.61	24.342		
1,000 1,00															
	14,400.00														
1,000 10															
1,48000 1 1,50200 1,463470 12,85700 4193 4195 4832 73,489 2,438,38 -1,86291 1,815.88 1,728,20 8767 20,183 15,0000 13,00200 14,843470 12,85700 4396 51,5000 13,00200 14,843470 12,85700 43,000 15,000 13,00200 15,00470 12,85700 43,000 15,000 13,00200 15,00470 12,85700 43,000 13,000 13,000 15,000 13,000 15,000 13,000 15,000 13,000 15,000 13,000 15,000 13,000 15,000 13,000 15,000 13,000 13,000 15,000 13,000 15,000 13,000 13,000 15,000 13,000 13,000 15,000 13,000 13,000 13,000 15,000 13,000 13,000 13,000 15,000 13,	14,600.00	13,092.00	14,434.70	12,637.00	41.10	46.62	75.489	-2,193.87	-1,664.91	1,815.94	1,732.77	83.17	21.833		
1,400.00 13,002.00 14,734,70 12,657.00 41,93 4951 73,469 2,435.86 -1,663.20 11,651.00 12,650.00 13,602.00 14,834.70 12,657.00 43,42 51.56 75.468 2,283.86 -1,663.20 11,651.01 17,251.31 94,64 19,169 15,500.00 13,002.00 15,003.70 12,857.00 43,42 51.56 75.468 2,283.86 -1,663.20 11,651.71 17,176.73 97.01 17,176.73 17,17	14,700.00									,					
1,500.00 13,002.00 14,847.0 12,637.00 44.80 50.52 75.480 2,289.85 1,689.82 1,815.71 1,723.51 92.29 19.675 1,500.00 13,002.00 15,004.70 12,637.00 44.45 51.55 75.480 2,289.384 -1,688.92 1,815.74 1,718.73 97.01 18.717 1,500.00 13,002.00 15,004.70 12,637.00 45.56 53.69 75.487 -2,693.84 -1,688.92 1,815.74 1,718.73 97.01 18.717 1,723.51 1,7	14,800.00														
15.00.00 13.092.00 16.034.70 12.637.00 44.43 52.62 75.488 2.2793.84 1.658.92 1.815.74 1.718.73 97.01 18.717 15.300.00 10.1092.00 15.134.70 12.637.00 45.56 53.89 75.487 2.2993.84 1.857.92 1.815.70 1.716.30 99.40 18.286 15.500.00 10.1092.00 15.234.70 12.637.00 45.56 53.89 75.487 2.2993.84 1.857.92 1.815.70 1.716.30 99.40 18.286 15.500.00 10.1092.00 15.234.70 12.637.00 45.00 50.00 75.487 3.2993.84 1.855.93 1.815.65 1.711.39 10.42 17.416 17.71															
1.500.00 1.500.00	15,100.00	13,092.00	14,934.70	12,637.00	43.42	51.56	75.488	-2,693.85	-1,659.92	1,815.77	1,721.13	94.64	19.186		
1.500.00 1.000.00 1.000.00 1.500.47 1.2837.00 46.76 4.77 75.487 7.5487 7.5497 7.	15,200.00	13,092.00	15,034.70	12,637.00	44.43	52.62	75.488	-2,793.84	-1,658.92	1,815.74	1,718.73	97.01	18.717		
15,500.00 13,002.00 15,344.70 12,637.00 48.01 55.90 75.487 -3,098.08 -1,655.93 18,15.03 17,11.39 104.25 17,416 15,500.00 15,002.00 15,004.70 12,637.00 59.01 58.18 75.486 -3,299.82 -1,659.93 18,15.03 17,004.00 109.17 16.031 15,500.00 13,002.00 15,004.70 12,637.00 59.01 59.04 75.486 -3,299.82 -1,659.93 18,15.03 17,003.80 111.65 16.261 15,500.00 13,002.00 15,004.70 12,637.00 55.97 62.08 75.486 -3,299.82 -1,659.93 18,15.03 17,003.80 111.65 16.261 15,000.00 13,002.00 15,004.70 12,637.00 55.97 62.08 75.486 -3,699.80 -1,659.94 18,15.03 18,15.03 18,15.00 16,004.70 16.00.00 15,004.70 12,637.00 55.97 62.08 75.486 -3,699.80 -1,659.94 18,15.40 1,609.81 116.65 15,603 16,000.00 13,002.00 15,004.70 12,637.00 55.97 62.08 75.486 -3,699.80 -1,649.94 18,15.30 1,609.81 116.65 15,603 16,000.00 13,002.00 16,004.70 12,603.70 55.97 62.08 75.486 -3,799.80 -1,649.94 18,15.30 1,609.81 116.65 15,603 16,000.00 13,002.00 16,004.70 12,603.70 56.93 75.486 -3,799.80 -1,649.94 18,15.30 1,609.10 124.26 14,010 14,000 13,002.00 16,004.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 13,003.70 13,003.70 16,003.70 12,003.70 12,003.70 13,003.70 13,003.70 14,003.70 12,003.70 12,003.70 13,003.70 13,003.70 16,003.70 12,003.70 12,003.70 12,003.70 12,003.70 13,003.70 16,003.70 12,003.70 12,003.70 13,003.70 16,003.70 12,003.70 12,003.70 12,003.70 13,003.70 16,003.70 12,003.70 12,003.70 13,003.70 16,003.70 12,003.70 12,003.70 13,003.70 16,003.70 12,003.70 12,003.70 12,003.70 13,003.70 16,003.70 12,003.70 12,003.70 13,003.70 16,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 12,003.70 13,003.70 13,003.70	15,300.00	13,092.00	15,134.70	12,637.00	45.56	53.69	75.487	-2,893.84	-1,657.92	1,815.70	1,716.30	99.40	18.266		
15,000 13,002 15,334.70 12,637.00 40,30 57.03 75,487 -3,193.82 -1,654.93 1,815.60 1,708.90 106.70 17,016 1,815.80	15,400.00	13,092.00		12,637.00	46.76	54.79	75.487	-2,993.83	-1,656.92	1,815.67	1,713.85	101.82	17.833		
15,700.00 13,092.00 15,534.70 12,637.00 50,61 59,18 75,486 -3,293.82 -1,653.93 1,815.57 1,706.40 109.17 16,831 15,800.00 13,092.00 15,734.70 12,637.00 51,93 59,34 75,486 -3,293.82 -1,653.93 1,815.55 1,703.88 111.65 16,261 15,000.00 13,092.00 15,734.70 12,637.00 55,37 62,89 75,486 -3,293.80 -1,659.93 1,815.55 1,703.85 111.65 15,563 1,810.00 13,092.00 15,934.70 12,637.00 55,97 62,89 75,486 -3,293.80 -1,659.94 1,815.40 1,896.25 119.18 15,233 18,000.00 13,092.00 16,034.70 12,637.00 55,97 62,89 75,485 -3,793.79 -1,649.94 1,815.40 1,896.25 119.18 15,233 18,000.00 13,092.00 16,034.70 12,637.00 58,89 65,31 75,486 -3,893.80 -1,649.94 1,815.39 1,836.88 121.71 14.916 14.800.00 13,092.00 16,334.70 12,637.00 58,89 65,31 75,486 -3,893.87 -1,649.94 1,815.39 1,836.88 121.71 14.916 14.26 14.810 14.800.00 13,092.00 16,334.70 12,637.00 60.00 66,53 75,486 -4,993.78 -1,649.94 1,815.29 1,865.91 120.81 14.315 14.800.00 13,092.00 16,334.70 12,637.00 62.81 69.01 75,484 -4,993.78 -1,649.94 1,815.29 1,865.91 120.38 14.001 14.000 13,092.00 16,334.70 12,637.00 62.81 69.01 75,484 -4,993.78 -1,649.95 1,815.22 1,880.89 134.54 13.96 13.756 18.800.00 13,092.00 16,344.70 12,637.00 65.58 71.52 75,484 -4,993.78 -1,649.95 1,815.22 1,880.89 134.54 13.26 14.001 13.000.00 13,092.00 16,344.70 12,637.00 65.58 71.52 75,484 -4,993.75 -1,649.95 1,815.92 1,880.89 134.54 13.26 13.000.00 13,092.00 16,344.70 12,637.00 65.58 71.52 75,484 -4,993.75 -1,649.95 1,815.92 1,880.89 134.54 13.26 13.26 13.20	15,500.00	13,092.00	15,334.70	12,637.00	48.01	55.90	75.487	-3,093.83	-1,655.93	1,815.63	1,711.39	104.25	17.416		
15,000.00 13,092.00 15,084.70 12,637.00 51,93 59,34 75,466 -3,398.81 -1,652.93 1,815.53 1,703.86 111,65 16,201 15,000.00 13,092.00 15,934.70 12,637.00 53,27 60,51 75,486 -3,593.80 -1,659.94 1,815.46 1,698.81 114,41 15,506 1,506 1,000.00 13,092.00 15,934.70 12,637.00 55,97 62,89 75,485 -3,693.80 -1,649.94 1,815.46 1,698.81 114,916 15,203 1,000.00 13,092.00 16,034.70 12,637.00 57,33 64.09 75,485 -3,893.80 -1,649.94 1,815.39 1,698.62 119.18 15,203 1,000.00 13,092.00 16,034.70 12,637.00 58.99 63,51 75,485 -3,893.79 -1,649.94 1,815.39 1,698.62 119.18 15,203 1,000.00 13,092.00 16,334.70 12,637.00 60,000 66,53 75,484 -3,993.79 -1,649.94 1,815.39 1,689.81 122.81 14,315 14,315 1,000.00 13,092.00 16,334.70 12,637.00 60,000 66,53 75,484 -4,993.78 -1,649.94 1,815.39 1,689.51 122.81 14,315 14,315 1,000.00 13,092.00 16,334.70 12,637.00 62,81 69.01 75,484 -4,193.77 1,649.95 1,815.20 1,863.93 131.96 13,766 1,800.00 13,092.00 16,334.70 12,637.00 62,81 69.01 75,484 -4,193.77 1,649.95 1,815.20 1,815.20 1,833.80 134.95 13,766 1,800.00 13,092.00 16,334.70 12,637.00 62,81 69.01 75,484 -4,193.77 1,649.95 1,815.20 1,815.20 1,813.74 13,226 1,815.20 1,815	15,600.00	13,092.00	15,434.70	12,637.00	49.30	57.03	75.487	-3,193.82	-1,654.93	1,815.60	1,708.90	106.70	17.016		
15,000,00 13,002,00 15,004,70 12,005,70 54,00 54,01 75,406 13,000,00 13,002,00 15,004,70 12,005,70 12,000,00 15,000,	15,700.00	13,092.00	15,534.70	12,637.00	50.61	58.18	75.486	-3,293.82	-1,653.93	1,815.57	1,706.40	109.17	16.631		
18,000.00 13,002.00 15,004.70 12,605.70 54.61 61.60 75.486 -3,603.80 -1,605.00 1,615.40 1,815.46 1,608.81 116.65 15.60 16,000.00 13,002.00 16,004.70 12,605.70 56.89 75.486 -3,603.80 -1,649.94 1,815.40 1,815.30 1,806.86 121.11 14.916 16,000.00 13,002.00 16,104.70 12,637.00 56.89 65.31 75.485 -3,803.79 -1,649.94 1,815.30 1,806.86 121.11 14.916 16,000.00 13,002.00 16,034.70 12,637.00 60.06 66.53 75.486 -3,903.79 -1,649.94 1,815.30 1,806.86 121.11 14.916 16,000.00 13,002.00 16,034.70 12,637.00 60.06 66.53 75.486 -3,903.78 -1,649.94 1,815.30 1,806.86 121.11 14.916 14.916 13,000.00 13,002.00 16,034.70 12,637.00 62.81 69.01 75.484 -4,903.78 -1,645.94 1,815.30 1,806.80 13.14 14.916 13.766 13,000.00 13,002.00 16,034.70 12,637.00 62.81 69.01 75.484 -4,903.78 -1,649.95 1,815.20 1,803.30 131.96 13.766 13	15,800.00	13,092.00	15,634.70	12,637.00	51.93	59.34	75.486	-3,393.81	-1,652.93	1,815.53	1,703.88	111.65	16.261		
18,000	15,900.00	13,092.00	15,734.70	12,637.00	53.27	60.51	75.486	-3,493.81	-1,651.93	1,815.50	1,701.35	114.14	15.905		
16,200.00 13,092.00 16,134.70 12,637.00 57.33 64.09 75.485 -3,783.79 -1,648.94 1,815.38 1,683.68 121.71 14.916 16,300.00 13,092.00 16,134.70 12,637.00 58.69 65.31 75.485 -3,893.79 -1,646.94 1,815.38 1,681.10 124.26 14.610 16,600.00 13,092.00 16,347.0 12,637.00 58.69 65.31 75.484 -3,993.78 -1,646.94 1,815.38 1,685.11 126.81 14.315 16,600.00 13,092.00 16,347.0 12,637.00 62.81 69.01 75.484 -4,093.78 -1,645.94 1,815.26 1,883.30 131.96 13.756 16,700.00 13,092.00 16,543.70 12,637.00 62.81 69.01 75.484 -4,193.77 -1,644.95 1,815.26 1,883.30 131.96 13.756 16,700.00 13,092.00 16,543.70 12,637.00 64.20 70.26 75.484 -4,193.77 -1,644.95 1,815.26 1,883.30 131.96 13.756 18,000.00 13,092.00 16,634.70 12,637.00 66.58 71.52 75.483 -4,493.76 -1,642.95 1,815.19 1,770.00 13,092.00 16,743.70 12,637.00 66.58 71.52 75.483 -4,493.76 -1,642.95 1,815.19 1,770.00 13,092.00 16,743.70 12,637.00 68.30 74.05 75.483 -4,693.75 -1,640.95 1,815.15 1,770.12 12,751 12,751 17,700.00 13,092.00 16,934.70 12,637.00 69.75 75.33 75.482 -4,693.75 -1,690.95 1,815.10 1,770.12 12,751 12,751 17,700.00 13,092.00 16,934.70 12,637.00 77.54 14.75 14.75 14.893.74 -1,633.96 1,815.05 1,815.10 1,770.12 12,751 12,751 17,700.00 13,092.00 16,934.70 12,637.00 77.54 14.75 14.75 14.893.74 -1,633.96 1,815.05 1,815.10 1,770.12 144.96 12,521 144.96	16,000.00	13,092.00	15,834.70	12,637.00	54.61	61.69	75.486	-3,593.80	-1,650.94	1,815.46	1,698.81	116.65	15.563		
18,000 13,092 0 16,134.70 12,637 12,637 0 58.99 65.31 75.485 -3,893.79 -1,645.94 1,815.33 1,891.10 124.26 14.610 16,000 13,092 0 16,234.70 12,637 0 60.06 66.53 75.484 -4,093.78 -1,646.94 1,815.29 1,685.91 129.38 14,031	16,100.00	13,092.00	15,934.70	12,637.00	55.97	62.89	75.485	-3,693.80	-1,649.94	1,815.43	1,696.25	119.18	15.233		
18,400.00 13,092.00 16,234.70 12,637.00 60.06 66.53 75,484 -3,993.78 -1,646.94 1,815.33 1,888.51 128.81 14,315 16,500.00 13,092.00 16,334.70 12,637.00 61.44 67.77 75,484 -4,93.78 -1,645.94 1,815.29 1,865.91 129.38 14,031 13,756 13,756 18,000.00 13,092.00 16,334.70 12,637.00 64.20 70.26 75,484 -4,293.77 -1,644.99 1,815.26 1,683.90 131.96 137.56 137.56 137.56 13,75	16,200.00	13,092.00	16,034.70	12,637.00	57.33	64.09	75.485	-3,793.79	-1,648.94	1,815.39	1,693.68	121.71	14.916		
18,500,00 13,092,00 16,334.70 12,637.00 61,44 67.77 75,484 -4,093.78 -1,645.94 1,815.29 1,885.91 129.38 14,031 13,756 16,000.00 13,052.00 16,634.70 12,637.00 64.20 70.26 75,484 -4,193.77 -1,644.95 1,815.26 1,868.30 131.96 13,756 13,756 18,000.00 13,092.00 16,634.70 12,637.00 65.58 75,483 -4,393.76 -1,642.95 1,815.19 1,678.05 137.14 13,236 18,000.00 13,092.00 16,634.70 12,637.00 66.97 72.78 75,483 -4,393.76 -1,642.95 1,815.19 1,678.05 137.14 13,236 12,000.00 13,092.00 16,634.70 12,637.00 68.36 74.05 75,483 -4,393.76 -1,642.95 1,815.15 1,675.42 139.74 12,990 14,710.00 13,092.00 16,634.70 12,637.00 69.75 75,483 -4,393.76 -1,640.95 1,815.15 1,675.42 139.74 12,990 14,444.96 12,521 17,700.00 13,092.00 17,344.70 12,637.00 71,14 76.61 75,482 -4,793.74 -1,638.96 1,815.05 1,667.47 147.58 12,298 17,300.00 13,092.00 17,344.70 12,637.00 73.94 79.19 75,482 -4,993.73 -1,636.96 1,814.96 1,662.13 152.85 1,874 1,477 1,700.00 13,092.00 17,347.00 12,637.00 75,34 80.49 75,481 -5,193.72 -1,634.96 1,814.96 1,662.13 152.85 1,874 1,477 1,700.00 13,092.00 17,347.00 12,637.00 75,34 80.49 75,481 -5,193.72 -1,634.96 1,814.96 1,662.13 152.85 1,874 1,477 1,700.00 13,092.00 17,347.00 12,637.00 75,34 80.49 75,481 -5,193.72 -1,634.96 1,814.96 1,662.13 152.85 1,874 1,477 1	16,300.00	13,092.00	16,134.70	12,637.00	58.69	65.31	75.485	-3,893.79	-1,647.94	1,815.36	1,691.10	124.26	14.610		
18,600.00 13,092.00 16,434.70 12,637.00 62.81 69.01 75.484 -4,193.77 -1,644.95 1,815.26 1,883.30 131.96 13.756	16,400.00	13,092.00	16,234.70	12,637.00	60.06	66.53	75.484	-3,993.78	-1,646.94	1,815.33	1,688.51	126.81	14.315		
16,700.00 13,092.00 16,534.70 12,637.00 64.20 70.26 75.484 -4,293.77 -1,643.95 1,815.22 1,680.68 134.54 13.492 16,800.00 13,092.00 16,834.70 12,637.00 65.58 71.52 75.483 -4,393.76 -1,642.95 1,815.19 1,676.05 137.14 13.236 16,800.00 13,092.00 16,734.70 12,637.00 68.36 74.05 75.483 -4,493.76 -1,641.95 1,815.15 1,675.42 139.74 12,990 17,000.00 13,092.00 16,934.70 12,637.00 69.75 75.33 75.482 -4,693.75 -1,639.95 1,815.05 1,670.12 144.96 12,521 17,100.00 13,092.00 17,034.70 12,637.00 69.75 75.33 75.482 -4,693.75 -1,639.95 1,815.05 1,667.47 147.58 12.298 17,300.00 13,092.00 17,034.70 12,637.00 72.54 77.90 75.482 -4,893.74 -1,639.96 1,815.05 1,667.47 147.58 12.298 17,300.00 13,092.00 17,134.70 12,637.00 75.34 80.49 75.481 -5,093.73 -1,639.96 1,815.05 1,667.47 147.58 12.298 11,700.00 13,092.00 17,334.70 12,637.00 75.34 80.49 75.481 -5,093.73 -1,639.96 1,815.05 1,667.47 147.58 12.298 11,700.00 13,092.00 17,334.70 12,637.00 75.34 80.49 75.481 -5,093.73 -1,635.96 1,814.95 1,659.46 155.49 11.672 11,700.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 -5,093.73 -1,635.96 1,814.95 1,659.46 155.49 11.672 11,700.00 13,092.00 17,734.70 12,637.00 76.74 81.79 75.481 -5,093.73 -1,635.96 1,814.95 1,659.46 155.49 11.672 11,700.00 13,092.00 17,734.70 12,637.00 76.74 81.79 75.481 -5,093.73 -1,635.96 1,814.95 1,659.46 155.49 11.672 11,700.00 13,092.00 17,734.70 12,637.00 79.55 84.41 75.480 -5,393.71 -1,633.97 1,814.88 1,665.07 158.14 11.477 11,700.00 13,092.00 17,734.70 12,637.00 79.55 84.41 75.480 -5,393.71 -1,633.97 1,814.81 1,664.00 160.79 11.287 11,700.00 13,092.00 17,734.70 12,637.00 89.56 85.73 75.480 -5,693.70 -1,639.97 1,814.87 1,646.00 160.79 11.287 11.09 11.	16,500.00	13,092.00	16,334.70	12,637.00	61.44	67.77	75.484	-4,093.78	-1,645.94	1,815.29	1,685.91	129.38	14.031		
18,800.00 13,092.00 16,834.70 12,637.00 65.58 71.52 75.483 -4,393.76 -1,642.95 1,815.19 1,678.05 137.14 13,236 1,680.00 13,092.00 16,734.70 12,637.00 68.97 72.78 75.483 -4,493.76 -1,641.95 1,815.15 1,675.42 139.74 12,990 17,700.00 13,092.00 16,834.70 12,637.00 68.76 75.33 75.482 -4,693.75 -1,641.95 1,815.15 1,675.42 139.74 12,990 17,700.00 13,092.00 16,934.70 12,637.00 69.75 75.33 75.482 -4,693.75 -1,639.95 1,815.00 1,670.12 144.96 12,521 17,000.00 13,092.00 17,734.70 12,637.00 72.54 77.90 75.482 -4,893.74 -1,639.96 1,815.02 1,664.80 150.21 12,083 17,000.00 13,092.00 17,334.70 12,637.00 73.94 79.19 75.482 -4,993.73 -1,639.96 1,815.02 1,664.80 150.21 12,083 17,000.00 13,092.00 17,334.70 12,637.00 75.34 80.49 75.481 -5,093.73 -1,635.96 1,814.99 1,665.77 183.14 11,477 17,700.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 -5,193.72 -1,634.96 1,814.99 1,656.77 183.14 11,477 17,700.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 -5,193.72 -1,634.96 1,814.91 1,656.77 183.14 11,477 11,477 17,700.00 13,092.00 17,334.70 12,637.00 78.14 83.10 75.481 -5,293.72 -1,633.97 1,814.81 1,654.70 166.11 10,925 18,000.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,933.71 -1,632.97 1,814.81 1,648.70 166.11 10,925 18,000.00 13,092.00 17,834.70 12,637.00 80.95 85.73 75.480 -5,933.70 -1,639.97 1,814.87 1,640.00 168.78 10,753 18,000.00 13,092.00 17,834.70 12,637.00 83.76 88.37 75.480 -5,933.70 -1,639.97 1,814.87 1,640.00 168.78 10,753 1,640.00 168.78 10,753 1,640.00 168.78 10,753 1,640.00 168.78 10,753 1,640.00 168.78 1,640.00 168.78 10,753 1,640.00 1,640.00 168.78 1,640.00 168.78 1,640.00 168.78 1,640.00 168.78 1,640.00 168.78 1,640.00	16,600.00	13,092.00	16,434.70	12,637.00	62.81	69.01	75.484	-4,193.77	-1,644.95	1,815.26	1,683.30	131.96	13.756		
16,900.00 13,092.00 16,734.70 12,637.00 66.97 72.78 75.483 4,493.76 -1,641.95 1,815.15 1,675.42 139.74 12,990	16,700.00	13,092.00	16,534.70	12,637.00	64.20	70.26	75.484	-4,293.77	-1,643.95	1,815.22	1,680.68	134.54	13.492		
17,000.00 13,092.00 16,834.70 12,637.00 68.36 74.05 75.483 4,593.75 -1,640.95 1,815.12 1,672.77 142.35 12,751	16,800.00	13,092.00	16,634.70	12,637.00	65.58	71.52	75.483	-4,393.76	-1,642.95	1,815.19	1,678.05	137.14	13.236		
17,100.00 13,092.00 16,934.70 12,637.00 69.75 75.33 75.482 4,693.75 -1,639.95 1,815.08 1,670.12 144.96 12.521 147.200.00 13,092.00 17,034.70 12,637.00 72.54 77.90 75.482 4,893.74 -1,638.96 1,815.05 1,667.47 147.58 12.298 17,400.00 13,092.00 17,134.70 12,637.00 75.94 79.19 75.482 4,893.74 -1,638.96 1,815.02 1,864.80 150.21 12.083 17,400.00 13,092.00 17,234.70 12,637.00 75.34 80.49 75.481 5.093.73 -1,638.96 1,814.95 1,659.46 155.49 11.672 17,600.00 13,092.00 17,434.70 12,637.00 76.74 81.79 75.481 5.093.72 -1,634.96 1,814.95 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 76.74 81.79 75.481 5.093.72 -1,634.96 1,814.95 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 79.55 84.41 75.480 5.393.71 -1,632.97 1,814.81 1,654.09 160.79 11.287 1,700.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 5.593.70 -1,630.97 1,814.84 1,651.40 163.45 11.104 1,700.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 5.593.70 -1,630.97 1,814.81 1,648.70 166.11 10.925 1,814.00 1,900.00 13,092.00 17,934.70 12,637.00 82.36 87.05 75.480 5.593.70 -1,630.97 1,814.71 1,846.00 168.78 10.753 1,814.00 1,900.00 13,092.00 17,934.70 12,637.00 85.78 89.70 75.479 5.893.89 -1,627.98 1,814.67 1,633.97 1,635.95 1,649.91 1,649.29 171.45 10.585 1,649.00 1	16,900.00	13,092.00	16,734.70	12,637.00	66.97	72.78	75.483	-4,493.76	-1,641.95	1,815.15	1,675.42	139.74	12.990		
17,200.00 13,092.00 17,034.70 12,637.00 71.14 76.61 75.482 4.793.74 -1,638.96 1,815.05 1,667.47 147.58 12.298 17,300.00 13,092.00 17,234.70 12,637.00 72.54 77.90 75.482 4.993.73 -1,636.96 1,814.98 1,662.13 152.85 11.874 17,500.00 13,092.00 17,334.70 12,637.00 75.34 80.49 75.481 5.093.73 -1,636.96 1,814.98 1,662.13 152.85 11.874 17,500.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 5.093.73 -1,635.96 1,814.91 1,656.77 158.14 11.477 17,700.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 5.193.72 -1,634.96 1,814.91 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 79.55 84.41 75.480 5.293.71 1,814.81 1,648.70 160.79 11.287 17,800.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 5.593.71 1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,334.70 12,637.00 82.36 87.05 75.480 5.593.71 1,630.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,334.70 12,637.00 82.36 87.05 75.480 5.593.70 1,630.97 1,814.71 1,640.00 168.78 10.753 18,000.00 13,092.00 17,934.70 12,637.00 82.36 87.05 75.480 5.593.70 1,630.97 1,814.71 1,640.00 168.78 10.753 18,000.00 13,092.00 17,934.70 12,637.00 82.36 87.05 75.480 5.593.70 1,630.97 1,814.71 1,640.00 168.78 10.753 18,000.00 13,092.00 17,934.70 12,637.00 82.36 87.05 75.480 5.593.70 1,629.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 18,034.70 12,637.00 85.89 10.3 75.479 5.593.69 1,629.97 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,034.70 12,637.00 89.40 93.70 75.478 5.993.68 1,626.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 5.693.67 1,629.99 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 5.693.67 1,622.99 1,814.50 1,622.99 1,814.50 1,622.95 1,814.60 1,632.42 190.25 9.537 18,800.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 5.693.67 1,622.99 1,814.50 1,622.99 1,814.50 1,622.95 1,814.60 1,622.95 1,814.60 1,622.95 1,814.60 1,622.95 1,814.60 1,622.95 1,814.60 1,622.95 1,814.60 1,622.95 1,814.60 1,622.95 1,814.60 1,622.95 1,814.60 1,622.9	17,000.00	13,092.00	16,834.70	12,637.00	68.36	74.05	75.483	-4,593.75	-1,640.95	1,815.12	1,672.77	142.35	12.751		
17,300.00 13,092.00 17,134.70 12,637.00 72.54 77.90 75.482 -4,893.74 -1,637.96 1,815.02 1,664.80 150.21 12.083 17,400.00 13,092.00 17,234.70 12,637.00 73.94 79.19 75.482 -4,993.73 -1,636.96 1,814.98 1,662.13 152.85 11.874 17,500.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 -5,193.72 -1,634.96 1,814.91 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 78.14 83.10 75.481 -5,193.72 -1,634.96 1,814.91 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 79.55 84.41 75.480 -5,393.71 -1,632.97 1,814.84 1,651.40 163.45 11.104 17,900.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,493.71 -1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,834.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,639.97 1,814.77 1,646.00 168.78 10.753 18,100.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.74 1,640.29 171.45 10.585 18,000.00 13,092.00 13,092.00 18,034.70 12,637.00 86.58 91.03 75.479 -5,793.69 -1,628.98 1,814.67 1,637.87 176.80 10.264 18,300.00 13,092.00 18,134.70 12,637.00 87.99 92.37 75.479 -5,893.69 -1,628.98 1,814.67 1,635.15 179.48 10.110 10.926 18,000.00 13,092.00 18,234.70 12,637.00 87.99 92.37 75.479 -5,893.69 -1,628.98 1,814.67 1,635.15 179.48 10.110 10.264 18,000.00 13,092.00 18,234.70 12,637.00 99.81 95.04 75.478 -6,193.67 -1,624.98 1,814.50 1,624.25 190.25 9.537 18,000.00 13,092.00 18,334.70 12,637.00 99.81 95.04 75.478 -6,193.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,000.00 13,092.00 18,734.70 12,637.00 99.81 75.478 -6,933.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,000.00 13,092.00 18,734.70 12,637.00 99.64 97.73 75.478 -6,933.66 -1,622.99 1,814.50	17,100.00	13,092.00	16,934.70	12,637.00	69.75	75.33	75.482	-4,693.75	-1,639.95	1,815.08	1,670.12	144.96	12.521		
17,400.00 13,092.00 17,234.70 12,637.00 73.94 79.19 75.482 -4,993.73 -1,636.96 1,814.98 1,662.13 152.85 11.874 17,500.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 -5,093.73 -1,636.96 1,814.95 1,659.46 155.49 11.672 17,700.00 13,092.00 17,334.70 12,637.00 76.74 81.79 75.481 -5,193.72 -1,634.96 1,814.91 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 78.14 83.10 75.481 -5,293.72 -1,633.97 1,814.88 1,654.09 160.79 11.287 17,800.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,393.71 -1,632.97 1,814.84 1,651.40 163.45 11.104 17,900.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,993.70 -1,630.97 1,814.77 1,846.00 188.78 10.753 18,100.00 13,092.00 17,834.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,630.97 1,814.71 1,646.00 188.78 10.753 18,100.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.71 1,646.00 188.78 10.753 18,200.00 13,092.00 18,034.70 12,637.00 85.8 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,600.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.479 -5,993.68 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,600.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.479 -5,993.68 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,600.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,993.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,993.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 -6,993.66 -1,622.99 1,814.47 1,621.51 192.95 9,537 18,800.00 13,092.00 18,834.70 12,637.00 95.66 99.08 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	17,200.00	13,092.00	17,034.70	12,637.00	71.14	76.61	75.482	-4,793.74	-1,638.96	1,815.05	1,667.47	147.58	12.298		
17,500.00 13,092.00 17,334.70 12,637.00 75.34 80.49 75.481 -5,093.73 -1,635.96 1,814.95 1,659.46 155.49 11.672 17,600.00 13,092.00 17,434.70 12,637.00 76.74 81.79 75.481 -5,193.72 -1,634.96 1,814.91 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 78.14 83.10 75.481 -5,293.72 -1,633.97 1,814.88 1,654.09 160.79 11.287 17,800.00 13,092.00 17,634.70 12,637.00 80.95 85.73 75.480 -5,393.71 -1,632.97 1,814.84 1,651.40 163.45 11.104 17,900.00 13,092.00 17,734.70 12,637.00 82.36 87.05 75.480 -5,593.70 -1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.47 1,643.29 171.45 10.585 18,000.00 13,092.00 18,334.70 12,637.00 85.17 89.70 75.479 -5,893.69 -1,628.97 1,814.67 1,637.87 176.80 10.264 18,000.00 13,092.00 18,334.70 12,637.00 87.99 92.37 75.479 -5,893.69 -1,628.97 1,814.67 1,635.15 179.48 10.110 18,000.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.479 -5,993.68 -1,626.98 1,814.67 1,635.15 179.48 10.110 18,000.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,093.68 -1,626.98 1,814.67 1,635.15 179.48 10.110 18,000.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,093.68 -1,626.98 1,814.67 1,625.71 184.86 9.816 18,700.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,093.68 -1,626.98 1,814.67 1,625.71 184.86 9.816 18,700.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,093.68 -1,626.98 1,814.67 1,625.71 184.86 9.816 18,800.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,093.68 -1,626.99 1,814.57 1,629.71 184.86 9.816 18,800.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,093.68 -1,626.99 1,814.43 1,621.51 192.95 9.537 18,800.00 13,092.00 18,334.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.43 1,618.78 195.65 9.574	17,300.00	13,092.00	17,134.70	12,637.00	72.54	77.90	75.482	-4,893.74	-1,637.96	1,815.02	1,664.80	150.21	12.083		
17,600.00 13,092.00 17,434.70 12,637.00 76.74 81.79 75.481 -5,193.72 -1,634.96 1,814.91 1,656.77 158.14 11.477 17,700.00 13,092.00 17,534.70 12,637.00 78.14 83.10 75.481 -5,293.72 -1,633.97 1,814.88 1,654.09 160.79 11.287 17,800.00 13,092.00 17,634.70 12,637.00 79.55 84.41 75.480 -5,393.71 -1,632.97 1,814.84 1,651.40 163.45 11.104 17,900.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,493.71 -1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,834.70 12,637.00 82.36 87.05 75.480 -5,593.70 -1,630.97 1,814.71 1,646.00 168.78 10.753 18,100.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.74 1,643.29 171.45 10.585 18,200.00 13,092.00 18,034.70 12,637.00 85.17 89.70 75.479 -5,793.69 -1,628.97 1,814.71 1,640.58 174.12 10.422 18,300.00 13,092.00 18,134.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,000.00 13,092.00 18,234.70 12,637.00 89.40 93.70 75.478 -5,993.68 -1,626.98 1,814.67 1,632.43 182.17 9.961 18,600.00 13,092.00 18,334.70 12,637.00 90.81 95.04 75.478 -6,093.68 -1,625.98 1,814.65 1,629.71 184.86 9.816 18,700.00 13,092.00 18,534.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,800.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,800.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,193.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,800.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,622.99 1,814.43 1,618.78 195.65 9.274	17,400.00	13,092.00	17,234.70	12,637.00	73.94	79.19	75.482	-4,993.73	-1,636.96	1,814.98	1,662.13	152.85	11.874		
17,700.00 13,092.00 17,534.70 12,637.00 78.14 83.10 75.481 -5,293.72 -1,633.97 1,814.88 1,654.09 160.79 11.287 17,800.00 13,092.00 17,634.70 12,637.00 79.55 84.41 75.480 -5,393.71 -1,632.97 1,814.84 1,651.40 163.45 11.104 17,900.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,493.71 -1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,834.70 12,637.00 82.36 87.05 75.480 -5,593.70 -1,630.97 1,814.77 1,646.00 188.78 10.753 18,100.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.74 1,643.29 171.45 10.585 18,200.00 13,092.00 18,034.70 12,637.00 85.17 89.70 75.479 -5,793.69 -1,628.97 1,814.71 1,640.58 174.12 10.422 18,300.00 13,092.00 18,234.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,234.70 12,637.00 89.40 93.70 75.479 -5,993.68 -1,626.98 1,814.64 1,635.15 179.48 10.110 18,500.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.478 -6,993.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 99.81 95.04 75.478 -6,193.67 -1,624.98 1,814.53 1,626.98 187.56 9.675 18,800.00 13,092.00 18,634.70 12,637.00 99.81 95.04 75.478 -6,193.67 -1,622.99 1,814.43 1,618.78 195.65 9.537 18,800.00 13,092.00 18,634.70 12,637.00 99.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,800.00 13,092.00 18,634.70 12,637.00 99.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,800.00 13,092.00 18,634.70 12,637.00 99.64 97.73 75.478 -6,393.66 -1,621.99 1,814.43 1,618.78 195.65 9.274	17,500.00	13,092.00	17,334.70	12,637.00	75.34	80.49	75.481	-5,093.73	-1,635.96	1,814.95	1,659.46	155.49	11.672		
17,800.00 13,092.00 17,634.70 12,637.00 79.55 84.41 75.480 -5,393.71 -1,632.97 1,814.84 1,651.40 163.45 11.104 17,900.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,493.71 -1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,834.70 12,637.00 82.36 87.05 75.480 -5,593.70 -1,630.97 1,814.77 1,646.00 168.78 10.753 18,100.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.74 1,643.29 171.45 10.585 18,200.00 13,092.00 18,034.70 12,637.00 85.17 89.70 75.479 -5,793.69 -1,628.97 1,814.71 1,640.58 174.12 10.422 18,300.00 13,092.00 18,134.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,234.70 12,637.00 89.40 93.70 75.478 -6,093.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,623.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,623.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,834.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.43 1,618.78 195.65 9.274	17,600.00	13,092.00	17,434.70	12,637.00	76.74	81.79	75.481	-5,193.72	-1,634.96	1,814.91	1,656.77	158.14	11.477		
17,800.00 13,092.00 17,634.70 12,637.00 79.55 84.41 75.480 -5,393.71 -1,632.97 1,814.84 1,651.40 163.45 11.104 17,900.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,493.71 -1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,834.70 12,637.00 82.36 87.05 75.480 -5,593.70 -1,630.97 1,814.77 1,646.00 168.78 10.753 18,100.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.74 1,643.29 171.45 10.585 18,200.00 13,092.00 18,034.70 12,637.00 85.17 89.70 75.479 -5,793.69 -1,628.97 1,814.71 1,640.58 174.12 10.422 18,300.00 13,092.00 18,134.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,234.70 12,637.00 89.40 93.70 75.478 -6,093.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,623.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,623.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 90.81 95.04 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,834.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.43 1,618.78 195.65 9.274	17,700.00	13,092.00	17,534.70	12,637.00	78.14	83.10	75.481	-5,293.72	-1,633.97	1,814.88	1,654.09	160.79	11.287		
17,900.00 13,092.00 17,734.70 12,637.00 80.95 85.73 75.480 -5,493.71 -1,631.97 1,814.81 1,648.70 166.11 10.925 18,000.00 13,092.00 17,834.70 12,637.00 83.76 88.37 75.480 -5,593.70 -1,630.97 1,814.77 1,646.00 168.78 10.753 18,100.00 13,092.00 17,934.70 12,637.00 85.17 89.70 75.479 -5,693.70 -1,629.97 1,814.74 1,643.29 171.45 10.585 18,200.00 13,092.00 18,134.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,234.70 12,637.00 87.99 92.37 75.479 -5,993.68 -1,626.98 1,814.64 1,635.15 179.48 10.110 18,500.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.478 -6,093.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,623.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,293.67 -1,623.98 1,814.50 1,624.25 190.25 9.537 1,814.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 1,814.70 1,2637.00 93.64 97.73 75.478 -6,393.66 -1,621.99 1,814.47 1,621.51 192.95 9.404 1,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.43 1,618.78 195.65 9.274 1,900.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,493.66 -1,621.99 1,814.43 1,618.78 195.65 9.274 1,900.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,493.66 -1,620.99 1,814.43 1,618.78 195.65 9.274 1,900.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,493.66 -1,620.99 1,814.43 1,618.78 195.65 9.274 1,900.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,493.66 -1,620.99 1,814.43 1,618.78 195.65 9.274 1,900.00 13,092.00 18,092.00 18,092.00 18,	17,800.00														
18,100.00 13,092.00 17,934.70 12,637.00 85.17 89.70 75.479 -5,693.70 -1,629.97 1,814.74 1,643.29 171.45 10.585 18,200.00 13,092.00 18,034.70 12,637.00 85.17 89.70 75.479 -5,793.69 -1,628.97 1,814.71 1,640.58 174.12 10.422 18,300.00 13,092.00 18,234.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,234.70 12,637.00 89.99 92.37 75.479 -5,993.68 -1,626.98 1,814.64 1,635.15 179.48 10.110 18,500.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.478 -6,093.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,534.70 12,637.00 92.23 96.39 75.478 -6,293.67 -1,623.98 1,814.53 1,626.98 187.56 9.675 18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.43 1,618.78 195.65 9.274	17,900.00	13,092.00													
18,100.00 13,092.00 17,934.70 12,637.00 83.76 88.37 75.480 -5,693.70 -1,629.97 1,814.74 1,643.29 171.45 10.585 18,200.00 13,092.00 18,034.70 12,637.00 85.17 89.70 75.479 -5,793.69 -1,628.97 1,814.71 1,640.58 174.12 10.422 18,300.00 13,092.00 18,234.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,234.70 12,637.00 89.40 93.70 75.478 -5,993.68 -1,626.98 1,814.64 1,635.15 179.48 10.110 18,500.00 13,092.00 18,334.70 12,637.00 99.81 95.04 75.478 -6,093.68 -1,626.98 1,814.67 1,632.43 182.17 9.961 18,700.00 13,092.00 18,534.70 12,637.00 99.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,293.67 -1,623.98 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.43 1,618.78 195.65 9.274	18,000.00	13,092.00	17,834.70	12,637.00	82.36	87.05	75.480	-5,593.70	-1,630.97	1,814.77	1,646.00	168.78	10.753		
18,300.00 13,092.00 18,134.70 12,637.00 86.58 91.03 75.479 -5,893.69 -1,627.98 1,814.67 1,637.87 176.80 10.264 18,400.00 13,092.00 18,234.70 12,637.00 87.99 92.37 75.479 -5,993.68 -1,626.98 1,814.64 1,635.15 179.48 10.110 18,500.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.478 -6,093.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,634.70 12,637.00 92.23 96.39 75.478 -6,293.67 -1,623.98 1,814.53 1,626.98 187.56 9.675 18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.47 1,621.51 192.95 9.404 19,000.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	18,100.00	13,092.00	17,934.70	12,637.00	83.76	88.37	75.480	-5,693.70	-1,629.97	1,814.74	1,643.29	171.45	10.585		
18,400.00 13,092.00 18,234.70 12,637.00 87.99 92.37 75.479 -5,993.68 -1,626.98 1,814.64 1,635.15 179.48 10.110 18,500.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.478 -6,093.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,534.70 12,637.00 92.23 96.39 75.478 -6,293.67 -1,623.98 1,814.53 1,626.98 187.56 9.675 18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.98 187.56 9.675 18,900.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,493.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70	18,200.00		18,034.70		85.17	89.70	75.479		-1,628.97	1,814.71	1,640.58	174.12	10.422		
18,500.00 13,092.00 18,334.70 12,637.00 89.40 93.70 75.478 -6,093.68 -1,625.98 1,814.60 1,632.43 182.17 9.961 18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,534.70 12,637.00 92.23 96.39 75.478 -6,293.67 -1,623.98 1,814.53 1,626.98 187.56 9.675 18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.47 1,621.51 192.95 9.404 19,000.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	18,300.00														
18,600.00 13,092.00 18,434.70 12,637.00 90.81 95.04 75.478 -6,193.67 -1,624.98 1,814.57 1,629.71 184.86 9.816 18,700.00 13,092.00 18,534.70 12,637.00 92.23 96.39 75.478 -6,293.67 -1,623.98 1,814.53 1,626.98 187.56 9.675 18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.47 1,621.51 192.95 9.404 19,000.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	18,400.00														
18,700.00 13,092.00 18,534.70 12,637.00 92.23 96.39 75.478 -6,293.67 -1,623.98 1,814.53 1,626.98 187.56 9.675 18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.47 1,621.51 192.95 9.404 19,000.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	18,500.00														
18,800.00 13,092.00 18,634.70 12,637.00 93.64 97.73 75.478 -6,393.66 -1,622.99 1,814.50 1,624.25 190.25 9.537 18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.47 1,621.51 192.95 9.404 19,000.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	10,000.00	13,092.00		12,037.00	90.81	95.04	15.418	-0,193.67				184.86	9.816		
18,900.00 13,092.00 18,734.70 12,637.00 95.06 99.08 75.477 -6,493.66 -1,621.99 1,814.47 1,621.51 192.95 9.404 19,000.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	18,700.00				92.23	96.39				1,814.53					
19,000.00 13,092.00 18,834.70 12,637.00 96.47 100.43 75.477 -6,593.65 -1,620.99 1,814.43 1,618.78 195.65 9.274	18,800.00	13,092.00	18,634.70	12,637.00	93.64	97.73	75.478	-6,393.66	-1,622.99	1,814.50	1,624.25	190.25	9.537		
	18,900.00	13,092.00	18,734.70	12,637.00	95.06	99.08	75.477	-6,493.66	-1,621.99	1,814.47	1,621.51	192.95	9.404		
19,100.00 13,092.00 18,934.70 12,637.00 97.89 101.78 75.477 -6,693.65 -1,619.99 1,814.40 1,616.04 198.36 9.147	19,000.00														
	19,100.00	13,092.00	18,934.70	12,637.00	97.89	101.78	75.477	-6,693.65	-1,619.99	1,814.40	1,616.04	198.36	9.147		





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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method: Output errors are at

Database:

Well El Campeon Fed Com 513H RKB @ 3200.50usft (TBD)

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma USA Compass

Offset TVD Reference: Reference Datum

_		AMD LUDGO											Offset Site Error:	0.00 us
urvey Prog Refe	ram: 0-l rence	MWD+HRGM Off	set	Semi M	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assignance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,300.00	13,092.00	19,134.70	12,637.00	100.72	104.49	75.476	-6,893.64	-1,617.99	1,814.33	1,610.55	203.78	8.903		
19,400.00	13,092.00	19,234.70	12,637.00	102.14	105.85	75.476	-6,993.63	-1,617.00	1,814.29	1,607.80	206.49	8.786		
19,500.00	13,092.00	19,334.70	12,637.00	103.55	107.22	75.476	-7,093.63	-1,616.00	1,814.26	1,605.05	209.21	8.672		
19,600.00	13,092.00	19,434.70	12,637.00	104.97	108.58	75.475	-7,193.62	-1,615.00	1,814.22	1,602.30	211.93	8.561		
19,700.00	13,092.00	19,534.70	12,637.00	106.39	109.94	75.475	-7,293.62	-1,614.00	1,814.19	1,599.54	214.65	8.452		
19,800.00	13,092.00	19,634.70	12,637.00	107.81	111.31	75.475	-7,393.61	-1,613.00	1,814.16	1,596.78	217.37	8.346		
19,900.00	13,092.00	19,734.70	12,637.00	109.23	112.68	75.475	-7,493.61	-1,612.00	1,814.12	1,594.03	220.10	8.242		
20,000.00	13,092.00	19,834.70	12,637.00	110.65	114.05	75.474	-7,593.60	-1,611.01	1,814.09	1,591.26	222.82	8.141		
20,100.00	13,092.00	19,934.70	12,637.00	112.07	115.42	75.474	-7,693.60	-1,610.01	1,814.05	1,588.50	225.55	8.043		
20,200.00	13,092.00	20,034.70	12,637.00	113.49	116.80	75.474	-7,793.59	-1,609.01	1,814.02	1,585.74	228.28	7.946		
20,300.00	13,092.00	20,134.70	12,637.00	114.91	118.17	75.473	-7,893.59	-1,608.01	1,813.98	1,582.97	231.01	7.852		
20,400.00	13,092.00	20,234.70	12,637.00	116.34	119.55	75.473	-7,993.58	-1,607.01	1,813.95	1,580.20	233.75	7.760		
20,500.00	13,092.00	20,334.70	12,637.00	117.76	120.92	75.473	-8,093.58	-1,606.02	1,813.91	1,577.43	236.48	7.670		
20,600.00	13,092.00	20,434.70	12,637.00	119.18	122.30	75.473	-8,193.57	-1,605.02	1,813.88	1,574.66	239.22	7.582		
20,700.00	13,092.00	20,534.70	12,637.00	120.60	123.68	75.472	-8,293.57	-1,604.02	1,813.85	1,571.89	241.96	7.496		
20,800.00	13,092.00	20,634.70	12,637.00	122.03	125.07	75.472	-8,393.56	-1,603.02	1,813.81	1,569.11	244.70	7.412		
20,900.00	13,092.00	20,734.70	12,637.00	123.45	126.45	75.472	-8,493.56	-1,602.02	1,813.78	1,566.33	247.44	7.330		
21,000.00	13,092.00	20,834.70	12,637.00	124.87	127.83	75.471	-8,593.55	-1,601.02	1,813.74	1,563.56	250.19	7.250		
21,100.00	13,092.00	20,934.70	12,637.00	126.30	129.22	75.471	-8,693.55	-1,600.03	1,813.71	1,560.78	252.93	7.171		
21,200.00	13,092.00	21,034.70	12,637.00	127.72	130.60	75.471	-8,793.54	-1,599.03	1,813.67	1,558.00	255.68	7.094		
21,300.00	13,092.00	21,134.70	12,637.00	129.15	131.99	75.471	-8,893.54	-1,598.03	1,813.64	1,555.21	258.43	7.018		
21,400.00	13,092.00	21,234.70	12,637.00	130.57	133.38	75.470	-8,993.53	-1,597.03	1,813.61	1,552.43	261.17	6.944		
21,500.00	13,092.00	21,334.70	12,637.00	132.00	134.77	75.470	-9,093.53	-1,596.03	1,813.57	1,549.65	263.92	6.872		
21,600.00	13,092.00	21,434.70	12,637.00	133.42	136.16	75.470	-9,193.52	-1,595.04	1,813.54	1,546.86	266.68	6.801		
21,700.00	13,092.00	21,534.70	12,637.00	134.85	137.55	75.469	-9,293.52	-1,594.04	1,813.50	1,544.07	269.43	6.731		
21,800.00	13,092.00	21,634.70	12,637.00	136.27	138.94	75.469	-9,393.51	-1,593.04	1,813.47	1,541.29	272.18	6.663		
21,900.00	13,092.00	21,734.70	12,637.00	137.70	140.34	75.469	-9,493.51	-1,592.04	1,813.43	1,538.50	274.94	6.596		
22,000.00	13,092.00	21,834.70	12,637.00	139.12	141.73	75.469	-9,593.50	-1,591.04	1,813.40	1,535.71	277.69	6.530		
22,100.00	13,092.00	21,934.70	12,637.00	140.55	143.13	75.468	-9,693.50	-1,590.04	1,813.36	1,532.92	280.45	6.466		
22,200.00	13,092.00	22,034.70	12,637.00	141.98	144.52	75.468	-9,793.49	-1,589.05	1,813.33	1,530.12	283.21	6.403		
22,300.00	13,092.00	22,134.70	12,637.00	143.40	145.92	75.468	-9,893.49	-1,588.05	1,813.30	1,527.33	285.96	6.341		
22,400.00	13,092.00	22,234.70	12,637.00	144.83	147.31	75.467	-9,993.48	-1,587.05	1,813.26	1,524.54	288.72	6.280		
22,500.00	13,092.00	22,334.70	12,637.00	146.26	148.71	75.467	-10,093.48	-1,586.05	1,813.23	1,521.74	291.48	6.221		
22,600.00	13,092.00	22,434.70	12,637.00	147.69	150.11	75.467	-10,193.47	-1,585.05	1,813.19	1,518.95	294.24	6.162		
22,700.00	13,092.00	22,534.70	12,637.00	149.11	151.51	75.467	-10,293.47	-1,584.05	1,813.16	1,516.15	297.01	6.105		
22,728.24	13,092.00	22,562.94	12,637.00	149.52	151.91	75.467	-10,321.71	-1,583.77	1,813.15	1,515.36	297.79	6.089 SF		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:
Output errors are at

Database:

Offset TVD Reference:

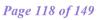
Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Survey Progr	ram· 0-	MWD+HRGM								Rule Assi	aned.		Offset Well Error:	1.00 usf
	rence Vertical	Off Measured	set Vertical	Semi N Reference	lajor Axis Offset	Highside	Offset Wellbe	ore Centre	Dist Between	ance Between	Minimum	Separation	Warning	1.00 us
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	9	
0.00	0.00	1.00	0.00	1.00	1.00	-90.362	-0.19	-30.09	30.09					
100.00	100.00	101.00	100.00	1.08	1.09	-90.362	-0.19	-30.09	30.09	27.92	2.17	13.857		
200.00	200.00	201.00	200.00	1.60	1.60	-90.362	-0.19	-30.09	30.09	26.89	3.20	9.400		
300.00	300.00	301.00	300.00	2.01	2.01	-90.362	-0.19	-30.09	30.09	26.07	4.02	7.480		
400.00	400.00	401.00	400.00	2.35	2.36	-90.362	-0.19	-30.09	30.09	25.38	4.71	6.391		
500.00	500.00	501.00	500.00	2.65	2.66	-90.362	-0.19	-30.09	30.09	24.78	5.31	5.666		
600.00	600.00	601.00	600.00	2.93	2.93	-90.362	-0.19	-30.09	30.09	24.23	5.86	5.138		
700.00	700.00	701.00	700.00	3.18	3.18	-90.362	-0.19	-30.09	30.09	23.73	6.36	4.732		
800.00	800.00	801.00	800.00	3.41	3.42	-90.362	-0.19	-30.09	30.09	23.26	6.83	4.406		
900.00	900.00	901.00	900.00	3.64	3.64	-90.362	-0.19	-30.09	30.09	22.82	7.27	4.137		
1,000.00	1,000.00	1,001.00	1,000.00	3.85	3.85	-90.362	-0.19	-30.09	30.09	22.40	7.69	3.911		
1,100.00	1,100.00	1,101.00	1,100.00	4.05	4.05	-90.362	-0.19	-30.09	30.09	21.99	8.10	3.716		
1,200.00	1,200.00	1,201.00	1,200.00	4.24	4.24	-90.362	-0.19	-30.09	30.09	21.61	8.48	3.547		
1,300.00	1,300.00	1,301.00	1,300.00	4.43	4.43	-90.362	-0.19	-30.09	30.09	21.23	8.86	3.398		
1,400.00	1,400.00	1,401.00	1,400.00	4.61	4.61	-90.362	-0.19	-30.09	30.09	20.87	9.22	3.265		
1,416.33	1,416.33	1,417.33	1,416.33	4.64	4.64	-90.362	-0.19	-30.09	30.09	20.82	9.27	3.245 CC		
1,500.00	1,500.00	1,501.00	1,500.00	4.78	4.78	-90.362	-0.19	-30.09	30.09	20.52	9.57	3.145 ES		
1,600.00	1,599.98	1,600.52	1,599.50	4.98	4.99	99.873	-1.78	-30.86	31.17	21.35	9.82	3.173		
1,620.70	1,620.67	1,621.12	1,620.08	4.99	5.10	99.984	-2.49	-31.21	31.66	21.79	9.87	3.207		
1,700.00	1,699.89	1,700.00	1,698.84	5.07	5.60	98.808	-6.46	-33.15	34.19	24.07	10.12	3.379		
1,800.00	1,799.81	1,799.75	1,798.30	5.23	5.72	94.988	-13.23	-36.45	38.37	28.02	10.35	3.706		
1,900.00	1,899.72	1,899.63	1,897.89	5.41	5.89	91.860	-20.07	-39.78	42.72	32.07	10.65	4.011		
2,000.00	1,999.63	1,999.51	1,997.49	5.60	6.09	89.315	-26.90	-43.10	47.18	36.21	10.96	4.304		
2,100.00	2,099.54	2,099.39	2,097.08	5.80	6.30	87.213	-33.73	-46.43	51.71	40.43	11.28	4.584		
2,200.00	2,199.45	2,199.27	2,196.67	6.02	6.52	85.452	-40.56	-49.76	56.29	44.69	11.61	4.851		
2,300.00	2,299.36	2,299.15	2,296.26	6.24	6.76	83.957	-47.39	-53.09	60.93	48.99	11.94	5.102		
2,400.00	2,399.27	2,399.04	2,395.85	6.47	7.02	82.674	-54.22	-56.42	65.60	53.31	12.29	5.340		
2,500.00	2,499.18	2,498.92	2,495.44	6.72	7.28	81.562	-61.05	-59.75	70.29	57.66	12.64	5.562		
2,600.00	2,599.10	2,598.80	2,595.03	6.96	7.55	80.589	-67.88	-63.08	75.01	62.02	13.00	5.771		
2,700.00	2,699.01	2,698.68	2,694.63	7.22	7.83	79.732	-74.72	-66.41	79.75	66.39	13.37	5.966		
2,800.00	2,798.92	2,798.56	2,794.22	7.48	8.12	78.971	-81.55	-69.74	84.51	70.76	13.74	6.149		
2,900.00	2,898.83	2,898.44	2,893.81	7.74	8.41	78.292	-88.38	-73.07	89.28	75.15	14.13	6.319		
3,000.00	2,998.74	2,998.32	2,993.40	8.01	8.71	77.681	-95.21	-76.40	94.06	79.54	14.52	6.479		
3,100.00	3,098.65	3,098.20	3,092.99	8.28	9.02	77.129	-102.04	-79.72	98.85	83.93	14.91	6.628		
3,200.00	3,198.56	3,198.08	3,192.58	8.56	9.33	76.629	-108.87	-83.05	103.65	88.33	15.32	6.767		
3,300.00	3,298.47	3,297.96	3,292.17	8.84	9.65	76.173	-115.70	-86.38	108.45	92.73	15.72	6.898		
3,400.00	3,398.39	3,397.84	3,391.77	9.13	9.97	75.755	-122.54	-89.71	113.26	97.13	16.13	7.020		
3,500.00	3,498.30	3,497.73	3,491.36	9.41	10.29	75.372	-129.37	-93.04	118.08	101.53	16.55	7.134		
3,600.00	3,598.21	3,597.61	3,590.95	9.70	10.62	75.018	-136.20	-96.37	122.90	105.93	16.97	7.242		
3,700.00	3,698.12	3,697.49	3,690.54	9.99	10.95	74.692	-143.03	-99.70	127.73	110.33	17.40	7.342		
3,800.00	3,798.03	3,797.37	3,790.13	10.29	11.29	74.389	-149.86	-103.03	132.56	114.73	17.82	7.437		
3,900.00	3,897.94	3,897.25	3,889.72	10.58	11.62	74.107	-156.69	-106.36	137.39	119.13	18.25	7.526		
4,000.00	3,997.85	3,997.13	3,989.31	10.88	11.96	73.845	-163.52	-109.69	142.22	123.54	18.69	7.610		
4,100.00	4,097.76	4,097.01	4,088.91	11.18	12.30	73.600	-170.36	-113.01	147.06	127.94	19.13	7.689		
4,200.00 4,300.00	4,197.68 4,297.59	4,196.89	4,188.50	11.48	12.64	73.370 73.155	-177.19 -184.02	-116.34 -110.67	151.91 156.75	132.34	19.57	7.764		
4,300.00	4,297.59	4,296.77	4,288.09	11.78	12.99	73.155	-184.02	-119.67	156.75	136.74	20.01	7.834		
4,400.00	4,397.50	4,396.65	4,387.68	12.08	13.33	72.952	-190.85	-123.00	161.60	141.14	20.45	7.901		
4,500.00	4,497.41	4,496.53	4,487.27	12.39	13.68	72.762	-197.68	-126.33	166.44	145.54	20.90	7.964		
4,600.00	4,597.32	4,596.42	4,586.86	12.69	14.03	72.582	-204.51	-129.66	171.29	149.94	21.35	8.023		
4,700.00	4,697.23	4,696.30	4,686.45	13.00	14.38	72.412	-211.34	-132.99	176.14	154.34	21.80	8.080		
4,800.00	4,797.14	4,796.18	4,786.05	13.31	14.73	72.251	-218.17	-136.32	181.00	158.74	22.25	8.134		
4,900.00	4,897.05	4,896.06	4,885.64	13.62	15.08	72.099	-225.01	-139.65	185.85	163.14	22.71	8.185		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database: Offset TVD Reference: Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

													Offset Site Error:	0.00 usf
Survey Progr Refe	ram: 0-	MWD+HRGM Off	set	Semi N	lajor Axis		Offset Wellbo	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,996.97	4,995.94	4,985.23	13.92	15.44	71.954	-231.84	-142.98	190.71	167.54	23.16	8.233		
5,100.00	5,096.88	5,095.82	5,084.82	14.23	15.79	71.816	-238.67	-146.31	195.56	171.94	23.62	8.279		
5,200.00	5,196.79	5,195.70	5,184.41	14.55	16.15	71.685	-245.50	-149.63	200.42	176.34	24.08	8.323		
5,300.00	5,296.70	5,295.58	5,284.00	14.86	16.50	71.561	-252.33	-152.96	205.28	180.74	24.54	8.365		
5,400.00	5,396.61	5,395.46	5,383.59	15.17	16.86	71.442	-259.16	-156.29	210.14	185.14	25.00	8.405		
5,500.00	5,496.52	5,495.34	5,483.19	15.48	17.22	71.328	-265.99	-159.62	215.00	189.53	25.47	8.443		
5,600.00	5,596.43	5,595.23	5,582.78	15.79	17.58	71.220	-272.83	-162.95	219.86	193.93	25.93	8.479		
5,700.00	5,696.34	5,695.11	5,682.37	16.11	17.94	71.116	-279.66	-166.28	224.72	198.33	26.39	8.514		
5,800.00	5,796.26	5,794.99	5,781.96	16.42	18.30	71.017	-286.49	-169.61	229.58	202.72	26.86	8.547		
5,900.00	5,896.17	5,894.87	5,881.55	16.74	18.66	70.921	-293.32	-172.94	234.45	207.12	27.33	8.579		
6,000.00	5,996.08	5,994.75	5,981.14	17.05	19.02	70.830	-300.15	-176.27	239.31	211.51	27.80	8.609		
6,100.00	6,095.99	6,094.63	6,080.73	17.37	19.38	70.742	-306.98	-179.60	244.17	215.91	28.27	8.639		
6,200.00	6,195.90	6,194.51	6,180.32	17.68	19.74	70.658	-313.81	-182.92	249.04	220.30	28.74	8.667		
6,300.00	6,295.81	6,294.39	6,279.92	18.00	20.11	70.577	-320.64	-186.25	253.91	224.70	29.21	8.694		
6,400.00	6,395.72	6,394.27	6,379.51	18.32	20.47	70.499	-327.48	-189.58	258.77	229.09	29.68	8.719		
6,500.00	6,495.63	6,494.15	6,479.10	18.63	20.83	70.424	-334.31	-192.91	263.64	233.49	30.15	8.744		
6,600.00	6,595.55	6,594.03	6,578.69	18.95	21.20	70.351	-341.14	-196.24	268.50	237.88	30.62	8.768		
6,700.00	6,695.46	6,693.92	6,678.28	19.27	21.56	70.281	-347.97	-199.57	273.37	242.28	31.10	8.791		
6,800.00	6,795.37	6,793.80	6,777.87	19.59	21.93	70.214	-354.80	-202.90	278.24	246.67	31.57	8.813		
6,900.00	6,895.28	6,893.68	6,877.46	19.91	22.29	70.149	-361.63	-206.23	283.11	251.06	32.04	8.835		
7,000.00	6,995.19	6,993.56	6,977.06	20.23	22.66	70.086	-368.46	-209.56	287.98	255.46	32.52	8.855		
7,100.00	7,095.10	7,093.44	7,076.65	20.54	23.03	70.025	-375.30	-212.89	292.84	259.85	33.00	8.875		
7,200.00	7,195.01	7,193.32	7,176.24	20.86	23.39	69.966	-382.13	-216.22	297.71	264.24	33.47	8.894		
7,300.00	7,294.92	7,293.20	7,275.83	21.18	23.76	69.909	-388.96	-219.54	302.58	268.63	33.95	8.913		
7,400.00	7,394.84	7,393.08	7,375.42	21.50	24.12	69.854	-395.79	-222.87	307.45	273.03	34.43	8.931		
7,500.00	7,494.75	7,492.96	7,475.01	21.82	24.49	69.801	-402.62	-226.20	312.32	277.42	34.90	8.948		
7,600.00	7,594.66	7,592.84	7,574.60	22.14	24.86	69.749	-409.45	-229.53	317.19	281.81	35.38	8.964		
7,700.00	7,694.57	7,692.72	7,674.20	22.46	25.23	69.699	-416.28	-232.86	322.06	286.20	35.86	8.981		
7,800.00	7,794.48	7,792.61	7,773.79	22.78	25.60	69.650	-423.12	-236.19	326.93	290.59	36.34	8.996		
7,900.00	7,894.39	7,892.49	7,873.38	23.10	25.96	69.603	-429.95	-239.52	331.80	294.98	36.82	9.011		
8,000.00	7,994.30	7,992.37	7,972.97	23.42	26.33	69.557	-436.78	-242.85	336.67	299.37	37.30	9.026		
8,100.00	8,094.21	8,092.25	8,072.56	23.75	26.70	69.512	-443.61	-246.18	341.55	303.76	37.78	9.040		
8,200.00	8,194.13	8,192.13	8,172.15	24.07	27.07	69.469	-450.44	-249.51	346.42	308.16	38.26	9.054		
8,300.00	8,294.04	8,292.01	8,271.74	24.39	27.44	69.427	-457.27	-252.83	351.29	312.55	38.74	9.067		
8,400.00	8,393.95	8,391.89	8,371.34	24.71	27.81	69.386	-464.10	-256.16	356.16	316.94	39.22	9.080		
8,500.00	8,493.86	8,491.77	8,470.93	25.03	28.18	69.346	-470.93	-259.49	361.03	321.33	39.71	9.093		
8,600.00	8,593.77	8,591.65	8,570.52	25.35	28.55	69.307	-477.77	-262.82	365.91	325.72	40.19	9.105		
8,700.00	8,693.68	8,691.53	8,670.11	25.67	28.92	69.269	-484.60	-266.15	370.78	330.11	40.67	9.117		
8,800.00	8,793.59	8,791.42	8,769.70	26.00	29.29	69.233	-491.43	-269.48	375.65	334.50	41.15	9.128		
8,900.00	8,893.50	8,891.30	8,869.29	26.32	29.66	69.197	-498.26	-272.81	380.52	338.89	41.64	9.139		
9,000.00	8,993.42	8,991.18	8,968.88	26.64	30.03	69.162	-505.09	-276.14	385.40	343.28	42.12	9.150		
9,100.00	9,093.33	9,091.06	9,068.48	26.96	30.40	69.128	-511.92	-279.47	390.27	347.67	42.60	9.161		
9,200.00	9,193.24	9,190.94	9,168.07	27.29	30.77	69.094	-518.75	-282.80	395.14	352.05	43.09	9.171		
9,300.00	9,293.15	9,290.82	9,267.66	27.61	31.14	69.062	-525.59	-286.13	400.02	356.44	43.57	9.181		
9,400.00	9,393.06	9,390.70	9,367.25	27.93	31.51	69.030	-532.42	-289.45	404.89	360.83	44.06	9.190		
9,500.00	9,492.97	9,490.58	9,466.84	28.25	31.88	68.999	-539.25	-292.78	409.76	365.22	44.54	9.200		
9,600.00	9,592.88	9,590.46	9,566.43	28.58	32.25	68.969	-546.08	-296.11	414.64	369.61	45.02	9.209		
9,700.00	9,692.79	9,690.34	9,666.02	28.90	32.62	68.940	-552.91	-299.44	419.51	374.00	45.51	9.218		
9,800.00	9,792.71	9,790.22	9,765.62	29.22	32.99	68.911	-559.74	-302.77	424.38	378.39	45.99	9.227		
9,900.00	9,892.62	9,890.11	9,865.21	29.55	33.36	68.883	-566.57	-306.10	429.26	382.78	46.48	9.235		
10,000.00	9,992.53	9,989.99	9,964.80	29.87	33.73	68.855	-573.40	-309.43	434.13	387.17	46.97	9.244		
10,100.00	10,092.44	10,089.87	10,064.39	30.19	34.11	68.828	-580.24	-312.76	439.01	391.55	47.45	9.252		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

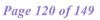
Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Page	Offset Des	sign: □	Campeon I	rea Com (NADØ3) - E	:i Campe	on Fed Com	413H - OH - P	тап т ∪8-31	-22				Offset Site Error:	0.00 usft
New Part P				fset	Semi N	laior Avis		Offset Wellho	ore Centre	Dief		gned:		Offset Well Error:	1.00 usf
10.0000 10.1923.	Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Separation		Warning	
10,000 10													9.260		
10,000 10 1,042 08 10,048 10 10,042 78 13,44 12 50.99 16 776 177.86 120,00 14 14,00 12,00 12 10,00 10	10,300.00														
1,000.00	10,400.00	10,392.17	10,389.51	10,363.16	31.16	35.22	68.751	-600.73	-322.74	453.63	404.72	48.91	9.275		
10,000 10	10,500.00	10,492.08	10,489.39	10,462.76	31.49	35.59	68.726	-607.56	-326.07	458.50	409.11	49.40	9.282		
10,00000	10,600.00	10,592.00	10,589.27	10,562.35	31.81	35.97	68.702	-614.39	-329.40	463.38	413.49	49.88	9.289		
19,000 00 10,0891,72 10,08891 0,0891 12 92.78 137.89 68.833 4.94.89 4.94.99 4.96.09 4.78.00 4.96.08 51.94 9.310 11,000 11,001 150 11,008.08 10,000.00 13,043 37.85 68.581 4.94.12 4.94.29 4.94.08 4.96.08 19.94 9.229 123.11,1000 11,001.05 11,008.08 10,000.00 33.44 37.88 68.599 4.94.08 5.40.06 48.775 4.95.49 52.29 19.229 11,000.00 11,001.05 11,008.08 11,000.00 12,01.37 11,000.00 11,001.05 11,000.00 11,000.00 11,001.05 11,000.00 11,000.0	10,700.00	10,691.91	10,689.15	10,661.94	32.13	36.34	68.679	-621.22	-332.73	468.25	417.88	50.37	9.296		
11,000 0 10,091 0 10,096 0 10,000 0 13,01 0 33.1 37.4 0 08.11 - 641.72 34.27 4 42.88 43.04 51.83 0.316 11,000 11,014 1 11,000 11,000 11,000 11,014 1 11,000 11,000 13.75 38.20 85.68 48.65 38 34.08 48.65 38 34.08 2 52.2 30.23 31,000 11	10,800.00	10,791.82	10,789.03	10,761.53	32.46	36.71	68.656	-628.06		473.13	422.27	50.86	9.303		
11,00000 11,00153 11,008.08 11,009.03 03.44 378 80.08.09 468.05 -340.05 447.75 445.43 52.20 9.323															
11,200.00 11,391.40 11,189.50 11,199.90 33.75 38.20 88.508 455.80 49.33 49.82 52.81 9.329 11,300.00 11,201.37 11,208.44 11,209.40 34.08 38.57 88.547 -80.62.21 36.07 502.37 44.82.1 53.93 0.335 11,300.00 11,401.20 11,306.67 11,477.46 34.73 39.35 68.670 474.68 57.05.27 44.07 11,000.00 11,401.20 11,000.07 11,401.11 30.00 39.50 80.07 474.68 57.05.27 46.07 10.00 11,401.11 11,400.00 11,401.11 11,400.10 11,401.11 30.00 39.50 80.07 39.50 80.00 474.68 57.05.28 461.10 64.18 9.327 11,700.00 11,801.00 11,700.45 11,701.11 30.00 33.00 39.50 80.00 80.00 80.00 476.00 3.05.44 40.48 40.48 40.48 40.49 40.19 9.315 11,700.00 11,801.00 11,700.45 11,700.93 37.0 39.53 80.60 80.20 80.00 80.20 80.00 80															
11,0000 11,281.37 11,288.44 11,289.49 34.08 38.67 88.547 .862.21 .352.71 497.50 444.21 53.29 9.335 11,4000 11,391.29 11,389.44 11,380.29 34.40 38.44 88.527 .868.12 .368.07 36.07 8.07.48 .358.77 848.59 53.78 9.341 11,500.00 11,500.11 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.20 11,500.51 11,500.50 11,500.51 11,500.50 11,500.51 11,500.50 11,500.51 11,500.51 11,500.50 11,															
11,400,00 1,391,20 13,985,4 1,380,29 34,40 38,94 88,527 498,10 35,676 35,78 3,41 11,500,00 11,591,11 11,500,54 11,591,11 35,05 39,50 69,085 476,03 3594,4 50,34 449,24 54,10 3,16 11,500,00 11,891,02 11,720,35 11,890,13 13,790,33 35,70 38,53 69,982 476,03 3594,4 50,34 449,24 54,10 3,04 11,500,00 11,890,40 11,890,40 11,890,41 36,70 38,53 69,982 476,03 3594,4 50,34 449,24 54,10 3,04 11,500,00 11,890,40 11,890,40 11,890,40 36,30 39,53 69,982 476,03 3594,4 50,34 449,24 54,10 3,04 11,500,00 11,890,40 11,890,40 11,890,40 36,30 39,53 70,455 476,03 3594,4 50,34 446,56 53,86 2,26 12,000,00 11,900,80 12,002,23 11,900,80 38,33 39,54 70,746 476,03 35,944 490,55 446,60 53,86 2,27 12,000,00 12,000,00 12,141,00 12,004,60 38,38 39,54 119,286 476,03 35,944 490,50 446,64 53,86 2,27 12,000,00 12,000,00 12,141,00 12,004,60 38,38 39,57 119,286 476,23 35,944 490,50 446,64 53,86 2,27 12,000,00 12,000,00 12,141,00 12,004,60 38,83 39,57 119,286 476,23 35,944 490,50 446,64 53,86 2,27 12,000,00 12,000,00 12,141,00 12,004,60 38,83 39,57 119,286 476,23 35,944 490,50 446,64 53,86 9,27 12,000,00 12,000,00 12,141,00 12,004,60 38,83 39,57 119,286 476,23 35,944 490,50 446,64 53,86 9,27 12,000,00 12,000,00 12,141,00 12,004,60 38,83 39,57 119,286 476,23 35,944 490,50 446,64 53,86 9,27 12,000,00 12,000,00 12,141,00 12,004,60 38,83 39,57 119,286 476,23 35,944 490,50 446,64 53,86 9,27 12,000,00 12,000,00 12,141,00 12,004,60 12,00	11,200.00	11,191.46	11,188.56	11,159.90	33.75	38.20	68.568	-655.38	-349.38	492.63	439.82	52.81	9.329		
11,000 0 1,491 0 1,506 87 1,477 46	11,300.00	11,291.37	11,288.44	11,259.49	34.08	38.57	68.547	-662.21	-352.71	497.50	444.21	53.29	9.335		
11,000.00 11,591.11 11,600.54 11,590.54 15,601.11 11,600.02 13,600.05 46,000	11,400.00	11,391.29	11,389.54	11,360.29	34.40	38.94	68.527	-669.12	-356.07	502.37	448.59	53.78	9.341		
11,200,00 11,691,02 11,720,45 11,890,24 35,38 39,62 69,532 69,582 676,03 359,44 501,38 441,24 54,10 9,304	11,500.00														
11,900.00 11,799.93 11,820.36 11,799.93 36.70 39.53 69.982 476.03 359.44 501.88 447.89 54.00 9.285 11,900.00 11,909.84 11,820.27 11,890.84 30.03 39.53 70.435 4.76.03 359.44 501.86 447.89 54.00 9.286 11,900.00 11,909.80 12,202.33 11,909.80 38.33 39.54 70.744 4.76.03 359.44 490.55 445.60 53.86 9.226 12,000.00 11,909.80 12,202.33 11,909.80 38.33 39.54 70.714 4.76.03 3.99.44 490.55 445.60 53.86 9.276 12,000.00 12,009.80 12,138.96 12,009.80 12,138.96 13,009.80 12,138.96 12,138	11,600.00		11,620.54		35.05	39.50	69.085	-676.03	-359.44	504.83	450.64	54.19	9.315		
11,800.00 11,800.84 11,800.27 11,800.84 80.03 98.53 70.469 4760.30 3.599.44 500.46 446.56 53.88 9.286 12,000.00 11,900.83 11,907.84 11,808.38 99.54 4767.03 3.599.44 500.46 446.56 53.88 9.286 12,000.00 11,900.83 12,000.00 11,900.80 12,000.00 11,900.80 12,000.00 11,900.80 12,000.00 11,900.80 12,019.00 12,01	11,700.00	11,691.02	11,720.45	11,691.02	35.38	39.52	69.532	-676.03	-359.44	503.34	449.24	54.10	9.304		
11,897.54 11,898.38 11,827.81 11,898.38 38.05 39.53 70.469 476.03 -359.44 499.55 445.96 53.88 9.286 12,020.00 11,900.00 12,000.00 11,000.00 12,000	11,800.00	11,790.93	11,820.36	11,790.93	35.70	39.53	69.982	-676.03	-359.44	501.88	447.89	54.00	9.295		
12,000.00 1,1980.80 12,002.23 11,980.80 36.33 30.54 70.714 4.76.03 3.59.44 499.50 445.69 53.86 92.74 12,002.24 12,009.04 12,048.47 12,019.04 36.38 38.54 119.286 4.76.03 3.59.44 499.50 445.64 53.86 92.74 12,000.00 12,009.80 12,114.10 12,048.68 36.36 38.57 1193.04 4.76.21 3.89.44 499.50 445.64 53.86 92.74 12,000.00 12,009.80 12,114.10 12,048.68 36.36 38.57 1193.04 4.76.21 3.89.44 499.50 445.64 53.86 92.74 12,000.00 12,009.80 12,114.10 12,048.68 36.36 38.57 1193.04 4.76.21 3.89.44 499.83 445.72 53.91 9.267 12,000.00 12,009.80 12,009.	11,900.00	11,890.84	11,920.27	11,890.84	36.03	39.53	70.435	-676.03	-359.44	500.46	446.56	53.89	9.286		
12,008,24	11,907.54	11,898.38	11,927.81	11,898.38	36.05	39.53	70.469	-676.03	-359.44	500.35	446.46	53.88	9.286		
12,030,47 12,021,27 12,090,70 12,021,27 36,36 39,54 119,286 -576,03 -39,944 499,50 445,64 53,86 9,274 12,100,00 12,000,80 12,114,10 12,094,66 36,36 39,57 119,304 -576,21 -359,44 499,63 445,72 53,91 0,267 12,200,00 12,100,80 12,113,00 12,114,10 12,094,66 36,36 39,57 -119,304 -576,21 -359,44 499,63 445,72 53,91 0,267 12,200,00 12,000,80 12,114,10 12,094,66 36,36 40,20 -121,225 -695,69 -359,25 514,31 456,60 55,70 9,233 12,400,00 12,300,80 12,314,77 12,280,00 36,37 40,58 -123,151 -716,00 -359,05 531,52 474,26 57,25 9,224 12,500,00 12,400,80 12,313,37 36,37 40,58 -123,151 -716,00 -359,05 531,52 474,26 57,25 9,224 12,500,00 12,400,80 12,314,77 12,280,30 36,37 40,58 -123,151 -716,00 -359,05 531,52 474,26 57,25 9,224 12,500,00 12,400,80 12,333,37 36,37 40,58 -123,151 -716,00 -359,05 531,52 474,26 57,25 9,224 12,500,00 12,400,80 12,333,37 36,37 41,02 -125,974 -747,42 -358,15 56,44 60,49 69 59,38 9,503 12,550,00 12,540,79 12,400,00 12,360,88 36,40 41,09 55,551 -753,05 -358,69 570,92 611,20 59,73 9,599 12,550,00 12,540,79 12,400,00 12,360,88 12,450,00 12,390,89 12,450,00 12,390,80	12,000.00														
12,100,00	12,028.24	12,019.04	12,048.47	12,019.04	36.36	39.54	-119.286	-676.03	-359.44	499.50	445.64	53.86	9.274		
12,200,00	12,030.47	12,021.27	12,050.70	12,021.27	36.36	39.54	-119.286	-676.03	-359.44	499.50	445.64	53.86	9.274		
12,200.00	12,100.00	12,090.80	12,114.10	12,084.66	36.36	39.57	-119.304	-676.21	-359.44	499.63	445.72	53.91	9.267		
12,400.00	12,200.00	12,190.80	12,183.95	12,154.21	36.36	39.83	-119.907	-682.24	-359.38	503.85	449.31	54.54	9.238		
12,500.00	12,300.00	12,290.80	12,250.00	12,218.84	36.36	40.20	-121.225	-695.69	-359.25	514.31	458.60	55.70	9.233		
12,528,24 12,519,04 12,388,56 12,347,02 36.37 41,02 -125,974 -747,42 -358,75 564,34 504,96 59.38 9.503 12,550,00 12,540,79 12,400,00 12,356,98 36.40 41,09 53.551 -753,05 -358,69 570,92 511,20 59.73 9.559 12,650,00 12,659,61 12,472,721 12,380,20 36.63 41,25 51,326 -767,23 -358,69 570,92 511,20 59.73 9.559 12,650,00 12,639,89 12,450,00 12,399,11 36.95 41,38 49.468 -779,94 -358,44 599,57 538,54 61.03 9.824 12,700,00 12,688,24 12,480,79 12,423,83 37,29 41,55 47,602 -798,29 -358,26 612,55 550,88 61.67 9.932 12,750,00 12,735,30 12,500,00 12,438,74 37,62 41,66 46,235 -810,41 -358,14 624,58 562,77 61,82 10.104 12,800,00 12,760,72 12,534,74 12,444,18 37,66 41,84 44,759 -833,13 -357,92 635,8 572,93 62,35 10,189 12,850,00 12,824,15 12,550,00 12,475,56 38,29 41,92 43,798 -844,21 -357,81 644,95 582,80 62,15 10,377 12,900,00 12,393,27 12,613,81 38,90 42,22 41,974 -891,78 -357,35 656,99 597,05 62,64 10,531 13,000,00 12,393,27 12,650,00 12,593,68 39,18 42,39 41,334 -920,77 -357,07 656,09 602,14 62,95 10,565 13,050,00 12,391,62 12,565,00 38,65 342,58 40,756 -962,25 -356,67 671,02 608,47 62,54 10,729 13,100,00 13,007,71 12,500,00 12,598,54 40,02 42,76 40,801 11,007,31 -356,24 670,78 608,47 62,54 10,729 13,200,00 13,047,14 12,750,00 12,589,54 40,02 42,76 40,801 11,007,31 -356,24 670,78 608,47 62,54 10,729 13,300,00 13,047,14 12,750,00 12,589,54 40,02 42,76 40,801 11,007,31 -356,24 670,78 608,48 61,94 10,830 13,300,00 13,047,14 12,750,00 12,589,54 40,02 42,76 40,801 11,007,31 -356,24 670,78 608,48 61,94 10,870 13,300,00 13,047,14 12,750,00 12,686,50 40,34 42,95 41,047 -1,028,08 -356,04 668,33 608,85 61,49 10,870 13,300,00 13,047,14 12,750,00 12,686,50 40,28 42,95 41,047 -1,028,08 -356,04 668,33 608,85 61,49 10,870 13,300,00 13,047,14 12,750,00 12,686,30 40,26 42,91 41,473 -1,053,50 -356,50 671,02 608,47 62,54 10,729 13,300,00 13,047,14 12,750,00 12,686,30 40,26 42,91 41,473 -1,053,50 -356,50 671,02 608,47 62,54 10,729 13,300,00 13,000,00 12,000,00 12,687,30 40,40 43,12 43,744 -1,149,99 -354,86 637,22 577,76 69,47 10,716 13,500,00	12,400.00	12,390.80	12,314.77	12,280.30	36.37	40.58	-123.151	-716.00	-359.05	531.52	474.26	57.25	9.284		
12,550.00 12,540.79 12,400.00 12,356.98 36.40 41.09 53.551 -753.05 -358.69 570.92 511.20 59.73 9.559 12,600.00 12,590.61 12,427.21 12,380.20 36.63 41.25 51.326 -767.23 -358.56 585.61 50.50 9.679 12,600.00 12,638.89 12,450.00 12,399.11 36.95 41.38 49.468 -779.94 -358.44 599.7 538.54 61.03 9.824 12,700.00 12,688.24 12,480.79 12,423.83 37.29 41.55 47.602 -798.29 -358.26 612.55 550.88 61.67 9.932 12,750.00 12,278.73 12,500.00 12,488.74 37.62 41.66 46.235 -810.41 -358.14 624.58 562.77 61.82 10.104 12,800.00 12,780.72 12,554.12 12,464.18 37.66 41.84 44.759 -833.13 -357.92 635.28 572.93 62.35 10.189 12,850.00 12,857.28 12,550.00 12,475.56 38.29 41.92 43.798 -844.21 -357.81 644.95 582.80 62.15 10.377 12,900.00 12,865.26 12,587.28 12,550.01 38.60 42.10 42.717 -871.43 -357.55 65.95 590.32 62.63 10.426 12,903.73 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.35 659.9 590.32 62.63 10.426 12,903.73 12,613.81 12,518.03 38.91 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,060.00 12,971.62 12,666.60 12,549.11 39.43 42.45 41.006 -934.68 -356.94 668.72 606.27 62.46 10.707 13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.762 -980.24 -356.50 671.63 609.58 62.05 10.824 13,300.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,047.77 12,690.00 12,686.26 42.21 40.47 -1,028.08 366.07 671.63 609.58 62.05 10.824 10.798 13,550.00 13,064.50 12,777.71 12,690.00 12,686.34 40.38 42.97 42.05 -1,107.86 -355.57 659.19 580.99 60.82 10.834 10.300.00 13,091.30 12,650.00 12,667.25 12,668.83 40.26 42.91 41.473 -1,028.08 365.07 665.99 60.85 60.85 60.85 10.834 10.798 13,550.00 13,092.00 12,667.25 12,668.83 40.26 42.91 41.473 -1,028.08 365.07 671.63 609.58 62.05 10.824 10.798 13,550.00 13,066.50 12,772.71 12,680.00 12,686.34 40.26 42.91 41.473 -1,028.08 365.07 671.63 609.58 62.05 10.834 10.798 13,550.00 13,092.00 12,687.25 12,668.63 40.33 42.97 42.057 -1,077.86 355.57 659.19 580.99 60.82 10.834 10.798 13,550.00 13,092.00 12,687.25 12,668.60 40.33 42.97 42.057 -1,077.86 35	12,500.00	12,490.80	12,373.08	12,333.37	36.37	40.93	-125.335	-740.12	-358.82	556.04	497.12	58.92	9.437		
12,600.00 12,590.61 12,427.21 12,380.20 36.83 41.25 51.326 -767.23 -358.56 585.61 525.11 60.50 9.679 12,650.00 12,638.89 12,450.00 12,399.11 36.95 41.38 49.468 -779.94 -358.44 599.57 538.54 61.03 9.824 12,700.00 12,688.24 12,480.79 12,438.83 37.29 41.55 47.602 -798.29 -356.26 612.55 550.88 61.67 9.932 12,750.00 12,785.30 12,500.00 12,438.74 37.62 41.66 46.235 -810.41 -358.14 62.45 562.77 61.82 10.104 12,800.00 12,780.72 12,534.12 12,464.18 37.96 41.84 44.759 -833.13 -357.92 635.28 572.93 62.35 10.189 12,800.00 12,865.26 12,550.00 12,475.56 38.29 41.92 43.798 -844.21 -357.81 644.95 582.80 62.15 10.377 12,900.00 12,865.26 12,587.28 12,501.01 38.60 42.10 42.717 -871.43 -357.55 652.95 590.32 62.63 10.426 12,950.00 12,932.73 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.35 659.69 597.05 62.64 10.531 13,000.00 12,939.27 12,660.00 12,589.68 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.595 13,050.00 13,005.52 12,700.00 12,566.50 39.65 42.58 40.756 -960.95 -356.67 671.02 608.47 62.54 10.707 13,150.00 13,005.52 12,700.00 12,566.50 39.65 42.58 40.756 -960.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,005.57 12,719.76 12,576.07 39.85 42.65 40.750 -980.24 -356.50 671.63 608.84 61.94 10.830 13,200.00 13,007.71 12,680.00 12,689.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,200.00 13,007.77 1 12,589.71 40.15 42.82 41.447 -1,028.08 -355.59 668.31 608.85 61.49 10.877 13,300.00 13,007.77 1 12,800.00 12,689.54 40.38 42.99 41.473 -1,058.08 -355.59 668.31 698.99 60.82 10.834 13,400.00 13,093.00 12,686.50 12,683.81 40.38 43.03 42.99 42.05 -1,101.18 -355.31 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,687.25 12,618.55 40.33 42.99 44.207 -1,107.80 -355.30 652.00 591.62 60.38 10.798	12,528.24	12,519.04	12,388.56	12,347.02	36.37	41.02	-125.974	-747.42	-358.75	564.34	504.96	59.38	9.503		
12,650.00 12,639.89 12,450.00 12,399.11 36.95 41.38 49.468 -779.94 -358.44 599.57 538.54 61.03 9.824 12,700.00 12,688.24 12,480.79 12,423.83 37.29 41.55 47.602 -798.29 -358.26 612.55 550.88 61.67 9.932 12,750.00 12,735.30 12,500.00 12,438.74 37.62 41.66 46.235 -810.41 -358.14 624.58 562.77 61.82 10.104 12,800.00 12,824.15 12,550.00 12,475.56 38.29 41.92 43.798 -844.21 -357.81 644.95 582.80 62.15 10.337 12,900.00 12,865.26 12,587.28 12,501.01 38.60 42.10 42.717 -871.43 -357.55 652.95 590.32 62.63 10.426 12,903.73 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.35 659.69 597.05 62.64 10.531 13,000.00 12,939.27 12,650.00 12,598.68 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,000.00 12,903.75 12,606.80 12,599.68 39.43 41.00 42.45 41.006 -934.68 -366.94 668.72 606.27 62.46 10.707 13,100.00 13,005.52 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,005.76 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,007.71 12,580.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,200.00 13,007.77 17,172.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 603.18 61.19 10.867 13,300.00 13,007.71 12,580.00 12,623.61 40.38 43.03 42.97 42.057 -1,077.86 -355.56 65.91 598.09 60.82 10.834 13,400.00 13,092.00 12,667.25 12,627.81 40.39 43.06 43.36 -1,117.91 -355.17 647.45 587.22 60.44 10.781 13,500.00 13,092.00 12,667.25 12,627.81 40.39 43.06 43.36 -1,117.91 -355.17 647.45 587.22 60.44 10.781 13,500.00 13,092.00 12,667.25 12,627.81 40.39 43.06 43.36 -1,117.91 -355.17 647.45 587.22 60.44 10.781 13,500.00 13,092.00 12,667.25 12,627.81 40.39 43.06 43.36 -1,117.91 -355.17 647.45 587.22 60.44 10.781 13,500.00 13,092.00 12,663.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,663.09 12,664.72 40.43 43.20 44.207 -1,210.72 -354.27 62.87 59.72 59.15 10.661 13,600.00 13,092.00 13,031.11 12,643.00 40.66 43.26 44.288 -1,280.60 -353.80 627.23 566.	12,550.00	12,540.79	12,400.00	12,356.98	36.40	41.09	53.551	-753.05	-358.69	570.92	511.20	59.73	9.559		
12,700.00	12,600.00	12,590.61	12,427.21	12,380.20	36.63	41.25	51.326	-767.23	-358.56	585.61	525.11	60.50	9.679		
12,750.00 12,735.30 12,500.00 12,438.74 37.62 41.66 46.235 -810.41 -358.14 624.58 562.77 61.82 10.104 12,800.00 12,780.72 12,534.12 12,464.18 37.96 41.84 44.759 -833.13 -357.92 635.28 572.93 62.35 10.189 12,850.00 12,824.15 12,550.00 12,475.56 38.29 41.92 43.798 -844.21 -357.81 644.95 582.80 62.15 10.377 12,900.00 12,852.60 12,597.28 12,501.01 38.60 42.10 42.717 -871.43 -357.55 652.95 590.32 62.63 10.426 12,950.00 12,933.73 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.35 659.69 597.05 62.64 10.531 13,000.00 12,939.27 12,650.00 12,539.68 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,050.00 12,971.62 12,668.80 12,549.11 39.43 42.45 41.006 -934.68 -356.94 668.72 606.27 62.46 10.707 13,100.00 13,005.2 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,025.76 12,717.76 12,560.07 39.85 42.65 40.702 -980.24 -356.50 671.03 608.84 61.94 10.830 13,250.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,025.00 13,045.50 12,772.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,028.08 -356.04 668.33 608.85 61.49 10.870 13,300.00 13,007.71 12,800.00 12,603.81 40.38 43.03 42.795 -1,1077.86 -355.33 652.00 591.62 60.38 10.798 10.834 13,400.00 13,092.00 12,805.00 12,623.81 40.39 43.06 42.97 42.057 -1,077.86 -355.59 664.38 603.18 61.19 10.857 13,500.00 13,092.00 12,602.81 40.38 43.03 42.795 -1,1071.88 -355.33 652.00 591.62 60.38 10.798 10.834 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43,744 -1,149.99 -354.88 637.2 567.2 577.6 594.7 10.716 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43,744 -1,149.99 -354.88 637.2 567.2 591.5 10.631 13,500.00 13,092.00 13,092.00 12,603.81 40.48 43.26 44.288 -1,280.60 -355.60 62.87 569.72 591.5 10.631 13,500.00 13,092.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -355.60 62.72 566.60 60.63 10.345	12,650.00	12,639.89	12,450.00	12,399.11	36.95	41.38	49.468	-779.94	-358.44	599.57	538.54	61.03	9.824		
12,800.00 12,780.72 12,534.12 12,464.18 37.96 41.84 44.759 -833.13 -357.92 635.28 572.93 62.35 10.189 12,850.00 12,824.15 12,550.00 12,475.56 38.29 41.92 43.798 -844.21 -357.81 644.95 552.80 62.15 10.377 12,900.00 12,865.26 12,587.28 12,501.01 38.60 42.10 42.717 -871.43 -357.55 652.95 590.32 62.63 10.426 12,950.00 12,933.73 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.35 652.95 590.32 62.63 10.426 13,000.00 12,937.62 12,660.00 12,539.68 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,050.00 12,971.62 12,666.80 12,549.11 39.43 42.45 41.006 934.68 366.94 668.72 666.27 62.46 10.707 13,100.00 13,000.52 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.702 980.24 356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1.007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,047.14 12,750.00 12,686.50 40.26 42.91 41.473 -1.028.08 -356.04 668.33 606.85 61.49 10.870 13,350.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1.028.08 -356.04 668.33 606.85 61.49 10.870 13,350.00 13,092.00 12,867.25 12,627.81 40.38 43.03 42.795 -1.1071.8 -355.36 658.91 598.09 60.82 10.834 13,480.00 13,091.30 12,850.00 12,633.61 40.38 43.03 42.795 -1.1071.8 -355.37 668.00 591.62 60.38 10.798 13,428.24 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1.107.72 -354.27 628.87 569.72 591.5 10.631 13,700.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1.120.72 -354.27 628.87 569.72 591.5 10.631 13,800.00 13,092.00 13,092.00 13,092.00 13,092.00 12,643.00 40.46 43.26 44.288 -1.280.60 -353.60 627.23 567.89 59.34 10.570 13,800.00 13,092.00 13,092.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1.280.60 -353.60 627.23 567.89 59.34 10.570	12,700.00	12,688.24	12,480.79	12,423.83	37.29	41.55	47.602	-798.29	-358.26	612.55	550.88	61.67	9.932		
12,850.00 12,824.15 12,550.00 12,475.56 38.29 41.92 43.798 -844.21 -357.81 644.95 582.80 62.15 10.377 12,900.00 12,865.26 12,587.28 12,501.01 38.60 42.10 42.717 -871.43 -357.55 652.95 590.32 62.63 10.426 12,950.00 12,930.373 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.35 659.69 597.05 62.64 10.531 13,050.00 12,931.62 12,665.00 12,559.88 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,000.00 13,000.52 12,700.00 12,566.60 39.45 42.65 41.006 -934.68 -356.94 668.72 606.27 62.46 10.707 13,150.00 13,002.57 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,756.00 12,589.57 40.02 <	12,750.00	12,735.30	12,500.00	12,438.74	37.62	41.66	46.235	-810.41	-358.14	624.58	562.77	61.82	10.104		
12,900.00 12,865.26 12,587.28 12,501.01 38.60 42.10 42.717 -871.43 -357.55 652.95 590.32 62.63 10.426 12,950.00 12,903.73 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.07 665.09 597.05 62.64 10.531 13,000.00 12,939.27 12,650.00 12,539.68 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,050.00 12,971.62 12,666.80 12,549.11 39.43 42.45 41.006 -934.68 -356.94 668.72 606.27 62.46 10.707 13,100.00 13,000.52 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,028.08 -356.04 668.33 606.85 61.49 10.870 13,350.00 13,086.67 12,825.72 12,618.85 40.33 42.97 42.057 -1,077.86 -355.50 658.91 598.09 60.82 10.834 13,428.24 13,092.00 12,667.25 12,627.81 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,667.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,667.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,667.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,667.25 12,627.81 40.39 43.06 43.36 41.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,661.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,000.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 566.60 60.63 10.345	12,800.00	12,780.72	12,534.12	12,464.18	37.96	41.84	44.759	-833.13	-357.92	635.28	572.93	62.35	10.189		
12,950.00 12,903.73 12,613.81 12,518.03 38.90 42.22 41.974 -891.78 -357.35 659.69 597.05 62.64 10.531 13,000.00 12,939.27 12,660.80 12,539.68 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,050.00 12,971.62 12,666.80 12,549.11 39.43 42.45 41.006 -934.68 -356.94 668.72 606.27 62.46 10.707 13,100.00 13,000.52 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 608.85 61.49 10.870 13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,053.50 -355.79 664.38 603.18 61.19 10.857 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,400.00 13,092.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,901.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -355.60 62.60 60.63 10.345	12,850.00	12,824.15	12,550.00	12,475.56	38.29	41.92	43.798	-844.21	-357.81	644.95	582.80	62.15	10.377		
13,000.00 12,939.27 12,650.00 12,539.68 39.18 42.39 41.334 -920.77 -357.07 665.09 602.14 62.95 10.565 13,050.00 12,971.62 12,666.80 12,549.11 39.43 42.45 41.006 -934.68 -356.94 668.72 606.27 62.46 10.707 13,100.00 13,000.52 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 606.85 61.49 10.870 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,400.00 13,092.00 12,603.439 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 62.887 569.72 59.34 10.570 13,800.00 13,092.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 566.60 60.63 10.345	12,900.00	12,865.26	12,587.28	12,501.01	38.60	42.10	42.717	-871.43	-357.55	652.95	590.32	62.63	10.426		
13,050.00 12,971.62 12,666.80 12,549.11 39.43 42.45 41.006 -934.68 -356.94 668.72 606.27 62.46 10.707 13,100.00 13,000.52 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 606.85 61.49 10.870 13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,053.50 -355.79 664.38 603.18 61.19 10.857 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.36 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,901.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.67 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -356.66 67.23 566.60 60.63 10.345	12,950.00	12,903.73	12,613.81	12,518.03	38.90	42.22	41.974	-891.78	-357.35	659.69	597.05	62.64	10.531		
13,100.00 13,000.52 12,700.00 12,566.50 39.65 42.58 40.756 -962.95 -356.67 671.02 608.47 62.54 10.729 13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 606.85 61.49 10.870 13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,053.50 -355.79 664.38 603.18 61.19 10.857 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.37 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -355.66 627.23 566.60 60.63 10.345	13,000.00														
13,150.00 13,025.76 12,719.76 12,576.07 39.85 42.65 40.702 -980.24 -356.50 671.63 609.58 62.05 10.824 13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 606.85 61.49 10.870 13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,053.50 -355.79 664.38 603.18 61.19 10.857 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -355.63 627.23 566.60 60.63 10.345	13,050.00														
13,200.00 13,047.14 12,750.00 12,589.54 40.02 42.76 40.801 -1,007.31 -356.24 670.78 608.84 61.94 10.830 13,250.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 606.85 61.49 10.870 13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,053.50 -355.79 664.38 603.18 61.19 10.857 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 566.60 60.63 10.345	13,100.00														
13,250.00 13,064.50 12,772.71 12,598.71 40.15 42.82 41.047 -1,028.08 -356.04 668.33 606.85 61.49 10.870 13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,053.50 -355.79 664.38 603.18 61.19 10.857 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,700.00 13,092.00 12,961.20 12,641.72 40.43 </td <td>13,150.00</td> <td>13,025.76</td> <td>12,719.76</td> <td>12,576.07</td> <td>39.85</td> <td>42.65</td> <td>40.702</td> <td>-980.24</td> <td>-356.50</td> <td>671.63</td> <td>609.58</td> <td>62.05</td> <td>10.824</td> <td></td> <td></td>	13,150.00	13,025.76	12,719.76	12,576.07	39.85	42.65	40.702	-980.24	-356.50	671.63	609.58	62.05	10.824		
13,300.00 13,077.71 12,800.00 12,608.63 40.26 42.91 41.473 -1,053.50 -355.79 664.38 603.18 61.19 10.857 13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 </td <td>13,200.00</td> <td></td>	13,200.00														
13,350.00 13,086.67 12,825.72 12,616.85 40.33 42.97 42.057 -1,077.86 -355.56 658.91 598.09 60.82 10.834 13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 567.89 59.34 10.570 13,800.00 13,092.00 13,131.11 12,643.00 40.50 </td <td></td>															
13,400.00 13,091.30 12,850.00 12,623.61 40.38 43.03 42.795 -1,101.18 -355.33 652.00 591.62 60.38 10.798 13,428.24 13,092.00 12,867.25 12,627.81 40.39 43.06 43.336 -1,117.91 -355.17 647.45 587.22 60.24 10.748 13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,111 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 567.89 59.34 10.570 13,800.00 13,092.00 13,131.11 12,643.00 40.50 43.33 44.288 -1,380.59 -352.63 627.23 566.60 60.63 10.345															
13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 567.89 59.34 10.570 13,800.00 13,092.00 13,131.11 12,643.00 40.50 43.33 44.288 -1,380.59 -352.63 627.23 566.60 60.63 10.345	13,350.00														
13,500.00 13,092.00 12,900.00 12,634.39 40.40 43.12 43.744 -1,149.99 -354.86 637.22 577.76 59.47 10.716 13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 567.89 59.34 10.570 13,800.00 13,092.00 13,131.11 12,643.00 40.50 43.33 44.288 -1,380.59 -352.63 627.23 566.60 60.63 10.345	13 429 24	13 002 00	12 867 25	12 627 91	40 30	43 UE	43 336	_1 117 01	_355 17	647 45	587 22	60.24	10.748		
13,600.00 13,092.00 12,961.20 12,641.72 40.43 43.20 44.207 -1,210.72 -354.27 628.87 569.72 59.15 10.631 13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 567.89 59.34 10.570 13,800.00 13,092.00 13,131.11 12,643.00 40.50 43.33 44.288 -1,380.59 -352.63 627.23 566.60 60.63 10.345															
13,700.00 13,092.00 13,031.11 12,643.00 40.46 43.26 44.288 -1,280.60 -353.60 627.23 567.89 59.34 10.570 13,800.00 13,092.00 13,131.11 12,643.00 40.50 43.33 44.288 -1,380.59 -352.63 627.23 566.60 60.63 10.345															
13,800.00 13,092.00 13,131.11 12,643.00 40.50 43.33 44.288 -1,380.59 -352.63 627.23 566.60 60.63 10.345															
	13,800.00														
	13,900.00	13,092.00	13,231.11		40.53	43.43	44.287	-1,480.59	-351.67	627.23	565.30	61.93	10.127		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

													Offset Site Error:	0.00 usf
Survey Prog Refe	ram: 0-l erence	MWD+HRGM Off	set	Semi M	laior Axis		Offset Wellbe	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,000.00	13,092.00	13,331.11	12,643.00	40.58	43.54	44.287	-1,580.58	-350.70	627.23	563.94	63.29	9.910		
14,100.00	13,092.00	13,431.11	12,643.00	40.63	43.67	44.287	-1,680.58	-349.73	627.22	562.52	64.70	9.694		
14,200.00	13,092.00	13,531.11	12,643.00	40.69	43.83	44.287	-1,780.57	-348.77	627.22	561.06	66.16	9.480		
14,300.00	13,092.00	13,631.11	12,643.00	40.76	44.02	44.287	-1,880.57	-347.80	627.22	559.55	67.67	9.269		
14,400.00	13,092.00	13,731.11	12,643.00	40.85	44.25	44.286	-1,980.56	-346.83	627.22	558.00	69.22	9.061		
14,500.00	13,092.00	13,831.11	12,643.00	40.95	44.53	44.286	-2,080.56	-345.87	627.22	556.40	70.81	8.857		
14,600.00	13,092.00	13,931.11	12,643.00	41.10	44.85	44.286	-2,180.56	-344.90	627.21	554.77	72.44	8.658		
14,700.00	13,092.00	14,031.11	12,643.00	41.29	45.24	44.286	-2,280.55	-343.94	627.21	553.10	74.11	8.463		
14,800.00	13,092.00	14,131.11	12,643.00	41.57	45.69	44.285	-2,380.55	-342.97	627.21	551.40	75.81	8.274		
14,900.00	13,092.00	14,231.11	12,643.00	41.99	46.23	44.285	-2,480.54	-342.00	627.21	549.67	77.54	8.089		
15,000.00	13,092.00	14,331.11	12,643.00	42.60	46.85	44.285	-2,580.54	-341.04	627.20	547.91	79.30	7.910		
15,100.00	13,092.00	14,431.11	12,643.00	43.42	47.55	44.285	-2,680.53	-340.07	627.20	546.12	81.08	7.735		
15,200.00	13,092.00	14,531.11	12,643.00	44.43	48.35	44.284	-2,780.53	-339.11	627.20	544.30	82.89	7.566		
15,300.00	13,092.00	14,631.11	12,643.00	45.56	49.22	44.284	-2,880.52	-338.14	627.20	542.47	84.73	7.402		
15,400.00	13,092.00	14,731.11	12,643.00	46.76	50.16	44.284	-2,980.52	-337.17	627.19	540.61	86.59	7.243		
15,500.00	13,092.00	14,831.11	12,643.00	48.01	51.17	44.284	-3,080.51	-336.21	627.19	538.73	88.47	7.090		
15,600.00	13,092.00	14,931.11	12,643.00	49.30	52.23	44.284	-3,180.51	-335.24	627.19	536.83	90.36	6.941		
15,700.00	13,092.00	15,031.11	12,643.00	50.61	53.34	44.283	-3,280.50	-334.28	627.19	534.91	92.28	6.797		
15,800.00	13,092.00	15,131.11	12,643.00	51.93	54.48	44.283	-3,380.50	-333.31	627.18	532.97	94.21	6.657		
15,900.00	13,092.00	15,231.11	12,643.00	53.27	55.66	44.283	-3,480.49	-332.34	627.18	531.02	96.16	6.522		
16,000.00	13,092.00	15,331.11	12,643.00	54.61	56.87	44.283	-3,580.49	-331.38	627.18	529.05	98.13	6.391		
16,100.00	13,092.00	15,431.11	12,643.00	55.97	58.10	44.282	-3,680.49	-330.41	627.18	527.07	100.11	6.265		
16,200.00	13,092.00	15,531.11	12,643.00	57.33	59.35	44.282	-3,780.48	-329.44	627.17	525.07	102.10	6.143		
16,300.00	13,092.00	15,631.11	12,643.00	58.69	60.62	44.282	-3,880.48	-328.48	627.17	523.07	104.10	6.024		
16,400.00	13,092.00	15,731.11	12,643.00	60.06	61.90	44.282	-3,980.47	-327.51	627.17	521.05	106.12	5.910		
16,500.00	13,092.00	15,831.11	12,643.00	61.44	63.19	44.282	-4,080.47	-326.55	627.17	519.02	108.15	5.799		
16,600.00	13,092.00	15,931.11	12,643.00	62.81	64.49	44.281	-4,180.46	-325.58	627.16	516.98	110.19	5.692		
16,700.00	13,092.00	16,031.11	12,643.00	64.20	65.81	44.281	-4,280.46	-324.61	627.16	514.92	112.24	5.588		
16,800.00	13,092.00	16,131.11	12,643.00	65.58	67.13	44.281	-4,380.45	-323.65	627.16	512.86	114.30	5.487		
16,900.00	13,092.00	16,231.11	12,643.00	66.97	68.46	44.281	-4,480.45	-322.68	627.16	510.79	116.36	5.390		
17,000.00	13,092.00	16,331.11	12,643.00	68.36	69.80	44.280	-4,580.44	-321.72	627.16	508.71	118.44	5.295		
17,100.00	13,092.00	16,431.11	12,643.00	69.75	71.14	44.280	-4,680.44	-320.75	627.15	506.63	120.52	5.204		
17,200.00	13,092.00	16,531.11	12,643.00	71.14	72.49	44.280	-4,780.43	-319.78	627.15	504.53	122.62	5.115		
17,300.00	13,092.00	16,631.11	12,643.00	72.54	73.84	44.280	-4,880.43	-318.82	627.15	502.43	124.72	5.029		
17,400.00	13,092.00	16,731.11	12,643.00	73.94	75.19	44.280	-4,980.42	-317.85	627.15	500.32	126.82	4.945		
17,500.00	13,092.00	16,831.11	12,643.00	75.34	76.56	44.279	-5,080.42	-316.89	627.14	498.21	128.93	4.864		
17,600.00	13,092.00	16,931.11	12,643.00	76.74	77.92	44.279	-5,180.42	-315.92	627.14	496.09	131.05	4.785		
17,700.00	13,092.00	17,031.11	12,643.00	78.14	79.29	44.279	-5,280.41	-314.95	627.14	493.96	133.18	4.709		
17,800.00	13,092.00	17,131.11	12,643.00	79.55	80.66	44.279	-5,380.41	-313.99	627.14	491.83	135.31	4.635		
17,900.00	13,092.00	17,231.11	12,643.00	80.95	82.03	44.278	-5,480.40	-313.02	627.13	489.69	137.44	4.563		
18,000.00	13,092.00	17,331.11	12,643.00	82.36	83.41	44.278	-5,580.40	-312.05	627.13	487.55	139.59	4.493		
18,100.00	13,092.00	17,431.11	12,643.00	83.76	84.79	44.278	-5,680.39	-311.09	627.13	485.40	141.73	4.425		
18,200.00	13,092.00	17,531.11	12,643.00	85.17	86.17	44.278	-5,780.39	-310.12	627.13	483.24	143.88	4.359		
18,300.00	13,092.00	17,631.11	12,643.00	86.58	87.55	44.277	-5,880.38	-309.16	627.12	481.09	146.04	4.294		
18,400.00	13,092.00	17,731.11	12,643.00	87.99	88.94	44.277	-5,980.38	-308.19	627.12	478.93	148.20	4.232		
18,500.00	13,092.00	17,831.11	12,643.00	89.40	90.33	44.277	-6,080.37	-307.22	627.12	476.76	150.36	4.171		
18,600.00	13,092.00	17,931.11	12,643.00	90.81	91.72	44.277	-6,180.37	-306.26	627.12	474.59	152.53	4.112		
18,700.00	13,092.00	18,031.11	12,643.00	92.23	93.11	44.277	-6,280.36	-305.29	627.11	472.42	154.70	4.054		
18,800.00	13,092.00	18,131.11	12,643.00	93.64	94.50	44.276	-6,380.36	-304.33	627.11	470.24	156.87	3.998		
18,900.00	13,092.00	18,231.11	12,643.00	95.06	95.89	44.276	-6,480.35	-303.36	627.11	468.06	159.05	3.943		
19,000.00	13,092.00	18,331.11	12,643.00	96.47	97.29	44.276	-6,580.35	-302.39	627.11	465.88	161.23	3.889		
19,100.00	13,092.00	18,431.11	12,643.00	97.89	98.69	44.276	-6,680.35	-301.43	627.10	463.69	163.42	3.837		





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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

urvey Prog	ram: 0-1	MWD+HRGM								Rule Assi	gned:		Offset Well Error:	1.00 usf
Refe	rence		set		lajor Axis		Offset Wellb	ore Centre	Dist	ance				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,200.00	13,092.00	18,531.11	12,643.00	99.30	100.08	44.275	-6,780.34	-300.46	627.10	461.50	165.60	3.787		
19,300.00	13,092.00	18,631.11	12,643.00	100.72	101.48	44.275	-6,880.34	-299.49	627.10	459.31	167.79	3.737		
19,400.00	13,092.00	18,731.11	12,643.00	102.14	102.88	44.275	-6,980.33	-298.53	627.10	457.11	169.99	3.689		
19,500.00	13,092.00	18,831.11	12,643.00	103.55	104.29	44.275	-7,080.33	-297.56	627.10	454.91	172.18	3.642		
19,600.00	13,092.00	18,931.11	12,643.00	104.97	105.69	44.275	-7,180.32	-296.60	627.09	452.71	174.38	3.596		
19,700.00	13,092.00	19,031.11	12,643.00	106.39	107.09	44.274	-7,280.32	-295.63	627.09	450.51	176.58	3.551		
19,800.00	13,092.00	19,131.11	12,643.00	107.81	108.50	44.274	-7,380.31	-294.66	627.09	448.30	178.79	3.507		
19,900.00	13,092.00	19,231.11	12,643.00	109.23	109.90	44.274	-7,480.31	-293.70	627.09	446.09	180.99	3.465		
20,000.00	13,092.00	19,331.11	12,643.00	110.65	111.31	44.274	-7,580.30	-292.73	627.08	443.88	183.20	3.423		
20,100.00	13,092.00	19,431.11	12,643.00	112.07	112.71	44.273	-7,680.30	-291.77	627.08	441.67	185.41	3.382		
20,200.00	13,092.00	19,531.11	12,643.00	113.49	114.12	44.273	-7,780.29	-290.80	627.08	439.45	187.63	3.342		
20,300.00	13,092.00	19,631.11	12,643.00	114.91	115.53	44.273	-7,880.29	-289.83	627.08	437.24	189.84	3.303		
20,400.00	13,092.00	19,731.11	12,643.00	116.34	116.94	44.273	-7,980.28	-288.87	627.07	435.02	192.06	3.265		
20,500.00	13,092.00	19,831.11	12,643.00	117.76	118.35	44.273	-8,080.28	-287.90	627.07	432.80	194.27	3.228		
20,600.00	13,092.00	19,931.11	12,643.00	119.18	119.76	44.272	-8,180.28	-286.94	627.07	430.57	196.49	3.191		
20,700.00	13,092.00	20,031.11	12,643.00	120.60	121.17	44.272	-8,280.27	-285.97	627.07	428.35	198.72	3.156		
20,800.00	13,092.00	20,131.11	12,643.00	122.03	122.58	44.272	-8,380.27	-285.00	627.06	426.12	200.94	3.121		
20,900.00	13,092.00	20,231.11	12,643.00	123.45	124.00	44.272	-8,480.26	-284.04	627.06	423.90	203.16	3.086		
21,000.00	13,092.00	20,331.11	12,643.00	124.87	125.41	44.271	-8,580.26	-283.07	627.06	421.67	205.39	3.053		
21,100.00	13,092.00	20,431.11	12,643.00	126.30	126.82	44.271	-8,680.25	-282.10	627.06	419.44	207.62	3.020		
21,200.00	13,092.00	20,531.11	12,643.00	127.72	128.24	44.271	-8,780.25	-281.14	627.05	417.20	209.85	2.988		
21,300.00	13,092.00	20,631.11	12,643.00	129.15	129.65	44.271	-8,880.24	-280.17	627.05	414.97	212.08	2.957		
21,400.00	13,092.00	20,731.11	12,643.00	130.57	131.07	44.271	-8,980.24	-279.21	627.05	412.74	214.31	2.926		
21,500.00	13,092.00	20,831.11	12,643.00	132.00	132.48	44.270	-9,080.23	-278.24	627.05	410.50	216.55	2.896		
21,600.00	13,092.00	20,931.11	12,643.00	133.42	133.90	44.270	-9,180.23	-277.27	627.04	408.26	218.78	2.866		
21,700.00	13,092.00	21,031.11	12,643.00	134.85	135.32	44.270	-9,280.22	-276.31	627.04	406.02	221.02	2.837		
21,800.00	13,092.00	21,131.11	12,643.00	136.27	136.73	44.270	-9,380.22	-275.34	627.04	403.78	223.26	2.809		
21,900.00	13,092.00	21,231.11	12,643.00	137.70	138.15	44.269	-9,480.21	-274.38	627.04	401.54	225.49	2.781		
22,000.00	13,092.00	21,331.11	12,643.00	139.12	139.57	44.269	-9,580.21	-273.41	627.03	399.30	227.73	2.753		
22,100.00	13,092.00	21,431.11	12,643.00	140.55	140.99	44.269	-9,680.21	-272.44	627.03	397.06	229.98	2.727		
22,200.00	13,092.00	21,531.11	12,643.00	141.98	142.40	44.269	-9,780.20	-271.48	627.03	394.81	232.22	2.700		
22,300.00	13,092.00	21,631.11	12,643.00	143.40	143.82	44.268	-9,880.20	-270.51	627.03	392.57	234.46	2.674		
22,400.00	13,092.00	21,731.11	12,643.00	144.83	145.24	44.268	-9,980.19	-269.54	627.03	390.32	236.71	2.649		
22,500.00	13,092.00	21,831.11	12,643.00	146.26	146.66	44.268	-10,080.19	-268.58	627.02	388.07	238.95	2.624		
22,600.00	13,092.00	21,931.11	12,643.00	147.69	148.08	44.268	-10,180.18	-267.61	627.02	385.82	241.20	2.600		
22,700.00	13,092.00	22,031.11	12,643.00	149.11	149.50	44.268	-10,280.18	-266.65	627.02	383.57	243.44	2.576		
22,728.24	13,092.00	22,059.36	12,643.00	149.52	149.90	44.268	-10,308.42	-266.37	627.02	382.94	244.08	2.569 SF		







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

0.00 usft Site Error:

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

rvey Progi	ram: 0-	MWD+HRGM								Rule Assi	aned:		Offset Well Error:	1.00 usf
Refe	rence	Offs			lajor Axis	III-de et de	Offset Wellbe	ore Centre		ance	_	0		
leasured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	1.00	1.00	-90.469	-9.83	-1,200.19	1,200.23					
100.00	100.00	100.00	100.00	1.08	1.08	-90.469	-9.83	-1,200.19	1,200.23	1,198.06	2.17	553.536		
200.00	200.00	200.00	200.00	1.60	1.60	-90.469	-9.83	-1,200.19	1,200.23	1,197.03	3.20	375.398		
300.00	300.00	300.00	300.00	2.01	2.01	-90.469	-9.83	-1,200.19	1,200.23	1,196.21	4.02	298.625		
400.00	400.00	400.00	400.00	2.35	2.35	-90.469	-9.83	-1,200.19	1,200.23	1,195.53	4.71	255.086		
500.00	500.00	500.00	500.00	2.65	2.65	-90.469	-9.83	-1,200.19	1,200.23	1,194.92	5.31	226.109		
600.00	600.00	600.00	600.00	2.93	2.93	-90.469	-9.83	-1,200.19	1,200.23	1,194.38	5.85	205.030		
700.00	700.00	700.00	700.00	3.18	3.18	-90.469	-9.83	-1,200.19	1,200.23	1,193.87	6.36	188.801		
800.00	800.00	800.00	800.00	3.41	3.41	-90.469	-9.83	-1,200.19	1,200.23	1,193.40	6.83	175.801		
900.00	900.00	900.00	900.00	3.64	3.64	-90.469	-9.83	-1,200.19	1,200.23	1,192.96	7.27	165.079		
1,000.00	1,000.00	1,000.00	1,000.00	3.85	3.85	-90.469	-9.83	-1,200.19	1,200.23	1,192.54	7.69	156.037		
1,100.00	1,100.00	1,100.00	1,100.00	4.05	4.05	-90.469	-9.83	-1,200.19	1,200.23	1,192.14	8.09	148.274		
1,200.00	1,200.00	1,200.00	1,200.00	4.24	4.24	-90.469	-9.83	-1,200.19	1,200.23	1,191.75	8.48	141.513		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.469	-9.83	-1,200.19	1,200.23	1,191.38	8.85	135.553		
1,400.00	1,400.00	1,400.00	1,400.00	4.61	4.61	-90.469	-9.83	-1,200.19	1,200.23	1,191.02	9.21	130.247		
1,500.00	1,500.00	1,500.00	1,500.00	4.78	4.78	-90.469	-9.83	-1,200.19	1,200.23	1,190.67	9.56	125.483		
1,600.00	1,599.98	1,619.51	1,619.47	4.98	5.00	99.543	-12.12	-1,199.20	1,199.71	1,189.89	9.82	122.153		
1,620.70	1,620.67	1,641.44	1,641.38	4.99	5.02	99.545	-13.00	-1,198.82	1,199.48	1,189.65	9.84	121.953		
1,700.00	1,699.89	1,720.73	1,720.60	5.07	5.11	99.548	-16.23	-1,197.42	1,198.67	1,188.70	9.97	120.255		
1,800.00	1,799.81	1,820.73	1,820.49	5.23	5.28	99.551	-20.29	-1,195.66	1,197.64	1,187.42	10.22	117.197		
1,900.00	1,899.72	1,920.72	1,920.39	5.41	5.46	99.555	-24.36	-1,193.90	1,196.61	1,186.12	10.49	114.119		
2,000.00	1,999.63	2,020.72	2,020.29	5.60	5.65	99.558	-28.43	-1,192.14	1,195.58	1,184.83	10.75	111.184		
2,100.00	2,099.54	2,120.71	2,120.18	5.80	5.86	99.561	-32.50	-1,190.38	1,194.55	1,183.53	11.02	108.384		
2,200.00	2,199.45	2,220.71	2,220.08	6.02	6.08	99.565	-36.57	-1,188.61	1,193.52	1,182.23	11.29	105.711		
2,300.00	2,299.36	2,320.70	2,319.98	6.24	6.31	99.568	-40.63	-1,186.85	1,192.49	1,180.93	11.56	103.155		
2,400.00	2,399.27	2,420.69	2,419.87	6.47	6.55	99.572	-44.70	-1,185.09	1,191.46	1,179.63	11.83	100.711		
2,500.00	2,499.18	2,520.69	2,519.77	6.72	6.79	99.575	-48.77	-1,183.33	1,190.43	1,178.33	12.10	98.371		
2,600.00	2,599.10	2,620.68	2,619.67	6.96	7.05	99.579	-52.84	-1,181.57	1,189.40	1,177.03	12.37	96.129		
2,700.00	2,699.01	2,720.68	2,719.56	7.22	7.31	99.582	-56.91	-1,179.81	1,188.37	1,175.73	12.64	93.980		
2,800.00	2,798.92	2,820.67	2,819.46	7.48	7.57	99.585	-60.97	-1,178.05	1,187.34	1,174.43	12.92	91.918		
2,900.00	2,898.83	2,920.67	2,919.35	7.74	7.84	99.589	-65.04	-1,176.29	1,186.31	1,173.12	13.19	89.938		
3,000.00	2,998.74	3,020.66	3,019.25	8.01	8.11	99.592	-69.11	-1,174.52	1,185.28	1,171.82	13.46	88.035		
3,100.00	3,098.65	3,120.66	3,119.15	8.28	8.39	99.596	-73.18	-1,172.76	1,184.25	1,170.52	13.74	86.206		
3,200.00	3,198.56	3,220.65	3,219.04	8.56	8.67	99.599	-77.24	-1,171.00	1,183.22	1,169.21	14.01	84.446		
3,300.00	3,298.47	3,320.65	3,318.94	8.84	8.96	99.603	-81.31	-1,169.24	1,182.19	1,167.91	14.29	82.751		
3,400.00	3,398.39	3,420.64	3,418.84	9.13	9.25	99.606	-85.38	-1,167.48	1,181.17	1,166.60	14.56	81.119		
3,500.00	3,498.30	3,520.64	3,518.73	9.41	9.54	99.610	-89.45	-1,165.72	1,180.14	1,165.30	14.84	79.545		
3,600.00	3,598.21	3,620.63	3,618.63	9.70	9.83	99.613	-93.52	-1,163.96	1,179.11	1,163.99	15.11	78.028		
3,700.00	3,698.12	3,720.63	3,718.53	9.99	10.13	99.617	-97.58	-1,162.20	1,178.08	1,162.69	15.39	76.563		
3,800.00	3,798.03	3,820.62	3,818.42	10.29	10.43	99.620	-101.65	-1,160.43	1,177.05	1,161.38	15.66	75.148		
3,900.00	3,897.94	3,920.62	3,918.32	10.58	10.72	99.624	-105.72	-1,158.67	1,176.02	1,160.08	15.94	73.782		
4,000.00	3,997.85	4,020.61	4,018.22	10.88	11.03	99.627	-109.79	-1,156.91	1,174.99	1,158.77	16.22	72.460		
4,100.00	4,097.76	4,120.60	4,118.11	11.18	11.33	99.631	-113.86	-1,155.15	1,173.96	1,157.47	16.49	71.183		
4,200.00	4,197.68	4,220.60	4,218.01	11.48	11.63	99.634	-117.92	-1,153.39	1,172.93	1,156.16	16.77	69.946		
4,300.00	4,297.59	4,320.59	4,317.90	11.78	11.94	99.638	-121.99	-1,151.63	1,171.90	1,154.85	17.05	68.749		
4,400.00	4,397.50	4,420.59	4,417.80	12.08	12.25	99.642	-126.06	-1,149.87	1,170.87	1,153.55	17.32	67.589		
4,500.00	4,497.41	4,520.58	4,517.70	12.39	12.56	99.645	-130.13	-1,148.11	1,169.84	1,152.24	17.60	66.465		
4,600.00	4,597.32	4,620.58	4,617.59	12.69	12.87	99.649	-134.20	-1,146.34	1,168.81	1,150.93	17.88	65.375		
4,700.00	4,697.23	4,720.57	4,717.49	13.00	13.18	99.652	-138.26	-1,144.58	1,167.78	1,149.63	18.16	64.319		
4,800.00	4,797.14	4,820.57	4,817.39	13.31	13.49	99.656	-142.33	-1,142.82	1,166.75	1,148.32	18.43	63.293		
4,900.00	4,897.05	4,920.56	4,917.28	13.62	13.80	99.659	-146.40	-1,141.06	1,165.72	1,147.01	18.71	62.297		
5,000.00	4,996.97	5,020.56	5,017.18	13.92	14.11	99.663	-150.47	-1,139.30	1,164.69	1,145.70	18.99	61.330		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De		MAND LIDOS											Offset Site Error:	0.00 usf
Survey Prog Refe	ram: 0-l rence	MWD+HRGM Off	set	Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.00	5,096.88	5,120.55	5,117.08	14.23	14.43	99.667	-154.54	-1,137.54	1,163.66	1,144.39	19.27	60.391		
5,200.00	5,196.79	5,220.55	5,216.97	14.55	14.74	99.670	-158.60	-1,135.78	1,162.63	1,143.09	19.55	59.478		
5,300.00	5,296.70	5,320.54	5,316.87	14.86	15.06	99.674	-162.67	-1,134.02	1,161.60	1,141.78	19.83	58.590		
5,400.00	5,396.61	5,420.54	5,416.76	15.17	15.37	99.677	-166.74	-1,132.25	1,160.58	1,140.47	20.10	57.726		
5,500.00	5,496.52	5,520.53	5,516.66	15.48	15.69	99.681	-170.81	-1,130.49	1,159.55	1,139.16	20.38	56.885		
5,600.00	5,596.43	5,620.52	5,616.56	15.79	16.01	99.685	-174.87	-1,128.73	1,158.52	1,137.85	20.66	56.067		
5,700.00	5,696.34	5,720.52	5,716.45	16.11	16.33	99.688	-178.94	-1,126.97	1,157.49	1,136.55	20.94	55.271		
5,800.00	5,796.26	5,820.51	5,816.35	16.42	16.65	99.692	-183.01	-1,125.21	1,156.46	1,135.24	21.22	54.495		
5,900.00	5,896.17	5,920.51	5,916.25	16.74	16.96	99.696	-187.08	-1,123.45	1,155.43	1,133.93	21.50	53.739		
6,000.00	5,996.08	6,020.50	6,016.14	17.05	17.28	99.699	-191.15	-1,121.69	1,154.40	1,132.62	21.78	53.002		
6,100.00	6,095.99	6,120.50	6,116.04	17.37	17.60	99.703	-195.21	-1,119.93	1,153.37	1,131.31	22.06	52.284		
6,200.00	6,195.90	6,220.49	6,215.94	17.68	17.92	99.707	-199.28	-1,118.16	1,152.34	1,130.00	22.34	51.583		
6,300.00	6,295.81	6,320.49	6,315.83	18.00	18.24	99.710	-203.35	-1,116.40	1,151.31	1,128.69	22.62	50.899		
6,400.00	6,395.72	6,420.48	6,415.73	18.32	18.56	99.714	-207.42	-1,114.64	1,150.28	1,127.38	22.90	50.232		
6,500.00	6,495.63	6,520.48	6,515.62	18.63	18.89	99.718	-211.49	-1,112.88	1,149.25	1,126.07	23.18	49.581		
6,600.00	6,595.55	6,620.47	6,615.52	18.95	19.21	99.721	-215.55	-1,111.12	1,148.22	1,124.76	23.46	48.945		
6,700.00	6,695.46	6,720.47	6,715.42	19.27	19.53	99.725	-219.62	-1,109.36	1,147.19	1,123.45	23.74	48.324		
6,800.00	6,795.37	6,820.46	6,815.31	19.59	19.85	99.729	-223.69	-1,107.60	1,146.16	1,122.14	24.02	47.717		
6,900.00	6,895.28	6,920.46	6,915.21	19.91	20.17	99.733	-227.76	-1,105.84	1,145.13	1,120.83	24.30	47.124		
7,000.00	6,995.19	7,020.45	7,015.11	20.23	20.50	99.736	-231.83	-1,104.07	1,144.11	1,119.52	24.58	46.545		
7,100.00	7,095.10	7,120.44	7,115.00	20.54	20.82	99.740	-235.89	-1,102.31	1,143.08	1,118.21	24.86	45.978		
7,200.00	7,195.01	7,220.44	7,214.90	20.86	21.14	99.744	-239.96	-1,100.55	1,142.05	1,116.90	25.14	45.424		
7,300.00	7,294.92	7,320.43	7,314.80	21.18	21.47	99.747	-244.03	-1,098.79	1,141.02	1,115.59	25.42	44.882		
7,400.00	7,394.84	7,420.43	7,414.69	21.50	21.79	99.751	-248.10	-1,097.03	1,139.99	1,114.28	25.70	44.351		
7,500.00	7,494.75	7,520.42	7,514.59	21.82	22.11	99.755	-252.17	-1,095.27	1,138.96	1,112.97	25.98	43.832		
7,600.00	7,594.66	7,620.42	7,614.48	22.14	22.44	99.759	-256.23	-1,093.51	1,137.93	1,111.66	26.27	43.324		
7,700.00	7,694.57	7,720.41	7,714.38	22.46	22.76	99.763	-260.30	-1,091.75	1,136.90	1,110.35	26.55	42.827		
7,800.00	7,794.48	7,820.41	7,814.28	22.78	23.09	99.766	-264.37	-1,089.98	1,135.87	1,109.04	26.83	42.340		
7,900.00	7,894.39	7,920.40	7,914.17	23.10	23.41	99.770	-268.44	-1,088.22	1,134.84	1,107.73	27.11	41.863		
8,000.00	7,994.30	8,020.40	8,014.07	23.42	23.74	99.774	-272.50	-1,086.46	1,133.81	1,106.42	27.39	41.395		
8,100.00	8,094.21	8,120.39	8,113.97	23.75	24.06	99.778	-276.57	-1,084.70	1,132.78	1,105.11	27.67	40.937		
8,200.00	8,194.13	8,220.39	8,213.86	24.07	24.39	99.781	-280.64	-1,082.94	1,131.75	1,103.80	27.95	40.488		
8,300.00	8,294.04	8,320.38	8,313.76	24.39	24.71	99.785	-284.71	-1,081.18	1,130.72	1,102.49	28.23	40.048		
8,400.00	8,393.95	8,420.38	8,413.66	24.71	25.04	99.789	-288.78	-1,079.42	1,129.69	1,101.18	28.52	39.616		
8,500.00	8,493.86	8,520.37	8,513.55	25.03	25.36	99.793	-292.84	-1,077.66	1,128.67	1,099.87	28.80	39.193		
8,600.00	8,593.77	8,620.36	8,613.45	25.35	25.69	99.797	-296.91	-1,075.89	1,127.64	1,098.56	29.08	38.778		
8,700.00	8,693.68	8,720.36	8,713.34	25.67	26.01	99.801	-300.98	-1,074.13	1,126.61	1,097.25	29.36	38.371		
8,800.00	8,793.59	8,820.35	8,813.24	26.00	26.34	99.804	-305.05	-1,072.37	1,125.58	1,095.93	29.64	37.971		
8,900.00	8,893.50	8,920.35	8,913.14	26.32	26.67	99.808	-309.12	-1,070.61	1,124.55	1,094.62	29.92	37.579		
9,000.00	8,993.42	9,020.34	9,013.03	26.64	26.99	99.812	-313.18	-1,068.85	1,123.52	1,093.31	30.21	37.194		
9,100.00	9,093.33	9,120.34	9,112.93	26.96	27.32	99.816	-317.25	-1,067.09	1,122.49	1,092.00	30.49	36.817		
9,200.00	9,193.24	9,220.33	9,212.83	27.29	27.65	99.820	-321.32	-1,065.33	1,121.46	1,090.69	30.77	36.446		
9,300.00	9,293.15	9,320.33	9,312.72	27.61	27.97	99.824	-325.39	-1,063.57	1,120.43	1,089.38	31.05	36.081		
9,400.00	9,393.06	9,420.32	9,412.62	27.93	28.30	99.828	-329.46	-1,061.81	1,119.40	1,088.07	31.34	35.724		
9,500.00	9,492.97	9,520.32	9,512.52	28.25	28.63	99.832	-333.52	-1,060.04	1,118.37	1,086.76	31.62	35.372		
9,600.00	9,592.88	9,620.31	9,612.41	28.58	28.95	99.835	-337.59	-1,058.28	1,117.34	1,085.44	31.90	35.027		
9,700.00	9,692.79	9,720.31	9,712.31	28.90	29.28	99.839	-341.66	-1,056.52	1,116.31	1,084.13	32.18	34.687		
9,800.00	9,792.71	9,820.30	9,812.20	29.22	29.61	99.843	-345.73	-1,054.76	1,115.28	1,082.82	32.46	34.354		
9,900.00	9,892.62	9,920.30	9,912.10	29.55	29.93	99.847	-349.80	-1,053.00	1,114.26	1,081.51	32.75	34.026		
10,000.00	9,992.53 10,092.44	10,020.29 10,120.29	10,012.00 10,111.89	29.87 30.19	30.26 30.59	99.851 99.855	-353.86 -357.93	-1,051.24 -1,049.48	1,113.23 1,112.20	1,080.20 1,078.88	33.03 33.31	33.704 33.387		
10,200.00	10,192.35	10,220.28	10,211.79	30.52	30.92	99.859	-362.00	-1,047.72	1,111.17	1,077.57	33.60	33.075		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Part	rogram	n: 0-	-MWD+HRGM								Rule Assi	aned:		Offset Site Error: Offset Well Error:	0.00 us
Table Tabl	Referen	nce	Of	fset			I II a b a t a b	Offset Wellb	ore Centre		ance	_	0		
19,000 0 10,		Depth	Depth	Depth			Toolface			Centres	Ellipses	Separation		Warning	
1,000.00 1,042.00 1,052.00 1,051.40 31.40 31.90 90.871 37.40 1,062.00 1,073.00 34.44 32.170 31.879 31.8	00 10	0,292.26						-366.07	-1,045.95	1,110.14			32.768		
1,000.00 1,0	00 10	0,392.17	10,420.27	10,411.58	31.16	31.57	99.867	-370.13	-1,044.19	1,109.11	1,074.95	34.16	32.467		
10,000.00	00 10	0,492.08	10,520.26	10,511.48	31.49	31.90	99.871	-374.20	-1,042.43	1,108.08	1,073.64	34.44	32.170		
10,000.00	00 10	0,592.00	10,620.26	10,611.38	31.81	32.23	99.875	-378.27	-1,040.67	1,107.05	1,072.32	34.73	31.879		
1,00,000 10,881.73 10,800.24 10,911.06 32.78 33.21 99.887 .580.47 .1,035.39 1,103.96 1,083.90 35.58 31.031 1,000.00 1,091.64 11,000.22 11,010.66 33.31 33.54 99.896 .580.64 .1,033.83 1,102.95 1,076.77 35.88 30.077 1,000.00	00 10	0,691.91	10,720.25	10,711.27	32.13	32.55	99.879	-382.34	-1,038.91	1,106.02	1,071.01	35.01	31.591		
11,000 1 0,981 6 1 1,002 4 11,010 6 33.11 33.4 98.81 99.87 34.6 1.033.85 1.102.81 0,087.07 38.86 90.77 11,000 1 1,000	00 10	0,791.82	10,820.25	10,811.17	32.46	32.88	99.883	-386.41	-1,037.15	1,104.99	1,069.70	35.29	31.309		
11,10000 1,001 55 11,102 3 1,110 8	00 10	0,891.73	10,920.24	10,911.06	32.78	33.21	99.887	-390.47	-1,035.39	1,103.96	1,068.39	35.58	31.031		
11,200.00	00 10	0,991.64	11,020.24	11,010.96	33.11	33.54	99.891	-394.54	-1,033.63	1,102.93	1,067.07	35.86	30.757		
11,000.00 11,291.27 11,320.22 13,100.65 34.08 34.52 99.003 -40.675 -1.028.34 1.098.55 1.088.52 1.081.23 36.90 2.0703 1.100.000 11,391.23 11,500.14 34.73 35.18 99.911 -414.88 -1.026.86 1.098.72 1.090.02 37.27 29.453 1.100.000 1.691.11 11,001.24 35.05 35.44 99.945 -414.88 -1.024.82 1.097.76 1.090.02 37.27 29.453 1.100.000 1.691.23 1.625.22 1.691.33 1.685.22 1.691.33 1.691.02 36.38 35.53 30.90.02 -416.71 -1.023.46 1.097.76 1.099.67 37.76 29.044 -4.000	00 11	1,091.55	11,120.23	11,110.86	33.43	33.87	99.895	-398.61	-1,031.86	1,101.91	1,065.76	36.14	30.487		
11,000.00 11,391.29 11,420.22 11,410.55 34.40 34.85 99.907 410.81 1,002.68 1,088.82 1,061.82 36.99 27.73 1,1500.00 11,161.00 11,161.01 11,161.07 1	00 11	1,191.46	11,220.23	11,210.75	33.75	34.19	99.899	-402.68	-1,030.10	1,100.88	1,064.45	36.43	30.222		
11,000,00	00 11	1,291.37	11,320.22	11,310.65	34.08	34.52	99.903	-406.75	-1,028.34	1,099.85	1,063.14	36.71	29.960		
11,000 1,1991,11 1,1110,7 1,120,7 1,120,22 3,150 3,544 99,945 4,180 90,942 4,180 90,942 1,097,04 1,097,04 1,097,04 1,097,04 2,090,04 1,097	00 11	1,391.29	11,420.22	11,410.55	34.40	34.85	99.907	-410.81	-1,026.58	1,098.82	1,061.82	36.99	29.703		
11616130 1169730 11698102 1170006 11698102 11698	00 11	1,491.20	11,520.21	11,510.44	34.73	35.18	99.911	-414.88	-1,024.82	1,097.79	1,060.52	37.27	29.453		
11,800,00	00 1	11,591.11	11,611.07	11,601.24	35.05	35.44	99.945	-418.00	-1,023.47	1,097.05	1,059.52	37.52	29.235		
11,000.00 11,000.01 11,000.08 11,000							99.962								
1190000 1189084 1190088 1189084 36.03 35.54 100.554 418.71 -1.023.16 1.088.93 1.086.71 38.23 28.747 1190754 1189838 38 11908.22 11898.38 36.05 33.56 100.682 418.71 -1.023.16 1.099.44 1.061.02 38.42 28.619 1120000 11.990.80 12.003.64 11.990.80 36.36 35.55 100.682 418.71 -1.023.16 1.099.44 1.061.02 38.42 28.619 1120000 12.003.80 12.003.84 12.010.44 36.36 35.55 88.324 418.71 -1.023.16 1.099.46 1.061.03 38.43 28.611 11.003.80 12.003.80	00 11	1,691.02	11,700.86	11,691.02	35.38	35.53	100.102	-418.71	-1,023.16	1,097.42	1,059.67	37.76	29.064		
119075 1198038 1198032 1198038 36.05 35.54 100.0551 418.71 -1.023.16 1.089.99 1.080.75 38.25 28.734 120000 1.990.80 12.00.64 1.990.80 36.3 35.55 100.682 418.71 -1.023.16 1.099.44 1.061.02 38.43 28.619 12.00202 12.01.04 12.028.88 12.019.04 36.36 35.55 89.324 418.71 -1.023.16 1.099.46 1.061.03 38.42 28.619 12.0000 12.908.00 12.908.07 12.91.17 12.993.02 36.36 36.55 89.324 418.71 -1.023.16 1.099.46 1.061.03 38.42 28.619 12.0000 12.908.00 12.939.37 12.293.02 36.36 36.55 89.324 418.71 -1.023.16 1.099.46 1.061.03 38.42 28.619 12.0000 12.908.00 12.939.37 12.293.02 36.36 36.59 89.349 419.20 -1.023.16 1.099.46 1.061.03 38.42 28.619 12.340.44 12.331.24 12.343.37 12.331.4 36.37 36.36 36.59 89.349 419.20 -1.023.16 1.099.46 1.061.03 38.42 28.619 12.340.00 12.398.00 12.398.37 12.331.4 36.37 36.36 90.561 44.44 41.022.93 1.099.16 1.061.07 38.00 28.929 12.550.00 12.398.00 12.398.39 36.37 37.23 39.348 497.69 41.022.79 1.010.07 1.064.04 37.03 29.755 12.550.00 12.408.00 12.488.29 12.489.98 36.37 37.23 39.348 497.69 41.022.99 1.101.07 1.064.04 37.03 29.755 12.550.00 12.540.79 12.519.72 12.489.98 36.37 37.23 38.401.99 49.61.99	00 11	1,790.93	11,800.77	11,790.93	35.70	35.53	100.318	-418.71	-1,023.16	1,098.17	1,060.18	37.99	28.908		
12,000 0 1,900 0 1,200 6 1,200 6 1,200 8 1,900 0 36.36 36.56 10.0882	00 11	1,890.84	11,900.68	11,890.84	36.03	35.54	100.534	-418.71	-1,023.16	1,098.93	1,060.71	38.23	28.747		
12,028.24 12,019.04 12,028.88 12,019.04 36.36 35.55 89.324 418.71 -1,023.16 1,099.46 1,061.03 38.43 28.611 12,100.00 12,100.64 12,006.80 38.36 35.55 89.324 4.18.71 -1,023.16 1,099.45 1,061.03 38.42 28.612 12,200.00 12,109.60 12,219.80 12,203.87 12,293.02 36.36 35.59 89.349 4.19.20 -1,023.16 1,099.45 1,061.07 38.19 28.786 12,300.01 12,343.37 12,313.24 36.37 36.36 90.561 442.44 -1,022.83 1,099.25 1,061.07 38.19 28.786 12,340.40 12,343.37 12,313.24 36.37 36.36 90.561 442.44 -1,022.83 1,099.25 1,061.21 38.00 28.529 12,500.00 12,480.80 12,482.29 12,458.33 36.37 37.23 -93.438 4.97.69 -1,022.39 1,101.07 1,064.04 37.03 29.735 12,528.24 12,519.04 12,603.70 12,476.58 36.37 37.36 94.019 5-568.88 -1,022.39 1,101.07 1,064.04 37.03 29.735 12,528.24 12,519.04 12,603.70 12,476.58 36.40 37.67 83.69 94.776 94.786 94.722 94.702.75 94	54 11	1,898.38	11,908.22	11,898.38	36.05	35.54	100.551	-418.71	-1,023.16	1,098.99	1,060.75	38.25	28.734		
12,100.00 12,200.80 12,100.64 12,000.80 36.36 35.55 88.324 4.18.71 -1,023.16 1,009.46 1,061.04 38.43 28.615 12,000.00 12,100.80 12,201.81 12,101.76 36.36 35.59 89.349 4.19.20 -1,023.16 1,009.45 1,061.03 38.42 28.615 12,000.00 12,200.80 12,203.87 12,203.02 36.36 36.12 -0,004.3 432.51 -1,023.03 1,009.25 1,061.07 38.19 28.786 12,304.04 12,331.44 12,433.77 12,331.24 36.37 36.36 90.561 44.244 -1,022.39 1,009.21 1,001.21 38.00 28.929 12,400.00 12,309.80 12,309.85 12,309.30 36.37 36.71 -015.13 4.00.72 -1,022.75 1,009.38 1,061.73 37.65 29.199 12,500.00 12,409.08 12,509.00 12,409.08 12,509.00 12,409.08 12,409.08 36.37 37.23 94.38 497.69 -1,022.39 1,101.07 1,064.04 37.03 29.735 12,509.00 12,409.08 12,509.00 12,409.08 12,509.00 12,409.08 12,509.00 12,409.08 12,509.00	00 11	1,990.80	12,000.64	11,990.80	36.33	35.55	100.682	-418.71	-1,023.16	1,099.44	1,061.02	38.42	28.619		
12,200.00	24 12	2,019.04	12,028.88	12,019.04	36.36	35.55	-89.324	-418.71	-1,023.16	1,099.46	1,061.03	38.43	28.611		
12,300.00	00 12	2,090.80	12,100.64	12,090.80	36.36	35.55	-89.324	-418.71	-1,023.16	1,099.46	1,061.04	38.43	28.612		
12,340.44 12,331.24 12,343.37 12,331.24 36.37 36.36 -90.561 -442.44 -1,022.93 1,099.21 1,061.21 38.00 28.929 12,400.00 12,490.80 12,482.29 12,683.33 36.37 37.23 -93.438 -490.72 -1,022.75 1,099.38 1,001.73 37.65 29.199 12,500.00 12,490.80 12,482.29 12,483.33 36.37 37.23 -93.438 -490.69 -1,022.39 1,101.07 1,064.04 37.03 29.735 12,550.00 12,510.04 12,505.70 12,476.58 36.37 37.36 -94.019 -508.88 -1,022.39 1,102.28 1,065.17 36.86 29.899 12,550.00 12,590.61 12,555.90 12,519.23 36.63 37.67 84.782 -538.95 -1,021.99 1,102.92 1,066.17 36.76 30.007 12,600.00 12,580.61 12,555.90 12,519.23 36.63 37.67 84.782 -538.95 -1,021.99 1,102.95 1,006.17 36.76 30.007 12,600.00 12,580.81 12,591.29 12,489.96 36.93 37.87 83.82 -561.48 -1,021.76 1,103.56 1,071.60 36.66 30.022 12,700.00 12,688.24 12,625.97 12,571.83 37.29 38.05 82.408 -585.17 -1,021.53 1,111.54 1,074.73 36.81 30.195 12,750.00 12,780.72 12,700.00 12,620.84 37.96 38.42 80.032 -840.58 -1,021.99 1,115.12 1,078.04 37.08 30.071 12,800.00 12,824.15 12,726.82 12,636.77 38.29 38.53 39.11 -860.58 -1,020.99 1,115.12 1,078.04 37.08 30.071 12,800.00 12,862.24 15 12,726.82 12,636.77 38.29 38.53 39.11 -860.15 -1,020.99 1,115.12 1,078.04 37.08 30.91 12,900.00 12,903.73 12,792.02 12,671.16 38.90 38.67 78.114 -689.48 -1,020.51 1,126.74 1,088.23 38.51 29.599 12,900.00 12,903.73 12,792.02 12,671.16 38.90 38.99 75.307 -746.15 -1,019.90 1,144.33 1,094.57 39.86 28.463 13,000.00 13,005.22 12,887.6 12,709.74 39.65 39.91 74.746 -869.08 -1,020.78 1,143.83 1,094.57 39.86 28.463 13,000.00 13,005.52 12,887.6 12,799.74 39.65 39.91 74.746 -869.08 -1,019.39 1,144.33 1,094.57 39.86 28.463 13,000.00 13,005.52 12,887.6 12,799.74 39.65 39.91 74.746 -869.08 -1,019.39 1,144.33 1,094.57 39.86 28.463 13,000.00 13,005.52 12,887.6 12,799.74 39.65 39.91 74.746 -869.08 -1,019.39 1,144.33 1,094.57 39.86 28.463 13,000.00 13,005.52 12,887.6 12,799.74 39.65 39.91 74.746 -869.08 -1,019.39 1,144.33 1,103.64 4,09 2.5592 13,000.00 13,006.50 12,888.76 12,799.74 39.65 39.91 74.794 -806.00 -1,019.39 1,144.33 1,103.64 4,09 2.559	00 12	2,190.80	12,201.61	12,191.76	36.36	35.59	-89.349	-419.20	-1,023.16	1,099.45	1,061.03	38.42	28.615		
12,400.00 12,398.60 12,398.65 12,383.39 36.37 95.13 460.72 -1,022.75 1,099.38 1,061.73 37.65 29.199 12,500.00 12,490.80 12,482.29 12,458.33 36.37 37.23 -93.438 -497.69 -1,022.39 1,101.07 1,064.04 37.03 29.735 12,550.00 12,407.99 12,519.04 12,569.07 12,476.59 36.43 37.45 89.99 -508.88 -1,022.28 1,102.03 1,065.17 36.76 30.007 12,600.00 12,590.61 12,559.00 12,546.49 36.95 37.87 83.582 -561.48 -1,021.98 1,105.36 1,068.72 36.64 30.171 12,600.00 12,683.89 12,591.28 12,564.49 36.95 38.25 82.408 -585.17 -1,021.53 1,111.54 1,074.73 36.81 30.195 12,750.00 12,783.30 12,660.08 12,595.30 37.62 38.22 81.267 -60.931 -1,021.29 1,118.52 1,081.52 <td< td=""><td>00 12</td><td>2,290.80</td><td>12,303.87</td><td>12,293.02</td><td>36.36</td><td>36.12</td><td>-90.043</td><td>-432.51</td><td>-1,023.03</td><td>1,099.25</td><td>1,061.07</td><td>38.19</td><td>28.786</td><td></td><td></td></td<>	00 12	2,290.80	12,303.87	12,293.02	36.36	36.12	-90.043	-432.51	-1,023.03	1,099.25	1,061.07	38.19	28.786		
12,500.00	44 12	2,331.24	12,343.37	12,331.24	36.37	36.36	-90.561	-442.44	-1,022.93	1,099.21	1,061.21	38.00	28.929		
12,528,24 12,519,04 12,569,79 12,476,58 36,37 37.36 -94,019 -508,88 -1,022,28 1,102,03 1,065,17 36,86 29,899 12,550,00 12,590,01 12,559,79 12,489,96 36,40 37,45 85,999 -517,69 -1,022,19 1,102,92 1,066,17 36,76 30,007 12,600,00 12,690,61 12,555,59 12,519,23 36,63 37,87 83,582 -561,48 -1,021,76 1,108,26 1,071,60 36,66 30,232 12,700,00 12,688,24 12,625,97 12,571,83 37,29 38,05 82,408 -565,17 -1,021,53 1,111,54 1,074,73 36,81 30,195 12,750,00 12,765,20 12,600,08 12,595,30 37,62 38,22 81,267 -609,91 -1,021,29 1,115,12 1,078,04 37,08 30,071 12,865,00 12,827,80 12,662,15 37,96 38,53 78,114 -662,15 -1,020,99 1,118,22 1,084,46 37,95 29,9	00 12	2,390.80	12,398.65	12,383.39	36.37	36.71	-91.513	-460.72	-1,022.75	1,099.38	1,061.73	37.65	29.199		
12,550.00 12,540.79 12,519.72 12,489.96 36.40 37.45 85.999 -517.69 -1,022.19 1,102.92 1,066.17 36.76 30.007 12,600.00 12,590.61 12,555.90 12,519.22 36.63 37.67 84.782 -588.95 -1,021.76 1,108.26 1,071.60 36.64 30.23 12,700.00 12,689.89 12,519.22 12,546.49 36.95 37.87 83.582 561.48 -1,021.76 1,108.26 1,071.60 36.64 30.23 12,700.00 12,783.30 12,680.08 12,595.30 37.62 38.22 81.267 -609.91 -1,021.53 1,111.51 1,078.04 37.08 30.071 12,800.00 12,783.73 12,720.00 12,682.81 12,720.20 12,862.61 12,720.20 12,862.81 1,111.51 1,078.04 37.05 30.071 12,800.00 12,803.72 12,822.97 38.23 38.53 79.112 -662.15 -1,020.78 1,1128.92 1,081.52 37.41 29.912	00 12	2,490.80	12,482.29	12,458.33	36.37	37.23	-93.438	-497.69	-1,022.39	1,101.07	1,064.04	37.03	29.735		
12,600.00 12,590.61 12,595.90 12,591.28 36.63 37.67 84.782 -538.95 -1,021.98 1,105.36 1,068.72 36.64 30.171 12,690.00 12,699.89 12,591.28 12,594.64 36.95 37.87 83.582 -561.48 -1,021.76 1,108.26 1,071.60 36.66 30.232 12,700.00 12,785.30 12,680.24 12,625.97 12,571.83 37.29 38.05 82.408 -585.17 -1,021.29 1,115.12 1,078.04 37.08 30.071 12,800.00 12,780.72 12,700.00 12,620.84 37.96 38.42 80.032 -640.99.91 -1,021.29 1,115.20 1,078.04 37.08 30.071 12,800.00 12,862.62 12,759.99 12,654.84 38.60 38.67 78.114 -682.15 -1,020.78 1,122.80 1,084.86 37.95 29.590 12,950.00 12,933.73 12,792.02 12,661.64 38.90 38.79 77.176 -717.51 -1,020.24 1,130.64 <	24 12	2,519.04	12,503.70	12,476.58	36.37	37.36	-94.019	-508.88	-1,022.28	1,102.03	1,065.17	36.86	29.899		
12,650.00 12,639.89 12,591.28 12,591.28 36.95 37.87 83.582 -561.48 -1,021.76 1,108.26 1,071.60 36.66 30.232 12,700.00 12,688.24 12,625.97 12,571.83 37.29 38.05 82.408 -585.17 -1,021.53 1,115.12 1,078.04 37.08 30.071 12,800.00 12,780.72 12,700.00 12,620.84 37.96 38.42 80.032 -640.58 -1,020.99 1,118.92 1,081.52 37.41 29.912 12,850.00 12,780.72 12,700.00 12,620.84 37.96 38.42 80.032 -640.58 -1,020.99 1,118.92 1,081.52 37.41 29.912 12,950.00 12,963.73 12,792.02 12,664.84 38.60 38.67 78.114 -682.15 -1,020.24 1,130.64 1,091.49 39.15 28.880 13,000.00 12,993.73 12,792.02 12,667.16 38.90 76.307 -746.15 -1,019.36 1,094.94 39.15 28.880 <	00 12	2,540.79	12,519.72	12,489.96	36.40	37.45	85.999	-517.69	-1,022.19	1,102.92	1,066.17	36.76	30.007		
12,700.00 12,688.24 12,625.97 12,571.83 37.29 38.05 82.408 -585.17 -1,021.53 1,111.54 1,074.73 36.81 30.195 12,750.00 12,736.30 12,660.08 12,595.30 37.62 38.22 81.267 -609.91 -1,021.29 1,115.12 1,078.04 37.08 30.071 12,800.00 12,780.72 12,700.00 12,620.84 37.96 38.42 80.032 -640.58 -1,020.99 1,118.92 1,081.52 37.41 29.912 12,850.00 12,861.51 12,726.82 12,636.77 38.29 38.53 79.112 -662.15 -1,020.78 1,112.80 1,084.86 37.95 29.590 12,900.00 12,865.26 12,759.59 12,654.84 38.60 38.67 78.114 -689.48 -1,020.51 1,126.74 1,088.23 38.51 29.259 12,950.00 12,903.73 12,792.2 12,671.16 38.90 38.79 77.176 -717.51 -1,020.24 1,130.64 1,091.49 39.15 28.880 13,050.00 12,971.62 12,850.00 12,696.28 39.43 38.99 75.590 -769.73 -1,019.96 1,134.43 1,094.57 39.86 28.463 13,050.00 13,005.52 12,887.76 12,709.74 39.65 39.09 74.794 805.00 -769.73 -1,019.93 1,144.43 1,102.16 42.27 27.554 13,150.00 13,025.76 12,919.27 12,719.19 39.85 39.17 74.160 8.35.05 -1,019.09 1,144.43 1,102.16 42.27 27.073 13,200.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 996.91 -1,018.19 1,149.42 1,105.36 44.06 26.088 13,350.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 996.91 -1,018.19 1,151.28 1,105.36 44.06 26.088 13,350.00 13,077.78 12,741.00 40.38 39.39 72.331 991.64 -1,017.55 1,153.60 1,106.57 48.85 24.624 13,482.44 3,092.00 13,101.61 12,741.00 40.39 39.40 72.289 -1,015.37 -1,017.32 1,153.80 1,106.84 47.32 24.383 13,500.00 13,092.00 13,173.73 12,741.00 40.40 39.44 72.289 -1,087.12 -1,016.64 1,153.76 1,101.90 51.86 22.46	00 12	2,590.61	12,555.90	12,519.23	36.63	37.67	84.782	-538.95	-1,021.98	1,105.36	1,068.72	36.64	30.171		
12,750.00	00 12	2,639.89	12,591.28	12,546.49	36.95	37.87	83.582	-561.48	-1,021.76	1,108.26	1,071.60	36.66	30.232		
12,800.00	00 12	2,688.24	12,625.97	12,571.83	37.29	38.05	82.408	-585.17	-1,021.53	1,111.54	1,074.73	36.81	30.195		
12,850.00	00 12	2,735.30	12,660.08	12,595.30	37.62	38.22	81.267	-609.91	-1,021.29	1,115.12	1,078.04	37.08	30.071		
12,900.00	00 12	2,780.72	12,700.00	12,620.84	37.96	38.42	80.032	-640.58	-1,020.99	1,118.92	1,081.52	37.41	29.912		
12,950.00 12,903.73 12,792.02 12,671.16 38.90 38.79 77.176 -717.51 -1,020.24 1,130.64 1,091.49 39.15 28.880 13,000.00 12,939.27 12,824.17 12,685.74 39.18 38.90 76.307 -746.15 -1,019.96 1,134.43 1,094.57 39.86 28.463 13,050.00 12,971.62 12,850.00 12,696.28 39.43 38.99 75.590 -769.73 -1,019.73 1,138.05 1,097.39 40.66 27.986 13,100.00 13,000.52 12,887.76 12,709.74 39.65 39.09 74.794 -805.00 -1,019.38 1,141.38 1,099.96 41.42 27.554 13,150.00 13,025.76 12,919.27 12,719.19 39.85 39.17 74.160 -835.05 -1,019.09 1,144.43 1,102.16 42.27 27.073 13,200.00 13,047.14 12,950.00 12,726.79 40.02 39.23 73.617 -864.83 -1,018.80 1,147.13 1,103.97 43.15 26.582 13,250.00 13,064.50 12,981.87 12,732.97 40.15 39.28 73.153 -896.08 -1,018.49 1,149.42 1,105.36 44.06 26.088 13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,350.00 13,086.67 13,050.00 12,740.32 40.33 39.37 72.491 -963.77 -1,017.83 1,152.71 1,106.83 45.88 25.126 13,400.00 13,091.30 13,077.88 12,741.00 40.38 39.39 72.331 -991.64 -1,017.55 1,153.60 1,106.75 46.85 24.624 13,400.00 13,092.00 13,173.37 12,741.00 40.40 39.44 72.289 -1,015.37 -1,017.32 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.40 39.44 72.289 -1,015.13 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.40 39.44 72.289 -1,015.13 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,015.12 -1,015.64 1,153.76 1,101.90 51.86 22.246	00 12	2,824.15	12,726.82	12,636.77	38.29	38.53	79.112	-662.15	-1,020.78	1,122.80	1,084.86	37.95	29.590		
13,000.00 12,939.27 12,824.17 12,685.74 39.18 38.90 76.307 -746.15 -1,019.96 1,134.43 1,094.57 39.86 28.463 13,050.00 12,971.62 12,850.00 12,696.28 39.43 38.99 75.590 -769.73 -1,019.73 1,138.05 1,097.39 40.66 27.986 13,100.00 13,000.52 12,887.76 12,709.74 39.65 39.09 74.794 -805.00 -1,019.38 1,141.38 1,099.96 41.42 27.554 13,200.00 13,047.14 12,950.00 12,726.79 40.02 39.23 73.617 -864.83 -1,018.80 1,147.13 1,103.97 43.15 26.582 13,250.00 13,064.50 12,981.87 12,732.97 40.15 39.28 73.153 -896.08 -1,018.49 1,149.42 1,105.36 44.06 26.088 13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,400.00 13,091.30 13,077.88 12,741.0	00 12	2,865.26	12,759.59	12,654.84	38.60	38.67	78.114	-689.48	-1,020.51	1,126.74	1,088.23	38.51	29.259		
13,000.00 12,939.27 12,824.17 12,685.74 39.18 38.90 76.307 -746.15 -1,019.96 1,134.43 1,094.57 39.86 28.463 13,050.00 12,971.62 12,850.00 12,696.28 39.43 38.99 75.590 -769.73 -1,019.73 1,138.05 1,097.39 40.66 27.986 13,100.00 13,000.52 12,887.76 12,709.74 39.65 39.09 74.794 -805.00 -1,019.38 1,141.38 1,099.96 41.42 27.554 13,150.00 13,047.14 12,950.00 12,726.79 40.02 39.23 73.617 -864.83 -1,018.80 1,147.13 1,103.97 43.15 26.582 13,250.00 13,064.50 12,981.87 12,732.97 40.15 39.28 73.153 -896.08 -1,018.49 1,149.42 1,105.36 44.06 26.088 13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,428.24 13,092.00 13,101.61 12,741.0	00 12	2,903.73	12,792.02	12,671.16	38.90	38.79	77.176	-717.51	-1,020.24	1,130.64	1,091.49	39.15	28.880		
13,050.00 12,971.62 12,850.00 12,696.28 39.43 38.99 75.590 -769.73 -1,019.73 1,138.05 1,097.39 40.66 27.986 13,100.00 13,000.52 12,887.76 12,709.74 39.65 39.09 74.794 -805.00 -1,019.38 1,141.38 1,099.96 41.42 27.554 13,150.00 13,025.76 12,919.27 12,719.19 39.85 39.17 74.160 -835.05 -1,019.09 1,144.43 1,102.16 42.27 27.073 13,200.00 13,047.14 12,950.00 12,726.79 40.02 39.23 73.617 -864.83 -1,018.80 1,147.13 1,103.97 43.15 26.582 13,250.00 13,064.50 12,981.87 12,732.97 40.15 39.28 73.153 -896.08 -1,018.49 1,149.42 1,105.36 44.06 26.088 13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,400.00 13,091.30 13,077.88 12,741.0															
13,100.00 13,000.52 12,887.76 12,709.74 39.65 39.09 74.794 -805.00 -1,019.38 1,141.38 1,099.96 41.42 27.554 13,150.00 13,025.76 12,919.27 12,719.19 39.85 39.17 74.160 -835.05 -1,019.09 1,144.43 1,102.16 42.27 27.073 13,200.00 13,047.14 12,950.00 12,726.79 40.02 39.23 73.617 -864.83 -1,018.80 1,147.13 1,103.97 43.15 26.582 13,250.00 13,064.50 12,981.87 12,737.33 40.26 39.33 72.787 -926.91 -1,018.49 1,149.42 1,105.36 44.06 26.088 13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,400.00 13,091.30 13,077.88 12,741.00 40.33 39.39 72.331 -991.64 -1,017.55 1,153.60 1,106.75 46.85 24.624 13,428.24 13,092.00 13,101.61 12,741.0										1,138.05					
13,200.00 13,047.14 12,950.00 12,726.79 40.02 39.23 73.617 -864.83 -1,018.80 1,147.13 1,103.97 43.15 26.582 13,250.00 13,064.50 12,981.87 12,732.97 40.15 39.28 73.153 -896.08 -1,018.49 1,149.42 1,105.36 44.06 26.088 13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,350.00 13,086.67 13,050.00 12,740.32 40.33 39.37 72.491 -963.77 -1,017.83 1,152.71 1,106.83 45.88 25.126 13,400.00 13,091.30 13,077.88 12,741.00 40.38 39.39 72.331 -991.64 -1,017.55 1,153.60 1,106.75 46.85 24.624 13,428.24 13,092.00 13,101.61 12,741.00 40.39 39.40 72.289 -1,015.37 -1,017.32 1,153.80 1,106.48 47.32 24.383 13,500.00 13,092.00 13,173.37 12,741.00 40.40 39.44 72.289 -1,087.13 -1,016.62 1,153.79 1,105.34 48.45 23.815 13,600.00 13,092.00 13,273.37 12,741.00 40.43 39.51 72.289 -1,187.12 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,287.12 -1,015.64 1,153.76 1,101.90 51.86 22.246				12,709.74						1,141.38					
13,250.00 13,064.50 12,981.87 12,732.97 40.15 39.28 73.153 -896.08 -1,018.49 1,149.42 1,105.36 44.06 26.088 13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,350.00 13,086.67 13,050.00 12,740.32 40.33 39.37 72.491 -963.77 -1,017.83 1,152.71 1,106.83 45.88 25.126 13,400.00 13,091.30 13,077.88 12,741.00 40.38 39.39 72.331 -991.64 -1,017.55 1,153.60 1,106.75 46.85 24.624 13,428.24 13,092.00 13,101.61 12,741.00 40.39 39.40 72.289 -1,015.37 -1,017.32 1,153.80 1,106.48 47.32 24.383 13,500.00 13,092.00 13,173.37 12,741.00 40.43 39.51 72.289 -1,087.13 -1,016.62 1,153.79 1,105.34 48.45 23.815 13,600.00 13,092.00 13,273.37 12,7					39.85	39.17	74.160	-835.05	-1,019.09		1,102.16	42.27	27.073		
13,300.00 13,077.71 13,013.01 12,737.33 40.26 39.33 72.787 -926.91 -1,018.19 1,151.28 1,106.30 44.99 25.592 13,350.00 13,086.67 13,050.00 12,740.32 40.33 39.37 72.491 -963.77 -1,017.83 1,152.71 1,106.83 45.88 25.126 13,400.00 13,091.30 13,077.88 12,741.00 40.38 39.39 72.331 -991.64 -1,017.55 1,153.60 1,106.75 46.85 24.624 13,428.24 13,092.00 13,101.61 12,741.00 40.39 39.40 72.289 -1,015.37 -1,017.32 1,153.80 1,106.48 47.32 24.383 13,500.00 13,092.00 13,173.37 12,741.00 40.40 39.44 72.289 -1,087.13 -1,016.62 1,153.79 1,105.34 48.45 23.815 13,600.00 13,092.00 13,273.37 12,741.00 40.43 39.51 72.289 -1,187.12 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12	00 13	3,047.14	12,950.00	12,726.79	40.02	39.23	73.617	-864.83	-1,018.80	1,147.13	1,103.97	43.15	26.582		
13,350.00 13,086.67 13,090.00 12,740.32 40.33 39.37 72.491 -963.77 -1,017.83 1,152.71 1,106.83 45.88 25.126 13,400.00 13,091.30 13,077.88 12,741.00 40.38 39.39 72.331 -991.64 -1,017.55 1,153.60 1,106.75 46.85 24.624 13,428.24 13,092.00 13,101.61 12,741.00 40.39 39.40 72.289 -1,015.37 -1,017.32 1,153.80 1,106.48 47.32 24.383 13,500.00 13,092.00 13,173.37 12,741.00 40.40 39.44 72.289 -1,087.13 -1,016.62 1,153.79 1,105.34 48.45 23.815 13,600.00 13,092.00 13,273.37 12,741.00 40.43 39.51 72.289 -1,187.12 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,287.12 -1,015.64 1,153.76 1,101.90 51.86 22.246	00 13	3,064.50	12,981.87	12,732.97	40.15	39.28	73.153	-896.08	-1,018.49	1,149.42	1,105.36	44.06	26.088		
13,400.00 13,091.30 13,077.88 12,741.00 40.38 39.39 72.331 -991.64 -1,017.55 1,153.60 1,106.75 46.85 24.624 13,428.24 13,092.00 13,101.61 12,741.00 40.39 39.40 72.289 -1,017.32 1,153.80 1,106.48 47.32 24.383 13,500.00 13,092.00 13,173.37 12,741.00 40.40 39.44 72.289 -1,087.13 -1,016.62 1,153.79 1,105.34 48.45 23.815 13,600.00 13,092.00 13,273.37 12,741.00 40.43 39.51 72.289 -1,187.12 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,287.12 -1,014.66 1,153.76 1,101.90 51.86 22.246	00 13	3,077.71	13,013.01	12,737.33	40.26	39.33	72.787	-926.91	-1,018.19	1,151.28	1,106.30	44.99	25.592		
13,428.24 13,092.00 13,101.61 12,741.00 40.39 39.40 72.289 -1,015.37 -1,017.32 1,153.80 1,106.48 47.32 24.383 13,500.00 13,092.00 13,173.37 12,741.00 40.40 39.44 72.289 -1,087.13 -1,016.62 1,153.79 1,105.34 48.45 23.815 13,600.00 13,092.00 13,273.37 12,741.00 40.43 39.51 72.289 -1,187.12 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,287.12 -1,014.66 1,153.76 1,101.90 51.86 22.246	00 13	3,086.67	13,050.00	12,740.32	40.33	39.37	72.491	-963.77	-1,017.83	1,152.71	1,106.83	45.88	25.126		
13,500.00 13,092.00 13,173.37 12,741.00 40.40 39.44 72.289 -1,087.13 -1,016.62 1,153.79 1,105.34 48.45 23.815 13,600.00 13,092.00 13,273.37 12,741.00 40.43 39.51 72.289 -1,187.12 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,287.12 -1,014.66 1,153.76 1,101.90 51.86 22.246	00 13	3,091.30	13,077.88	12,741.00	40.38	39.39	72.331	-991.64	-1,017.55	1,153.60	1,106.75	46.85	24.624		
13,600.00 13,092.00 13,273.37 12,741.00 40.43 39.51 72.289 -1,187.12 -1,015.64 1,153.78 1,103.67 50.11 23.027 13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,287.12 -1,014.66 1,153.76 1,101.90 51.86 22.246															
13,700.00 13,092.00 13,373.37 12,741.00 40.46 39.60 72.289 -1,287.12 -1,014.66 1,153.76 1,101.90 51.86 22.246															
13.800.00 13.092.00 13.473.37 12.741.00 40.50 39.70 72.288 -1.387.11 -1.013.69 1.153.75 1.100.04 53.71 21.482															
	00 13	13,092.00	13,473.37	12,741.00	40.50	39.70	72.288	-1,387.11	-1,013.69	1,153.75	1,100.04	53.71	21.482		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	0.5	Campeon I	<u> </u>										Offset Site Error:	0.00 usf
Survey Prog Refe	ram: 0-l erence	MWD+HRGM Off	set	Semi M	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,000.00	13,092.00	13,673.37	12,741.00	40.58	39.97	72.288	-1,587.10	-1,011.73	1,153.72	1,096.10	57.62	20.024		
14,100.00	13,092.00	13,773.37	12,741.00	40.63	40.14	72.288	-1,687.10	-1,010.75	1,153.70	1,094.03	59.67	19.334		
14,200.00	13,092.00	13,873.37	12,741.00	40.69	40.35	72.287	-1,787.09	-1,009.77	1,153.69	1,091.91	61.78	18.674		
14,300.00	13,092.00	13,973.37	12,741.00	40.76	40.60	72.287	-1,887.09	-1,008.79	1,153.67	1,089.73	63.94	18.043		
14,400.00	13,092.00	14,073.37	12,741.00	40.85	40.91	72.287	-1,987.08	-1,007.82	1,153.66	1,087.51	66.15	17.441		
14,500.00	13,092.00	14,173.37	12,741.00	40.95	41.28	72.287	-2,087.08	-1,006.84	1,153.64	1,085.25	68.39	16.868		
14,600.00	13,092.00	14,273.37	12,741.00	41.10	41.73	72.286	-2,187.08	-1,005.86	1,153.63	1,082.95	70.68	16.322		
14,700.00	13,092.00	14,373.37	12,741.00	41.29	42.27	72.286	-2,287.07	-1,004.88	1,153.61	1,080.61	73.00	15.803		
14,800.00	13,092.00	14,473.37	12,741.00	41.57	42.90	72.286	-2,387.07	-1,003.90	1,153.60	1,078.25	75.35	15.310		
14,900.00	13,092.00	14,573.37	12,741.00	41.99	43.63	72.286	-2,487.06	-1,002.92	1,153.58	1,075.86	77.73	14.842		
15,000.00	13,092.00	14,673.37	12,741.00	42.60	44.46	72.286	-2,587.06	-1,001.95	1,153.57	1,073.44	80.13	14.396		
15,100.00	13,092.00	14,773.37	12,741.00	43.42	45.37	72.285	-2,687.05	-1,000.97	1,153.55	1,071.00	82.56	13.973		
15,200.00	13,092.00	14,873.37	12,741.00	44.43	46.36	72.285	-2,787.05	-999.99	1,153.54	1,068.53	85.01	13.570		
15,300.00	13,092.00	14,973.37	12,741.00	45.56	47.42	72.285	-2,887.04	-999.01	1,153.52	1,066.05	87.47	13.187		
15,400.00	13,092.00	15,073.37	12,741.00	46.76	48.53	72.285	-2,987.04	-998.03	1,153.51	1,063.55	89.96	12.823		
15,500.00	13,092.00	15,173.37	12,741.00	48.01	49.68	72.284	-3,087.03	-997.05	1,153.49	1,061.03	92.46	12.475		
15,600.00	13,092.00	15,273.37	12,741.00	49.30	50.87	72.284	-3,187.03	-996.08	1,153.48	1,058.50	94.98	12.144		
15,700.00	13,092.00	15,373.37	12,741.00	50.61	52.08	72.284	-3,287.02	-995.10	1,153.46	1,055.95	97.51	11.829		
15,800.00	13,092.00	15,473.37	12,741.00	51.93	53.32	72.284	-3,387.02	-994.12	1,153.45	1,053.39	100.06	11.528		
15,900.00	13,092.00	15,573.37	12,741.00	53.27	54.58	72.283	-3,487.01	-993.14	1,153.43	1,050.82	102.61	11.241		
16,000.00	13,092.00	15,673.37	12,741.00	54.61	55.86	72.283	-3,587.01	-992.16	1,153.42	1,048.24	105.18	10.966		
16,100.00	13,092.00	15,773.37	12,741.00	55.97	57.15	72.283	-3,687.00	-991.18	1,153.40	1,045.64	107.76	10.704		
16,200.00	13,092.00	15,873.37	12,741.00	57.33	58.46	72.283	-3,787.00	-990.21	1,153.39	1,043.04	110.35	10.452		
16,300.00	13,092.00	15,973.37	12,741.00	58.69	59.77	72.282	-3,886.99	-989.23	1,153.37	1,040.43	112.94	10.212		
16,400.00	13,092.00	16,073.37	12,741.00	60.06	61.10	72.282	-3,986.99	-988.25	1,153.36	1,037.81	115.55	9.982		
16,500.00	13,092.00	16,173.37	12,741.00	61.44	62.43	72.282	-4,086.98	-987.27	1,153.34	1,035.18	118.16	9.761		
16,600.00	13,092.00	16,273.37	12,741.00	62.81	63.77	72.282	-4,186.98	-986.29	1,153.33	1,032.55	120.78	9.549		
16,700.00	13,092.00	16,373.37	12,741.00	64.20	65.11	72.281	-4,286.97	-985.31	1,153.31	1,029.90	123.41	9.345		
16,800.00	13,092.00	16,473.37	12,741.00	65.58	66.47	72.281	-4,386.97	-984.34	1,153.30	1,027.25	126.04	9.150		
16,900.00	13,092.00	16,573.37	12,741.00	66.97	67.82	72.281	-4,486.97	-983.36	1,153.28	1,024.60	128.68	8.962		
17,000.00	13,092.00	16,673.37	12,741.00	68.36	69.18	72.281	-4,586.96	-982.38	1,153.27	1,021.94	131.33	8.782		
17,100.00	13,092.00	16,773.37	12,741.00	69.75	70.55	72.281	-4,686.96	-981.40	1,153.25	1,019.27	133.98	8.608		
17,200.00	13,092.00	16,873.37	12,741.00	71.14	71.92	72.280	-4,786.95	-980.42	1,153.24	1,016.60	136.63	8.440		
17,300.00	13,092.00	16,973.37	12,741.00	72.54	73.29	72.280	-4,886.95	-979.44	1,153.22	1,013.93	139.29	8.279		
17,400.00	13,092.00	17,073.37	12,741.00	73.94	74.67	72.280	-4,986.94	-978.47	1,153.21	1,011.25	141.96	8.124		
17,500.00	13,092.00	17,173.37	12,741.00	75.34	76.04	72.280	-5,086.94	-977.49	1,153.19	1,008.57	144.63	7.973		
17,600.00	13,092.00	17,273.37	12,741.00	76.74	77.42	72.279	-5,186.93	-976.51	1,153.18	1,005.88	147.30	7.829		
17,700.00	13,092.00	17,373.37	12,741.00	78.14	78.81	72.279	-5,286.93	-975.53	1,153.16	1,003.19	149.98	7.689		
17,800.00	13,092.00	17,473.37	12,741.00	79.55	80.19	72.279	-5,386.92	-974.55	1,153.15	1,000.49	152.66	7.554		
17,900.00	13,092.00	17,573.37	12,741.00	80.95	81.58	72.279	-5,486.92	-973.57	1,153.13	997.79	155.34	7.423		
18,000.00	13,092.00	17,673.37	12,741.00	82.36	82.97	72.278	-5,586.91	-972.60	1,153.12	995.09	158.03	7.297		
18,100.00	13,092.00	17,773.37	12,741.00	83.76	84.36	72.278	-5,686.91	-971.62	1,153.10	992.39	160.72	7.175		
18,200.00	13,092.00	17,873.37	12,741.00	85.17	85.76	72.278	-5,786.90	-970.64	1,153.09	989.68	163.41	7.056		
18,300.00	13,092.00	17,973.37	12,741.00	86.58	87.15	72.278	-5,886.90	-969.66	1,153.07	986.97	166.11	6.942		
18,400.00	13,092.00 13,092.00	18,073.37	12,741.00 12,741.00	87.99 89.40	88.55 89.95	72.277 72.277	-5,986.89 -6.086.89	-968.68 -967.70	1,153.06	984.25	168.81 171.51	6.831		
18,500.00		18,173.37	12,741.00	89.40	89.95	72.277	-6,086.89	-967.70	1,153.04	981.54	171.51	6.723		
18,600.00	13,092.00	18,273.37		90.81	91.35	72.277	-6,186.88	-966.73	1,153.03	978.82	174.21	6.619		
18,700.00	13,092.00	18,373.37	12,741.00	92.23	92.75	72.277	-6,286.88	-965.75	1,153.01	976.10	176.91	6.517		
18,800.00	13,092.00	18,473.37	12,741.00	93.64	94.15	72.277	-6,386.87	-964.77	1,153.00	973.38	179.62	6.419		
18,900.00 19,000.00	13,092.00 13,092.00	18,573.37 18,673.37	12,741.00 12,741.00	95.06 96.47	95.55 96.96	72.276 72.276	-6,486.87 -6,586.86	-963.79 -962.81	1,152.98 1,152.97	970.65 967.93	182.33 185.04	6.324 6.231		
19,100.00	13,092.00	18,773.37	12,741.00	97.89	98.36	72.276	-6,686.86	-961.83	1,152.95	965.20	187.76	6.141		





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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

urvey Prog	ram: 0-N rence	MWD+HRGM	set	Somi I	Maior Axis		Offset Wellb	ore Centre	Diet	Rule Assi	gned:		Offset Well Error:	1.00 us
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside			Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
19,200.00	13,092.00	18,873.37	12,741.00	99.30	99.77	(°) 72.276	-6,786.86	-960.86	1,152.94	962.47	190.47	6.053		
19,300.00	13,092.00	18,973.37	12,741.00	100.72	101.17	72.275	-6,886.85	-959.88	1,152.94	959.74	193.19	5.968		
19,400.00	13,092.00	19,073.37	12,741.00	100.72	102.58	72.275	-6,986.85	-958.90	1,152.92	957.00	195.19	5.885		
19,500.00	13,092.00	19,173.37	12,741.00	103.55	103.99	72.275	-7,086.84	-957.92	1,152.90	954.27	198.63	5.804		
19,600.00	13,092.00	19,273.37	12,741.00	104.97	105.40	72.275	-7,186.84	-956.94	1,152.88	951.53	201.35	5.726		
19,700.00	13,092.00	19,373.37	12,741.00	106.39	106.81	72.274	-7,286.83	-955.96	1,152.87	948.79	204.07	5.649		
19,800.00	13,092.00	19,473.37	12,741.00	107.81	108.22	72.274	-7,386.83	-954.98	1,152.85	946.05	206.80	5.575		
19,900.00	13,092.00	19,573.37	12,741.00	109.23	109.64	72.274	-7,486.82	-954.01	1,152.84	943.31	209.52	5.502		
20,000.00	13,092.00	19,673.37	12,741.00	110.65	111.05	72.274	-7,586.82	-953.03	1,152.82	940.57	212.25	5.431		
20,100.00	13,092.00	19,773.37	12,741.00	112.07	112.46	72.273	-7,686.81	-952.05	1,152.81	937.83	214.98	5.362		
20,200.00	13,092.00	19,873.37	12,741.00	113.49	113.87	72.273	-7,786.81	-951.07	1,152.79	935.08	217.71	5.295		
20,300.00	13,092.00	19,973.37	12,741.00	114.91	115.29	72.273	-7,886.80	-950.09	1,152.78	932.34	220.44	5.229		
20,400.00	13,092.00	20,073.37	12,741.00	116.34	116.70	72.273	-7,986.80	-949.11	1,152.76	929.59	223.17	5.165		
20,500.00	13,092.00	20,173.37	12,741.00	117.76	118.12	72.272	-8,086.79	-948.14	1,152.75	926.84	225.91	5.103		
20,600.00	13,092.00	20,273.37	12,741.00	119.18	119.54	72.272	-8,186.79	-947.16	1,152.73	924.09	228.64	5.042		
20,700.00	13,092.00	20,373.37	12,741.00	120.60	120.95	72.272	-8,286.78	-946.18	1,152.72	921.34	231.38	4.982		
20,800.00	13,092.00	20,473.37	12,741.00	122.03	122.37	72.272	-8,386.78	-945.20	1,152.70	918.59	234.11	4.924		
20,900.00	13,092.00	20,573.37	12,741.00	123.45	123.79	72.272	-8,486.77	-944.22	1,152.69	915.84	236.85	4.867		
21,000.00	13,092.00	20,673.37	12,741.00	124.87	125.20	72.271	-8,586.77	-943.24	1,152.67	913.08	239.59	4.811		
21,100.00	13,092.00	20,773.37	12,741.00	126.30	126.62	72.271	-8,686.76	-942.27	1,152.66	910.33	242.33	4.757		
21,200.00	13,092.00	20,873.37	12,741.00	127.72	128.04	72.271	-8,786.76	-941.29	1,152.64	907.58	245.07	4.703		
21,300.00	13,092.00	20,973.37	12,741.00	129.15	129.46	72.271	-8,886.75	-940.31	1,152.63	904.82	247.81	4.651		
21,400.00	13,092.00	21,073.37	12,741.00	130.57	130.88	72.270	-8,986.75	-939.33	1,152.61	902.06	250.55	4.600		
21,500.00	13,092.00	21,173.37	12,741.00	132.00	132.30	72.270	-9,086.75	-938.35	1,152.60	899.31	253.29	4.551		
21,600.00	13,092.00	21,273.37	12,741.00	133.42	133.72	72.270	-9,186.74	-937.37	1,152.58	896.55	256.03	4.502		
21,700.00	13,092.00	21,373.37	12,741.00	134.85	135.14	72.270	-9,286.74	-936.40	1,152.57	893.79	258.78	4.454		
21,800.00	13,092.00	21,473.37	12,741.00	136.27	136.56	72.269	-9,386.73	-935.42	1,152.55	891.03	261.52	4.407		
21,900.00	13,092.00	21,573.37	12,741.00	137.70	137.98	72.269	-9,486.73	-934.44	1,152.54	888.27	264.26	4.361		
22,000.00	13,092.00	21,673.37	12,741.00	139.12	139.41	72.269	-9,586.72	-933.46	1,152.52	885.51	267.01	4.316		
22,100.00	13,092.00	21,773.37	12,741.00	140.55	140.83	72.269	-9,686.72	-932.48	1,152.51	882.75	269.76	4.272		
22,200.00	13,092.00	21,873.37	12,741.00	141.98	142.25	72.268	-9,786.71	-931.50	1,152.49	879.99	272.50	4.229		
22,300.00	13,092.00	21,973.37	12,741.00	143.40	143.67	72.268	-9,886.71	-930.53	1,152.48	877.23	275.25	4.187		
22,400.00	13,092.00	22,073.37	12,741.00	144.83	145.09	72.268	-9,986.70	-929.55	1,152.46	874.46	278.00	4.146		
22,500.00	13,092.00	22,173.37	12,741.00	146.26	146.52	72.268	-10,086.70	-928.57	1,152.45	871.70	280.75	4.105		
22,600.00	13,092.00	22,273.37	12,741.00	147.69	147.94	72.268	-10,186.69	-927.59	1,152.43	868.94	283.50	4.065		
22,700.00	13,092.00	22,373.37	12,741.00	149.11	149.36	72.267	-10,286.69	-926.61	1,152.42	866.17	286.25	4.026		
22.728.24	13,092.00	22,401.61	12.741.00	149.52	149.77	72.267	-10,314.93	-926.34	1,152.41	865.39	287.02	4.015 ES,	25	







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

													Offset Site Error:	0.00 usf
Survey Progr Refer	ram: 0- rence	MWD+HRGM Off	set	Semi N	lajor Axis		Offset Wellbe	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	1.00	0.00	1.00	1.00	89.599	0.21	29.98	29.98	, ,	, ,			
100.00	100.00	101.00	100.00	1.08	1.09	89.599	0.21	29.98	29.98	27.81	2.17	13.806		
200.00	200.00	201.00	200.00	1.60	1.60	89.599	0.21	29.98	29.98	26.78	3.20	9.366		
300.00	300.00	301.00	300.00	2.01	2.01	89.599	0.21	29.98	29.98	25.96	4.02	7.453		
400.00	400.00	401.00	400.00	2.35	2.36	89.599	0.21	29.98	29.98	25.27	4.71	6.368		
500.00	500.00	501.00	500.00	2.65	2.66	89.599	0.21	29.98	29.98	24.67	5.31	5.645		
600.00	600.00	601.00	600.00	2.93	2.93	89.599	0.21	29.98	29.98	24.12	5.86	5.119		
700.00	700.00	701.00	700.00	3.18	3.18	89.599	0.21	29.98	29.98	23.62	6.36	4.714		
800.00	800.00	801.00	800.00	3.41	3.42	89.599	0.21	29.98	29.98	23.15	6.83	4.390		
900.00	900.00	901.00	900.00	3.64	3.64	89.599	0.21	29.98	29.98	22.71	7.27	4.122		
1,000.00	1,000.00	1,001.00	1,000.00	3.85	3.85	89.599	0.21	29.98	29.98	22.29	7.69	3.897		
1,100.00	1,100.00	1,101.00	1,100.00	4.05	4.05	89.599	0.21	29.98	29.98	21.88	8.10	3.703		
1,200.00	1,200.00	1,201.00	1,200.00	4.24	4.24	89.599	0.21	29.98	29.98	21.50	8.48	3.534		
1,300.00	1,300.00	1,301.00	1,300.00	4.43	4.43	89.599	0.21	29.98	29.98	21.12	8.86	3.385		
1,400.00	1,400.00	1,401.00	1,400.00	4.61	4.61	89.599	0.21	29.98	29.98	20.76	9.22	3.253		
1,416.33	1,416.33	1,417.33	1,416.33	4.64	4.64	89.599	0.21	29.98	29.98	20.71	9.27	3.233 CC		
1,500.00	1,500.00	1,501.00	1,500.00	4.78	4.78	89.599	0.21	29.98	29.98	20.41	9.57	3.134 ES		
1,600.00	1,599.98	1,600.60	1,599.58	4.98	4.98	-80.529	-1.42	30.66	30.36	20.54	9.82	3.093		
1,620.70	1,620.67	1,621.22	1,620.18	4.99	5.10	-80.607	-2.16	30.97	30.53	20.67	9.86	3.097		
1,700.00	1,699.89	1,700.18	1,699.01	5.07	5.60	-79.114	-6.24	32.67	31.66	21.57	10.09	3.138		
1,800.00	1,799.81	1,800.13	1,798.73	5.23	5.91	-75.266	-12.68	35.35	33.72	23.30	10.42	3.237		
1,900.00	1,899.72	1,900.09	1,898.44	5.41	6.08	-71.875	-19.11	38.03	35.91	25.18	10.74	3.345		
2,000.00	1,999.63	2,000.04	1,998.15	5.60	6.27	-68.883	-25.54	40.70	38.22	27.15	11.06	3.454		
2,100.00	2,099.54	2,100.00	2,097.86	5.80	6.47	-66.238	-31.98	43.38	40.62	29.21	11.41	3.561		
2,200.00	2,199.45	2,199.95	2,197.57	6.02	6.68	-63.892	-38.41	46.06	43.09	31.33	11.76	3.663		
2,300.00	2,299.36	2,299.91	2,297.28	6.24	6.91	-61.804	-44.85	48.74	45.63	33.49	12.14	3.759		
2,400.00	2,399.27	2,399.86	2,396.99	6.47	7.15	-59.938	-51.28	51.42	48.22	35.70	12.53	3.850		
2,500.00	2,499.18	2,499.82	2,496.71	6.72	7.41	-58.263	-57.71	54.10	50.86	37.93	12.93	3.933		
2,600.00	2,599.10	2,599.77	2,596.42	6.96	7.67	-56.756	-64.15	56.78	53.54	40.19	13.35	4.010		
2,700.00	2,699.01	2,699.72	2,696.13	7.22	7.94	-55.392	-70.58	59.46	56.25	42.46	13.79	4.080		
2,800.00	2,798.92	2,799.68	2,795.84	7.48	8.21	-54.155	-77.01	62.14	58.99	44.75	14.23	4.144		
2,900.00	2,898.83	2,899.63	2,895.55	7.74	8.50	-53.028	-83.45	64.82	61.75	47.06	14.70	4.202		
3,000.00	2,998.74	2,999.59	2,995.26	8.01	8.79	-51.998	-89.88	67.49	64.54	49.37	15.17	4.255		
3,100.00	3,098.65	3,099.54	3,094.98	8.28	9.08	-51.053	-96.32	70.17	67.35	51.69	15.65	4.303		
3,200.00	3,198.56	3,199.50	3,194.69	8.56	9.38	-50.184	-102.75	72.85	70.17	54.02	16.15	4.346		
3,300.00	3,298.47	3,299.45	3,294.40	8.84	9.69	-49.383	-109.18	75.53	73.01	56.36	16.65	4.385		
3,400.00	3,398.39	3,399.41	3,394.11	9.13	10.00	-48.641	-115.62	78.21	75.86	58.69	17.16	4.420		
3,500.00	3,498.30	3,499.36	3,493.82	9.41	10.31	-47.954	-122.05	80.89	78.72	61.04	17.68	4.451		
3,600.00	3,598.21	3,599.32	3,593.53	9.70	10.63	-47.315	-128.48	83.57	81.59	63.38	18.21	4.480		
3,700.00	3,698.12	3,699.27	3,693.24	9.99	10.95	-46.719	-134.92	86.25	84.48	65.73	18.75	4.506		
3,800.00	3,798.03	3,799.23	3,792.96	10.29	11.27	-46.163	-141.35	88.93	87.37	68.08	19.29	4.529		
3,900.00	3,897.94	3,899.18	3,892.67	10.58	11.60	-45.642	-147.79	91.61	90.27	70.43	19.84	4.551		
4,000.00	3,997.85	3,999.14	3,992.38	10.88	11.93	-45.154	-154.22	94.28	93.17	72.78	20.39	4.570		
4,100.00	4,097.76	4,099.09	4,092.09	11.18	12.26	-44.695	-160.65	96.96	96.09	75.14	20.95	4.587		
4,200.00	4,197.68	4,199.05	4,191.80	11.48	12.59	-44.264	-167.09	99.64	99.00	77.49	21.51	4.603		
4,300.00	4,297.59	4,299.00	4,291.51	11.78	12.92	-43.857	-173.52	102.32	101.93	79.85	22.08	4.617		
4,400.00	4,397.50	4,398.95	4,391.22	12.08	13.26	-43.473	-179.95	105.00	104.86	82.21	22.65	4.630		
4,500.00	4,497.41	4,498.91	4,490.94	12.39	13.60	-43.109	-186.39	107.68	107.79	84.57	23.22	4.642		
4,600.00	4,597.32	4,598.86	4,590.65	12.69	13.94	-42.765	-192.82	110.36	110.73	86.93	23.80	4.653		
4,700.00	4,697.23	4,698.82	4,690.36	13.00	14.28	-42.439	-199.26	113.04	113.67	89.29	24.38	4.662		
4,800.00	4,797.14	4,798.77	4,790.07	13.31	14.62	-42.129	-205.69	115.72	116.61	91.65	24.96	4.671		
4,900.00	4,897.05	4,898.73	4,889.78	13.62	14.96	-41.835	-212.12	118.40	119.56	94.01	25.55	4.679		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

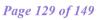
Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset De	o.g.i.	·	-eu Com (NAD83) - E	i Campe	on red Com	433H - OH - F	Iaii i 06-3 i	-22				Offset Site Error:	0.00 usft
Survey Progi Refe	ram: 0-	MWD+HRGM Off	set	Semi N	lajor Axis		Offset Wellbe	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,000.00	4,996.97	4,998.68	4,989.49	13.92	15.31	-41.554	-218.56	121.08	122.51	96.37	26.14	4.687		
5,100.00	5,096.88	5,098.64	5,089.20	14.23	15.65	-41.287	-224.99	123.75	125.46	98.73	26.73	4.694		
5,200.00	5,196.79	5,198.59	5,188.92	14.55	16.00	-41.032	-231.42	126.43	128.42	101.09	27.32	4.700		
5,300.00	5,296.70	5,298.55	5,288.63	14.86	16.35	-40.789	-237.86	129.11	131.37	103.45	27.92	4.706		
5,400.00	5,396.61	5,398.50	5,388.34	15.17	16.70	-40.556	-244.29	131.79	134.33	105.82	28.52	4.711		
5,500.00	5,496.52	5,498.46	5,488.05	15.48	17.04	-40.334	-250.73	134.47	137.30	108.18	29.12	4.715		
5,600.00	5,596.43	5,598.41	5,587.76	15.79	17.39	-40.120	-257.16	137.15	140.26	110.54	29.72	4.720		
5,700.00	5,696.34	5,698.37	5,687.47	16.11	17.75	-39.916	-263.59	139.83	143.23	112.91	30.32	4.724		
5,800.00	5,796.26	5,798.32	5,787.18	16.42	18.10	-39.720	-270.03	142.51	146.20	115.27	30.93	4.727		
5,900.00	5,896.17	5,898.28	5,886.90	16.74	18.45	-39.532	-276.46	145.19	149.17	117.63	31.53	4.731		
6,000.00	5,996.08	5,998.23	5,986.61	17.05	18.80	-39.351	-282.89	147.87	152.14	120.00	32.14	4.734		
6,100.00	6,095.99	6,098.19	6,086.32	17.37	19.15	-39.177	-289.33	150.54	155.11	122.36	32.75	4.736		
6,200.00	6,195.90	6,198.14	6,186.03	17.68	19.51	-39.009	-295.76	153.22	158.08	124.73	33.36	4.739		
6,300.00	6,295.81	6,298.09	6,285.74	18.00	19.86	-38.848	-302.20	155.90	161.06	127.09	33.97	4.741		
6,400.00	6,395.72	6,398.05	6,385.45	18.32	20.22	-38.693	-308.63	158.58	164.04	129.45	34.58	4.743		
6,500.00	6,495.63	6,498.00	6,485.16	18.63	20.57	-38.543	-315.06	161.26	167.01	131.82	35.19	4.745		
6,600.00	6,595.55	6,597.96	6,584.88	18.95	20.93	-38.398	-321.50	163.94	169.99	134.18	35.81	4.747		
6,700.00	6,695.46	6,697.91	6,684.59	19.27	21.29	-38.258	-327.93	166.62	172.97	136.55	36.42	4.749		
6,800.00	6,795.37	6,797.87	6,784.30	19.59	21.64	-38.124	-334.36	169.30	175.95	138.91	37.04	4.750		
6,900.00	6,895.28	6,897.82	6,884.01	19.91	22.00	-37.993	-340.80	171.98	178.94	141.28	37.66	4.752		
7,000.00	6,995.19	6,997.78	6,983.72	20.23	22.36	-37.867	-347.23	174.66	181.92	143.64	38.27	4.753		
7,100.00	7,095.10	7,097.73	7,083.43	20.54	22.71	-37.745	-353.67	177.33	184.90	146.01	38.89	4.754		
7,200.00	7,195.01	7,197.69	7,183.15	20.86	23.07	-37.627	-360.10	180.01	187.89	148.37	39.51	4.755		
7,300.00	7,294.92	7,297.64	7,282.86	21.18	23.43	-37.512	-366.53	182.69	190.87	150.74	40.13	4.756		
7,400.00	7,394.84	7,397.60	7,382.57	21.50	23.79	-37.401	-372.97	185.37	193.86	153.10	40.75	4.757		
7,500.00	7,494.75	7,497.55	7,482.28	21.82	24.15	-37.294	-379.40	188.05	196.84	155.47	41.37	4.758		
7,600.00	7,594.66	7,597.51	7,581.99	22.14	24.51	-37.189	-385.83	190.73	199.83	157.84	42.00	4.758		
7,700.00	7,694.57	7,697.46	7,681.70	22.46	24.87	-37.088	-392.27	193.41	202.82	160.20	42.62	4.759		
7,800.00	7,794.48	7,797.42	7,781.41	22.78	25.23	-36.990	-398.70	196.09	205.81	162.57	43.24	4.760		
7,900.00	7,894.39	7,897.37	7,881.13	23.10	25.59	-36.894	-405.14	198.77	208.80	164.93	43.86	4.760		
8,000.00	7,994.30	7,997.32	7,980.84	23.42	25.95	-36.801	-411.57	201.45	211.79	167.30	44.49	4.760		
8,100.00	8,094.21	8,097.28	8,080.55	23.75	26.31	-36.711	-418.00	204.13	214.78	169.66	45.11	4.761		
8,200.00	8,194.13	8,197.23	8,180.26	24.07	26.67	-36.623	-424.44	206.80	217.77	172.03	45.74	4.761		
8,300.00	8,294.04	8,297.19	8,279.97	24.39	27.03	-36.538	-430.87	209.48	220.76	174.40	46.36	4.762		
8,400.00	8,393.95	8,397.14	8,379.68	24.71	27.39	-36.455	-437.30	212.16	223.75	176.76	46.99	4.762		
8,500.00	8,493.86	8,497.10	8,479.39	25.03	27.75	-36.374	-443.74	214.84	226.74	179.13	47.62	4.762		
8,600.00	8,593.77	8,597.05	8,579.11	25.35	28.11	-36.295	-450.17	217.52	229.74	181.49	48.24	4.762		
8,700.00	8,693.68	8,697.01	8,678.82	25.67	28.47	-36.218	-456.61	220.20	232.73	183.86	48.87	4.762		
8,800.00	8,793.59	8,796.96	8,778.53	26.00	28.84	-36.143	-463.04	222.88	235.72	186.23	49.50	4.762		
8,900.00	8,893.50	8,896.92	8,878.24	26.32	29.20	-36.070	-469.47	225.56	238.72	188.59	50.12	4.763		
9,000.00	8,993.42	8,996.87	8,977.95	26.64	29.56	-35.999	-475.91	228.24	241.71	190.96	50.75	4.763		
9,100.00	9,093.33	9,096.83	9,077.66	26.96	29.92	-35.930	-482.34	230.92	244.71	193.32	51.38	4.763		
9,200.00	9,193.24	9,196.78	9,177.37	27.29	30.28	-35.862	-488.77	233.59	247.70	195.69	52.01	4.763		
9,300.00	9,293.15	9,296.74	9,277.09	27.61	30.65	-35.796	-495.21	236.27	250.70	198.06	52.64	4.763		
9,400.00	9,393.06	9,396.69	9,376.80	27.93	31.01	-35.731	-501.64	238.95	253.69	200.42	53.27	4.763		
9,500.00	9,492.97	9,496.65	9,476.51	28.25	31.37	-35.668	-508.08	241.63	256.69	202.79	53.90	4.763		
9,600.00	9,592.88	9,596.60	9,576.22	28.58	31.74	-35.607	-514.51	244.31	259.68	205.16	54.53	4.762		
9,700.00	9,692.79	9,696.56	9,675.93	28.90	32.10	-35.546	-520.94	246.99	262.68	207.52	55.16	4.762		
9,800.00	9,792.71	9,796.51	9,775.64	29.22	32.46	-35.488	-527.38	249.67	265.68	209.89	55.79	4.762		
9,900.00	9,892.62	9,896.46	9,875.35	29.55	32.83	-35.430	-533.81	252.35	268.67	212.26	56.42	4.762		
10,000.00	9,992.53	9,996.42	9,975.07	29.87	33.19	-35.374	-540.24	255.03	271.67	214.62	57.05	4.762		
10,100.00	10,092.44	10,096.37	10,074.78	30.19	33.55	-35.319	-546.68	257.71	274.67	216.99	57.68	4.762		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

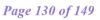
Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

		44/D . I . D . C .											Offset Site Error:	0.00 usf
urvey Prog Refe	ram: 0-l erence	MWD+HRGM Off	set	Semi M	lajor Axis		Offset Wellbe	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
10,200.00	10,192.35	10,196.33	10,174.49	30.52	33.92	-35.265	-553.11	260.38	277.67	219.36	58.31	4.762		
10,300.00	10,292.26	10,296.28	10,274.20	30.84	34.28	-35.212	-559.55	263.06	280.66	221.72	58.94	4.762		
10,400.00	10,392.17	10,396.24	10,373.91	31.16	34.64	-35.161	-565.98	265.74	283.66	224.09	59.57	4.761		
10,500.00	10,492.08	10,496.19	10,473.62	31.49	35.01	-35.110	-572.41	268.42	286.66	226.46	60.21	4.761		
10,600.00	10,592.00	10,596.15	10,573.33	31.81	35.37	-35.061	-578.85	271.10	289.66	228.82	60.84	4.761		
10,700.00	10,691.91	10,696.10	10,673.05	32.13	35.74	-35.012	-585.28	273.78	292.66	231.19	61.47	4.761		
10,800.00	10,791.82	10,796.06	10,772.76	32.46	36.10	-34.965	-591.71	276.46	295.66	233.56	62.10	4.761		
10,900.00	10,891.73	10,896.01	10,872.47	32.78	36.47	-34.918	-598.15	279.14	298.66	235.92	62.74	4.761		
11,000.00	10,991.64	10,995.97	10,972.18	33.11	36.83	-34.873	-604.58	281.82	301.66	238.29	63.37	4.760		
11,100.00	11,091.55	11,095.92	11,071.89	33.43	37.20	-34.828	-611.02	284.50	304.66	240.66	64.00	4.760		
11,200.00	11,191.46	11,195.88	11,171.60	33.75	37.56	-34.784	-617.45	287.17	307.66	243.02	64.64	4.760		
11,300.00	11,291.37	11,295.83	11,271.31	34.08	37.92	-34.741	-623.88	289.85	310.66	245.39	65.27	4.760		
11,400.00	11,391.29	11,395.79	11,371.03	34.40	38.29	-34.699	-630.32	292.53	313.66	247.76	65.90	4.759		
11,500.00	11,491.20	11,495.74	11,470.74	34.73	38.65	-34.658	-636.75	295.21	316.66	250.12	66.54	4.759		
11,600.00	11,591.11	11,605.51	11,580.33	35.05	39.04	-34.720	-642.36	297.55	318.35	251.22	67.13	4.742		
11,700.00	11,691.02	11,716.22	11,691.02	35.38	39.34	-35.071	-644.13	298.28	316.48	249.00	67.48	4.690		
11,800.00	11,790.93	11,816.13	11,790.93	35.70	39.34	-35.513	-644.13	298.28	313.04	245.50	67.54	4.635		
11,900.00	11,890.84	11,916.04	11,890.84	36.03	39.35	-35.966	-644.13	298.28	309.62	242.02	67.60	4.580		
11,907.54	11,898.38	11,923.58	11,898.38	36.05	39.35	-36.001	-644.13	298.28	309.36	241.76	67.61	4.576		
12,000.00	11,990.80	12,016.00	11,990.80	36.33	39.35	-36.241	-644.13	298.28	307.42	239.71	67.71	4.540		
12,028.24	12,019.04	12,044.24	12,019.04	36.36	39.35	133.731	-644.13	298.28	307.31	239.58	67.73	4.537		
12,100.00	12,090.80	12,116.00	12,090.80	36.36	39.36	133.731	-644.13	298.28	307.31	239.58	67.73	4.537		
12,114.63	12,105.43	12,130.63	12,105.43	36.36	39.36	133.731	-644.13	298.28	307.31	239.58	67.73	4.537		
12,200.00	12,190.80	12,210.24	12,185.04	36.36	39.36	133.731	-644.13	298.28	307.36	239.59	67.77	4.535		
12,300.00	12,290.80	12,286.73	12,261.30	36.36	39.62	134.404	-649.22	298.33	312.29	243.92	68.37	4.568		
12,400.00	12,390.80	12,350.00	12,323.42	36.37	39.98	135.910	-661.09	298.45	326.41	257.23	69.19	4.718		
12,500.00	12,490.80	12,422.43	12,392.41	36.37	40.43	138.485	-682.97	298.66	349.71	279.33	70.38	4.969		
12,528.24	12,519.04	12,440.07	12,408.75	36.37	40.54	139.216	-689.60	298.72	358.03	287.41	70.62	5.070		
12,550.00	12,540.79	12,450.00	12,417.86	36.40	40.60	-39.376	-693.56	298.76	364.68	294.03	70.65	5.162		
12,600.00	12,590.61	12,484.06	12,448.56	36.63	40.81	-37.198	-708.32	298.90	379.22	308.07	71.15	5.330		
12,650.00	12,639.89	12,514.44	12,475.15	36.95	41.00	-35.452	-723.00	299.04	392.74	321.36	71.38	5.502		
12,700.00	12,688.24	12,550.00	12,505.24	37.29	41.22	-33.845	-741.94	299.22	405.17	333.43	71.74	5.648		
12,750.00	12,735.30	12,574.69	12,525.41	37.62	41.36	-32.719	-756.17	299.36	416.23	344.79	71.44	5.826		
12,800.00	12,780.72	12,600.00	12,545.43	37.96	41.50	-31.749	-771.65	299.51	426.05	355.00	71.05	5.996		
12,850.00	12,824.15	12,634.40	12,571.51	38.29	41.69	-30.831	-794.08	299.73	434.40	363.33	71.07	6.113		
12,900.00	12,865.26	12,664.11	12,592.91	38.60	41.85	-30.157	-814.68	299.92	441.33	370.58	70.74	6.238		
12,950.00	12,903.73	12,700.00	12,617.30	38.90	42.03	-29.599	-841.00	300.18	446.84	376.12	70.72	6.319		
13,000.00	12,939.27	12,723.34	12,632.26	39.18	42.14	-29.283	-858.92	300.35	450.68	380.80	69.88	6.449		
13,050.00	12,971.62	12,750.00	12,648.43	39.43	42.27	-29.074	-880.10	300.55	453.07	383.90	69.17	6.550		
13,100.00	13,000.52	12,782.44	12,666.76	39.65	42.40	-28.995	-906.86	300.81	453.87	385.09	68.77	6.599		
13,150.00	13,025.76	12,811.98	12,682.10	39.85	42.52	-29.062	-932.10	301.05	453.12	384.97	68.15	6.649		
13,200.00	13,047.14	12,850.00	12,699.91	40.02	42.66	-29.304	-965.68	301.38	450.95	382.91	68.04	6.628		
13,250.00	13,064.50	12,871.12	12,708.82	40.15	42.72	-29.625	-984.83	301.56	446.96	380.18	66.78	6.693		
13,300.00	13,077.71	12,900.00	12,719.86	40.26	42.81	-30.124	-1,011.51	301.82	441.59	375.58	66.01	6.690		
13,350.00	13,086.67	12,930.47	12,730.03	40.33	42.89	-30.799	-1,040.23	302.10	434.72	369.41	65.31	6.656		
13,400.00	13,091.30	12,960.26	12,738.48	40.38	42.96	-31.640	-1,068.79	302.37	426.40	361.85	64.55	6.606		
13,428.24	13,092.00	12,977.14	12,742.61	40.39	42.99	-32.198	-1,085.16	302.53	421.08	357.00	64.08	6.571		
13,500.00	13,092.00	13,020.76	12,751.03	40.40	43.07	-32.831	-1,127.94	302.94	409.32	346.42	62.90	6.507		
13,600.00	13,092.00	13,083.22	12,757.36	40.43	43.14	-33.322	-1,190.05	303.54	400.79	339.34	61.45	6.523		
13,700.00	13,092.00	13,167.44	12,758.00	40.46	43.19	-33.372	-1,274.25	304.35	399.95	338.48	61.47	6.507		
13,708.78	13,092.00	13,176.22	12,758.00	40.46	43.20	-33.372	-1,283.03	304.43	399.95	338.39	61.55	6.497		
13,800.00	13,092.00	13,267.44	12,758.00	40.50	43.25	-33.372	-1,374.24	305.31	399.95	337.46	62.49	6.400		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Page	Offset De	oigii.		·	NAD83) - E	:i Campe	on Fed Com	433H - OH - P	тап т ∪8-31	-22				Offset Site Error:	0.00 usf
New North-North Market Market Market North-North					Semi N	Naior Axis		Offset Wellho	ore Centre	Dist		gned:		Offset Well Error:	1.00 usf
130000 1 130	Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Separation		Warning	
14.0000 1 10.0000 0 19.0000 4 19.0000 4 19.0000 4 19.000 4 19.000 4 19.00000 4 19.0000								-1,474.24					6.292		
14.00000 1 0,00000 0 13.00000 1 1	14,000.00	13,092.00	13,467.44	12,758.00	40.58	43.42	-33.372	-1,574.23	307.24	399.95	335.26	64.69	6.183		
143000 0 130000 0 138744 127800 485 450 43372 -181422 310.12 309.4 331.6 39.5 331.6 585. 145000 1 30000 1 30000 1 386744 1278000 485 4450 43372 -181422 310.6 309.4 30.35 50 50.5447 145000 1 30000 1 30000 1 466744 1278000 485 4450 43372 -2717.21 312.6 309.4 320.0 70.0 5.547 145000 1 30000 1 366744 127800 445 4410 44.47 33.372 -2717.21 312.6 309.4 320.0 77.22 5.539 145000 1 30000 1 466744 127800 445 4410 44.47 33.372 -2717.21 312.6 309.4 320.0 77.22 5.539 145000 1 30000 1 466744 127800 445 45 416 33.372 -2717.21 312.6 309.4 320.0 77.22 5.539 145000 1 30000 1 46674 127800 445 461 43.372 -2717.21 312.6 309.4 320.4 76.6 522 150000 1 30000 1 46674 127800 442 40.0 450 450 43.372 -2717.4 312.6 309.4 320.4 76.6 522 150000 1 30000 1 46674 127800 442 40.0 450 450 43.372 -2717.4 312.6 309.4 320.4 76.6 522 150000 1 30000 1 46674 127800 442 440 450 43.372 -2717.4 312.6 309.4 320.4 76.6 522 150000 1 30000 1 46674 127800 456 440 43.3 47.6 1 43.372 -2717.4 312.6 309.4 312.6 31	14,100.00	13,092.00	13,567.44	12,758.00	40.63	43.52	-33.372	-1,674.23	308.20	399.95	334.09	65.85	6.073		
14.600.00 13.000.00 13.000.00 13.000.00 13.000.00 13.000.00 13.000.00 13.000.00 13.000.00 13.000.00 13.000.00 13.000.00 14.000.00 13.000.00 14.000	14,200.00	13,092.00	13,667.44	12,758.00	40.69	43.65	-33.372	-1,774.23	309.16	399.95	332.88	67.06	5.964		
14,500.00	14,300.00	13,092.00	13,767.44	12,758.00	40.76	43.80	-33.372	-1,874.22	310.12	399.94	331.64	68.31	5.855		
14,000 0 1,000 0 1,000 14,0074 17,000 0 1,000 14,00	14,400.00	13,092.00	13,867.44	12,758.00	40.85	43.99	-33.372	-1,974.22	311.08	399.94	330.35	69.60	5.747		
14,700.0 1 3,000.2 0 14,674 1 2,788.0	14,500.00	13,092.00	13,967.44	12,758.00	40.95	44.20	-33.372	-2,074.21	312.05	399.94	329.02	70.92	5.639		
14,000.00 10,000.00 14,000.00 14,000.00 14,000.00 14,000.00 14,000.00 13,000.00 14,000		13,092.00	14,067.44		41.10	44.47	-33.372	-2,174.21		399.94	327.67		5.533		
14,900.00 13,002.00 14,867.44 12,758.00 41.90 45.04 33.372 2.674.19 315.90 399.94 323.41 76.54 5.255 15,000.00 13,002.00 14,867.44 12,758.00 42.00 48.20 -33.372 2.674.18 315.82 399.94 321.93 78.01 5.127 15,000.00 13,002.00 14,867.44 12,758.00 44.24 48.80 33.372 2.674.18 315.82 399.94 321.93 78.00 81.04 4.055 15,000.00 13,002.00 14,867.44 12,758.00 44.54 47.61 33.372 2.674.18 315.80 399.94 321.93 78.00 81.04 4.055 15,000.00 13,002.00 14,867.44 12,758.00 44.54 47.61 33.372 3.674.19 315.75 399.94 316.80 81.04 4.055 15,000.00 13,002.00 14,867.44 12,758.00 46.70 49.40 43.33.72 3.674.17 321.67 399.94 315.78 84.16 4.72 15,000.00 13,002.00 15,002															
15,000,00 13,002,00 14,467.44 12,786.00 42,00 48,00 33,372 2,574.19 316.86 399.94 321.03 78.01 5.127 15,100.00 13,002.00 14,567.44 12,786.00 43.42 48.86 33.372 2,741.89 318.78 399.94 310.30 78.01 5.127 15,100.00 13,002.00 14,707.44 12,786.00 45.56 49.46 33.372 2,741.73 318.78 399.94 317.35 82.59 15,100.00 13,002.00 14,707.44 12,786.00 45.56 49.46 33.372 2,741.73 318.75 399.94 317.35 82.59 4.842 15,100.00 13,002.00 15,007.44 12,786.00 45.56 49.46 33.372 2,741.73 19.75 399.94 317.35 82.59 4.842 15,100.00 13,002.00 15,007.44 12,786.00 45.01 89.40 13.03.372 2,741.74 320.71 320.71 399.94 317.35 82.59 4.842 15,100.00 13,002.00 15,007.44 12,786.00 45.01 89.41 33.372 3,741.75 320.87 399.94 317.35 82.59 4.842 15,100.00 13,002.00 15,007.44 12,786.00 45.01 82.80 31.33.372 3,741.75 320.87 399.94 317.05 86.89 4.578 15,100.00 13,002.00 15,007.44 12,786.00 45.01 82.80 31.33.372 3,741.75 320.80 399.94 317.05 86.89 4.441 15,100.00 13,002.00 15,007.44 12,786.00 51.37 54.97 33.372 3,741.15 320.50 399.94 307.05 86.89 4.441 15,100.00 13,002.00 15,007.44 12,786.00 51.37 54.97 33.372 3,741.15 320.52 399.94 307.00 89.44 44.41 15,100.00 13,002.00 15,007.44 12,786.00 51.35 54.97 33.372 3,474.15 320.52 399.94 307.00 89.44 44.41 16,100.00 13,002.00 15,007.44 12,786.00 51.35 54.97 33.372 3,474.15 320.52 399.94 307.00 89.44 44.41 16,100.00 13,002.00 15,007.44 12,786.00 57.33 58.71 33.372 3,474.13 326.41 399.94 302.66 97.38 4.00 16,100.00 13,002.00 15,007.44 12,786.00 67.33 58.71 33.372 3,474.13 326.41 399.94 302.66 97.38 4.00 16,100.00 13,002.00 15,007.44 12,786.00 67.30 63.33 59.31 4.474.11 332.6 399.94 297.37 10.25 73 3.999 17,100.00 13,002.00 15,007.44 12,786.00 67.05 62.00 33.372 3,474.13 326.7 399.94 297.37 10.25 73 3.999 17,100.00 13,002.00 15,007.44 12,786.00 67.05 62.00 33.371 4.474.10 335.15 399.94 297.11 10.08 3.3899 17,100.00 13,002.00 15,007.44 12,786.00 67.05 62.00 33.371 4.474.11 332.20 399.94 297.37 10.25 5 3.310 17,100.00 13,002.00 16,007.44 12,786.00 67.54 62.50 33.371 4.474.10 335.15 399.94 297.39 120.55 3.310 17,100.00 13															
15,00000 13,00200 14,0074 12,758.00 43.42 48,08 43.372 4.2674.18 317.82 399.44 318.90 81.04 4955 15,00000 13,002.00 14,0074 12,758.00 45.65 48,40 43.3372 4.2674.17 310.75 399.44 317.35 82.99 4.842 15,00000 13,002.00 14,0074 12,758.00 45.65 48,40 43.3372 4.2674.17 310.75 399.44 317.35 82.99 4.842 15,00000 13,002.00 14,0074 12,758.00 49.00 50.41 33.372 4.2074.17 320.71 399.94 314.19 65.75 4.664 15,00000 13,002.00 15,0074 12,758.00 49.00 50.41 33.372 4.3774 16 325.69 399.44 314.19 65.75 4.664 15,00000 13,002.00 15,0074 12,758.00 59.00 15.26.00 33.372 4.3774 16 325.69 399.94 314.19 65.75 4.664 15,00000 13,002.00 15,0074 12,758.00 59.00 15.26.00 33.372 4.3774 16 325.69 399.94 314.19 65.75 4.664 15,00000 13,002.00 15,0074 12,758.00 59.37 53.372 4.377 33.372 4.3774 16 325.69 399.94 310.99 88.99 4.494 15,00000 13,002.00 15,0074 12,758.00 59.37 57.41 33.372 4.3774 15 325.69 399.94 300.90 09.00 44 4.413 16,00000 13,002.00 15,0074 12,758.00 55.97 57.44 33.372 4.3774 15 325.69 399.94 300.90 09.00 44 4.413 16,00000 13,002.00 15,0074 12,758.00 55.97 57.44 33.372 4.3774 13 326.49 399.94 300.90 09.00 44 4.413 16,00000 13,002.00 15,0074 12,758.00 55.97 57.44 33.372 4.3774 32 324.19 399.94 300.90 09.00 44 4.413 16,00000 13,002.00 15,0074 12,758.00 55.97 57.44 33.372 4.3774 32 324.19 399.94 300.00 49.00 09.00 44 4.413 16,00000 13,002.00 15,0074 12,758.00 55.97 57.44 33.372 4.3774 32 324.19 399.94 300.00 49.00 09.00 44 4.00 4.00 4.00 4.00	14,900.00	13,092.00	14,367.44	12,758.00	41.99	45.64	-33.372	-2,474.19	315.90	399.94	323.41	76.54	5.225		
15,200,00 13,092,00 14,8674 12,758,00 48,01 12,758,00 13,092,00 14,8674 12,758,00 48,07 14,000 13,092,00 14,8674 12,758,00 48,07 14,000 13,092,00 14,8674 12,758,00 48,07 14,000 13,092,00 14,0	15,000.00	13,092.00	14,467.44	12,758.00	42.60	46.20	-33.372	-2,574.19	316.86	399.94	321.93	78.01	5.127		
15,00000 13,092.00 14,007.44 12,758.00 45.66 48.06 33.372 2.8.74.17 30.71 309.04 317.35 8.25.96 4.642 15,00000 13,092.00 14,007.44 12,758.00 45.0 40.0 33.372 2.8.74.17 30.71 309.04 314.19 85.75 4.664 15,00000 13,092.00 15,007.44 12,758.00 49.0 51.48 433.372 4.3.074.17 321.67 309.04 314.19 85.75 4.664 15,00000 13,092.00 15,007.44 12,758.00 51.0 52.00 33.372 4.3.74.16 325.03 309.04 312.58 67.56 4.578 15,00000 13,092.00 15,007.44 12,758.00 51.0 52.00 33.372 4.3.74.16 325.05 309.04 310.55 88.99 4.494 15,00000 13,092.00 15,007.44 12,758.00 51.0 52.00 33.372 4.3.74.16 325.05 309.04 309.05 090.04 4.441 15,00000 13,092.00 15,007.44 12,758.00 51.0 51.0 51.0 51.0 51.0 51.0 51.0 5	15,100.00	13,092.00	14,567.44	12,758.00	43.42	46.86	-33.372	-2,674.18	317.82	399.94	320.43	79.52	5.030		
15.400.00 13.092.00 14.867.44 12.758.00 46.76 49.40 33.372 3.2071 399.94 315.76 84.16 4.752 15.500.00 13.092.00 15.267.44 12.758.00 49.01 59.41 33.372 3.074.17 32.167 399.94 315.76 84.19 85.75 4.664 15.700.00 13.092.00 15.267.44 12.758.00 59.61 52.00 33.372 3.274 16 322.00 399.94 310.95 89.99 4.494 15.500.00 13.092.00 15.267.44 12.758.00 59.61 52.00 33.372 3.274 16 322.00 399.94 307.64 82.30 43.33 15.500.00 13.092.00 15.267.44 12.758.00 59.61 52.00 43.372 3.374 15 32.552 399.94 307.64 82.30 43.33 15.500.00 13.092.00 15.267.44 12.758.00 59.67 57.44 3.33.72 3.474.15 326.52 399.94 307.64 82.30 43.33 15.500.00 13.092.00 15.267.44 12.758.00 59.7 57.44 3.33.72 3.474.15 326.52 399.94 307.64 82.30 43.33 15.500.00 13.092.00 15.267.44 12.758.00 59.7 57.44 3.33.72 3.474.15 326.52 399.94 307.64 82.30 43.33 16.500.00 13.092.00 15.667.44 12.758.00 59.87 57.44 3.33.72 3.474.15 39.54.25 399.94 305.56 99.38 4.256 16.500.00 13.092.00 15.767.44 12.758.00 59.8 50.7 57.34 53.372 3.374.15 39.54.25 399.94 305.56 97.38 4.107 16.500.00 13.092.00 15.767.44 12.758.00 59.8 50 50.0 3.33.72 3.374.13 328.14 399.94 305.56 97.38 4.107 16.500.00 13.092.00 15.767.44 12.758.00 59.6 50.6 51.0 3.33.72 3.374.14 32.54.25 399.94 305.56 97.38 4.107 16.500.00 13.092.00 15.767.44 12.758.00 59.0 50.6 51.0 3.33.72 3.374.14 32.35.2 3.399.94 209.15 100.83 3.987 16.500.00 13.092.00 16.767.44 12.758.00 59.0 50.6 52.6 33.371 4.741.1 33.22 399.94 209.15 100.83 3.893 16.700.00 13.092.00 16.667.44 12.758.00 59.6 50.52 3.3374 4.741.10 33.51 399.94 209.15 100.83 3.893 16.700.00 13.092.00 16.667.44 12.758.00 59.7 57.4 59.4 33.371 4.774.10 33.51 399.94 209.25 106.10 3.770 17.700.00 13.092.00 16.667.44 12.758.00 59.7 57.4 59.4 33.371 4.774.10 33.51 399.94 209.25 106.10 3.770 17.700.00 13.092.00 16.667.44 12.758.00 59.5 50.50 3.3371 4.774.10 33.51 399.94 209.25 106.10 3.571 17.700.00 13.092.00 16.667.44 12.758.00 59.5 50.5 50.33.371 4.774.10 33.51 399.94 209.25 106.10 3.570 17.700.00 13.092.00 16.667.44 12.758.00 59.5 50.5 50.33.371 4.774.10 33.51 399.94 209.25 116.70 3															
15.00.00 13.092.00 14.867.44 12.758.00 49.0 15.07.41 -33.372 -3.074.17 321.67 399.94 314.19 85.75 4.664 15.00.00 13.092.00 15.067.44 12.758.00 49.0 51.48 -33.372 -3.174.16 322.63 399.94 314.19 85.75 4.664 15.00.00 13.092.00 15.067.44 12.758.00 59.0 15.26.0 33.372 -3.274.16 322.63 399.94 310.95 88.99 4.494 15.00.00 13.092.00 15.367.44 12.758.00 59.0 15.20 33.77 33.372 -3.374.15 324.56 399.94 307.64 92.30 4.433 15.00.00 13.092.00 15.867.44 12.758.00 59.0 53.2 54.9 -33.372 -3.374.15 324.56 399.94 307.64 92.30 4.333 16.00.00 13.092.00 15.867.44 12.758.00 59.0 54.81 56.9 -33.372 -3.474.15 326.48 399.94 307.64 92.30 4.333 16.00.00 13.092.00 15.867.44 12.758.00 59.0 55.7 57.44 -33.372 -3.574.14 327.45 399.94 307.64 92.30 4.30 4.30 4.30 4.30 4.30 4.30 4.30 4															
15,000,00 13,002,00 15,007.44 12,758,00 0 50 61 52 0 53.37	15,400.00	13,092.00	14,867.44	12,758.00	46.76	49.40	-33.372	-2,974.17	320.71	399.94	315.78	84.16	4.752		
15,700,00 13,002,00 15,167-44 12,758,00 50 61 6 26 0 33,372	15,500.00	13,092.00	14,967.44	12,758.00	48.01	50.41	-33.372	-3,074.17	321.67	399.94	314.19	85.75	4.664		
15,800,00 13,092,00 15,867,44 12,758,00 51 53 53.77 33.372 3.374,15 324,56 399,94 307,64 93,00 90,64 4.413 15,900,00 13,092,00 15,867,44 12,758,00 54,61 55,19 33.372 3.574,14 326,48 399,94 307,64 93,00 90,64 4.413 16,000,00 13,092,00 15,667,44 12,758,00 55,87 57,44 33.372 3.674,14 326,48 399,94 302,66 93,88 4.266 16,100,00 13,092,00 15,667,44 12,758,00 55,87 57,44 33.372 3.674,14 326,48 399,94 304,27 95,67 4.190 16,200,00 13,092,00 15,667,44 12,758,00 56,89 60,00 33.372 3.874,14 326,48 399,94 302,66 93,88 4.107 16,400,00 13,092,00 15,667,44 12,758,00 60,66 13,30 33.372 3.874,12 326,41 399,94 302,66 93,88 4.107 16,400,00 13,092,00 15,667,44 12,758,00 60,66 13,30 33.372 3.874,12 330,33 399,94 290,11 100,83 3.967 16,500,00 13,092,00 15,667,44 12,758,00 60,66 13,30 3.3372 3.374,15 326,46 399,94 290,11 100,83 3.967 16,500,00 13,092,00 15,667,44 12,758,00 64,20 65,26 33.371 4.274,11 332,26 399,94 290,27 71 102,57 3.899 16,500,00 13,092,00 15,674,44 12,758,00 64,20 65,26 33.371 4.274,11 332,26 399,94 290,28 109,66 3.647 17,000,00 13,092,00 16,674,44 12,758,00 66,97 67,94 33.371 4.474,10 335,15 399,94 290,28 109,66 3.647 17,000,00 13,092,00 16,674,44 12,758,00 66,97 67,94 33.371 4.474,10 335,15 399,94 290,28 109,66 3.647 17,000,00 13,092,00 16,674,44 12,758,00 66,97 67,94 33.371 4.474,10 335,15 399,94 290,28 109,66 3.647 17,000,00 13,092,00 16,674,44 12,758,00 66,97 67,94 33.371 4.474,10 335,15 399,94 290,28 109,66 3.647 17,000,00 13,092,00 16,674,44 12,758,00 75,44 73,66 33.371 4.474,10 335,15 399,94 290,28 109,66 3.647 17,000,00 13,092,00 16,674,44 12,758,00 75,44 73,66 33.371 4.474,10 336,11 399,94 290,28 109,66 3.531 17,000,00 13,092,00 16,674,44 12,758,00 75,44 73,66 33.371 4.574,10 336,11 399,94 290,28 109,66 3.547 17,000,00 13,092,00 16,674,44 12,758,00 75,44 73,66 33.371 4.574,10 336,11 399,94 290,28 109,66 3.547 17,000,00 13,092,00 16,674,44 12,758,00 75,44 73,66 33.371 4.574,10 336,11 399,94 290,28 109,66 3.547 17,000,00 13,092,00 16,674,44 12,758,00 75,44 73,66 33.371 4.574,10 336,11 399,94 290,28 109,66 3.5	15,600.00	13,092.00	15,067.44	12,758.00	49.30	51.48	-33.372	-3,174.16	322.63	399.94	312.58	87.36	4.578		
15,900.00 13,092.00 15,867.44 12,758.00 53.27 54.97 33.372 -3,474.15 325.52 399.94 307.64 92.30 4.333 16,000.00 13,092.00 15,667.44 12,758.00 56.96 56.99 57.44 33.372 -3,574.14 326.48 399.94 302.26 97.98 4 150 16,200.00 13,092.00 15,667.44 12,758.00 58.69 60.00 33.372 -3,774.13 328.41 399.94 302.26 97.38 4 1107 16,300.00 13,092.00 15,674.44 12,758.00 60.06 61.30 33.372 -3,774.13 328.41 399.94 302.26 97.38 4 107 16,500.00 13,092.00 15,674.44 12,758.00 60.06 61.30 33.372 -3,774.13 328.41 399.94 302.26 97.38 4 107 16,500.00 13,092.00 15,674.44 12,758.00 60.06 61.30 33.372 -3,774.12 333.33 399.94 299.11 100.83 3967 16,500.00 13,092.00 15,674.44 12,758.00 60.06 61.30 33.372 -4,774.12 331.30 399.94 299.11 100.83 3967 16,500.00 13,092.00 15,674.44 12,758.00 62.81 63.93 33.371 -4,174.11 332.26 399.94 297.37 102.57 3899 16,500.00 13,092.00 10,1574.44 12,758.00 62.81 63.93 33.371 -4,174.11 332.26 399.94 292.85 106.10 33.370 16,500.00 13,092.00 10,1574.44 12,758.00 62.86 65.59 33.371 -4,274.11 332.26 399.94 292.85 106.10 33.70 16,500.00 13,092.00 10,1574.44 12,758.00 65.58 66.59 33.371 -4,374.10 334.18 399.94 292.07 107.87 3.70 16,500.00 13,092.00 10,1574.44 12,758.00 65.58 66.59 33.371 -4,374.10 334.18 399.94 292.07 107.87 3.70 17,000.00 13,092.00 16,567.44 12,758.00 68.56 66.59 33.371 -4,374.10 334.18 399.94 292.07 107.87 3.70 17,000.00 13,092.00 16,567.44 12,758.00 68.56 66.59 33.371 -4,574.10 336.11 399.94 288.49 111.45 3.588 17,100.00 13,092.00 16,567.44 12,758.00 68.56 69.76 67.94 33.371 -4,574.10 336.11 399.94 288.49 111.45 3.588 17,100.00 13,092.00 16,567.44 12,758.00 68.56 69.76 67.94 33.371 -4,574.10 336.11 399.94 288.49 111.45 3.588 17,100.00 13,092.00 16,567.44 12,758.00 68.58 69.76 7.04 73.36 33.371 -4,574.10 336.11 399.94 288.89 111.45 3.588 17,100.00 13,092.00 16,567.44 12,758.00 68.58 69.76 7.38 67.38 7.38 7.48 7.49 7.49 8.38 7.49 8.38 7.49 8.38 7.49 8.38 7.49 8.38 7.49 8.38 7.49 8.38 7.49 8.49 8.49 8.49 8.49 8.49 8.49 8.49 8	15,700.00	13,092.00	15,167.44	12,758.00	50.61	52.60	-33.372	-3,274.16	323.60	399.94	310.95	88.99	4.494		
18,000,00 13,092,00 15,467,44 12,758,00 54,61 56,19 33,372 -3,574,14 327,45 399,94 305,96 93,98 42,56 18,100,00 13,092,00 15,567,44 12,758,00 57,33 58,71 33,372 -3,674,14 327,45 399,94 302,56 97,38 4,107 16,200,00 13,092,00 15,674,41 12,758,00 58,89 60,00 33,372 -3,674,13 32,373 399,94 302,56 97,38 4,107 16,200,00 13,092,00 15,674,41 12,758,00 60,06 61,30 33,372 -3,674,13 32,373 399,94 299,11 100,83 3967 16,600,00 13,092,00 15,674,41 12,758,00 61,44 62,61 33,372 -4,074,12 330,33 399,94 299,11 100,83 3,987 16,000,00 13,092,00 16,074,41 12,758,00 62,21 63,93 33,371 -4,174,11 332,26 399,94 295,61 104,33 3833 16,700,00 13,092,00 16,674,41 12,758,00 64,20 65,26 33,371 -4,274,11 332,26 399,94 292,07 10,674,12 330,33 37,00 13,092,00 16,674,41 12,758,00 64,20 65,26 33,371 -4,274,11 332,26 399,94 292,07 107,67 3,700 16,800,00 13,092,00 16,874,41 12,758,00 66,97 67,94 33,371 -4,474,10 335,15 399,94 290,28 109,66 3,647 17,000,00 13,092,00 16,474 12,758,00 69,75 70,44 33,371 -4,474,10 335,15 399,94 290,28 109,66 3,647 17,000,00 13,092,00 16,674,41 12,758,00 69,75 70,44 33,371 -4,474,10 336,11 399,94 286,86 111,45 3,588 17,200,00 13,092,00 16,687,44 12,758,00 69,75 70,46 33,371 -4,474,00 336,11 399,94 286,86 111,45 3,581 17,200,00 13,092,00 16,687,44 12,758,00 75,34 74,36 33,371 -4,574,00 338,10 399,94 286,86 111,45 3,581 17,200,00 13,092,00 16,687,44 12,758,00 75,34 74,36 33,371 -4,574,00 338,10 399,94 288,86 111,45 3,591 3,476															
18,100,00 13,092,00 15,567,44 12,758,00 55,97 57,44 33,372 3,674,14 32,745 399,94 30,427 9,567 4,180 16,200,00 13,092,00 15,667,44 12,758,00 56,69 60,00 33,372 3,741,13 32,841 399,94 30,256 97,38 4,107 16,300,00 13,092,00 15,867,44 12,758,00 60,06 61,30 33,372 3,874,13 32,937 399,94 30,044 99,10 4,036 16,400,00 13,092,00 15,867,44 12,758,00 60,06 61,30 33,372 3,974,12 330,33 399,94 299,11 100,83 3,967 16,500,00 13,092,00 15,667,44 12,758,00 61,44 62,61 3,3371 4,174,11 332,6 3,399,4 295,11 10,63 3,383 3,867 18,700,00 13,092,00 16,167,44 12,758,00 64,20 65,58 66,59 33,371 4,174,11 332,6 3,999,4 295,17 10,757 3,70	15,900.00	13,092.00	15,367.44	12,758.00	53.27	54.97	-33.372	-3,474.15	325.52	399.94	307.64	92.30	4.333		
16,200.00 13,092.00 15,667.44 12,758.00 57.33 58.71 -33.372 -3,774.13 328.41 3309.94 302.56 97.38 4.107 16,500.00 13,092.00 15,567.44 12,758.00 60.66 61.30 -33.372 -3,874.12 330.33 399.94 299.11 100.83 3,967 16,500.00 13,092.00 15,567.44 12,758.00 60.66 61.30 -33.372 -3,974.12 330.33 399.94 299.11 100.83 3,967 16,500.00 13,092.00 16,607.44 12,758.00 62.81 63.93 -33.371 -4,174.11 332.26 399.94 299.11 100.83 3,867 16,500.00 13,092.00 16,607.44 12,758.00 62.81 63.93 -33.371 -4,174.11 332.26 399.94 295.61 104.33 3,863 16,600.00 13,092.00 16,607.44 12,758.00 65.58 66.99 -33.371 -4,374.10 335.15 399.94 290.28 109.66 10.370 18,090.00 13,092.00 16,627.44 12,758.00 65.58 66.99 33.371 -4,374.10 335.15 399.94 290.28 109.66 3,847 17,000.00 13,092.00 16,667.44 12,758.00 66.97 67.94 33.371 -4,474.10 335.15 399.94 290.28 109.66 3,847 17,000.00 13,092.00 16,667.44 12,758.00 65.96 69.97 67.94 33.371 -4,474.10 335.15 399.94 290.28 109.66 3,847 17,100.00 13,092.00 16,667.44 12,758.00 69.97 67.94 33.371 -4,674.09 337.07 399.94 290.28 109.66 3,847 17,100.00 13,092.00 16,667.44 12,758.00 69.75 70.84 33.371 -4,674.09 337.07 399.94 290.28 109.66 3,531 17,100.00 13,092.00 16,667.44 12,758.00 69.75 70.84 33.371 -4,674.09 337.07 399.94 290.28 109.66 3.531 17,100.00 13,092.00 16,667.44 12,758.00 77.14 77.30 33.371 -4,874.00 339.90 399.94 290.28 109.66 3.531 17,100.00 13,092.00 16,667.44 12,758.00 77.24 73.36 33.371 -4,874.08 339.00 399.94 290.28 109.66 3.531 17,100.00 13,092.00 16,667.44 12,758.00 77.24 73.36 33.371 -4,874.08 339.00 399.94 290.28 109.68 113.26 3.531 17,100.00 13,092.00 17,674.44 12,758.00 78.14 74.73 33.3371 -4,874.08 399.00 399.94 290.28 109.68 113.26 3.581 17,100.00 13,092.00 17,674.44 12,758.00 78.14 74.73 33.3371 -5,744.00 341.88 399.94 277.54 122.40 3.288 17,100.00 13,092.00 17,674.44 12,758.00 80.85 81.62 33.371 -5,744.05 341.77 399.94 277.54 122.40 3.288 18,000.00 13,092.00 17,674.44 12,758.00 80.85 81.62 33.371 -5,574.05 341.77 399.94 277.11 129.83 3.081 18,000.00 13,092.00 17,674.44 12,758.00 80.85 81.62 33.371 -	16,000.00	13,092.00	15,467.44	12,758.00	54.61	56.19	-33.372	-3,574.14	326.48	399.94	305.96	93.98	4.256		
18,300,00 13,002,00 15,767,44 12,758,00 60,06 61,30 -33,372 -3,874,13 329,37 309,94 299,11 10,83 3,967 16,600,00 13,002,00 15,667,44 12,758,00 62,61 63,93 -33,371 -4,174,11 332,26 399,94 299,11 10,83 3,833 3,833 16,700,00 13,002,00 16,1674,4 12,758,00 62,61 63,93 -33,371 -4,174,11 332,26 399,94 295,61 104,33 3,833 3,833 16,700,00 13,002,00 16,1674,4 12,758,00 62,61 63,93 -33,371 -4,174,11 332,26 399,94 295,61 104,33 3,833 3,833 16,700,00 13,002,00 16,1674,4 12,758,00 62,61 65,95 65,95 33,371 -4,174,11 332,22 399,94 293,65 106,10 3,770 16,900,00 13,002,00 16,1674,4 12,758,00 65,58 66,97 67,94 -33,371 -4,174,10 33,18 399,94 290,28 109,86 3,647 17,000,00 13,002,00 16,667,44 12,758,00 69,75 70,64 -33,371 -4,674,09 33,00 399,94 290,28 109,86 3,647 17,000,00 13,002,00 16,667,44 12,758,00 69,75 70,64 -33,371 -4,674,09 33,00 399,94 288,49 111,45 3,588 17,700,00 13,002,00 16,667,44 12,758,00 77,14 72,00 -33,371 -4,774,09 338,03 399,94 280,87 113,26 3,531 17,400,00 13,002,00 16,667,44 12,758,00 77,14 72,00 -33,371 -4,774,09 338,03 399,94 280,87 113,26 3,531 17,400,00 13,002,00 16,687,44 12,758,00 72,54 73,36 -33,371 -4,874,08 339,00 399,94 281,22 118,72 3,368 17,700,00 13,002,00 16,867,44 12,758,00 72,54 73,36 -33,371 -4,874,08 339,00 399,94 281,22 118,72 3,368 17,700,00 13,002,00 16,867,44 12,758,00 75,54 73,36 -33,371 -4,874,08 339,00 399,94 281,22 118,72 3,368 17,700,00 13,002,00 17,767,44 12,758,00 76,74 77,48 -33,371 -5,174,07 341,88 399,94 277,54 122,40 3,268 17,700,00 13,002,00 17,767,44 12,758,00 78,14 78,85 3,3371 -5,174,07 341,88 399,94 277,54 122,40 3,268 17,700,00 13,002,00 17,767,44 12,758,00 80,95 81,62 33,371 -5,174,07 341,88 399,94 277,54 122,40 3,268 17,700,00 13,002,00 17,767,44 12,758,00 80,95 81,62 33,371 -5,174,07 341,88 399,94 277,54 122,40 3,268 17,700,00 13,002,00 17,767,44 12,758,00 80,95 81,62 33,371 -5,174,07 341,88 399,94 277,50 114,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,219 124,24 3,21	16,100.00	13,092.00	15,567.44	12,758.00	55.97	57.44	-33.372	-3,674.14	327.45	399.94	304.27	95.67	4.180		
16,400,00 13,092,00 15,867,44 12,758,00 60,06 61,30 -33,372 -3,974,12 330,33 399,4 299,11 100,83 3,967 16,500,00 13,092,00 15,967,44 12,758,00 62,81 63,93 -33,371 -4,774,11 332,26 399,4 295,61 104,33 3,833 16,700,00 13,092,00 16,267,44 12,758,00 65,26 33,371 -4,774,11 332,26 399,4 295,61 104,33 3,833 16,900,00 13,092,00 16,267,44 12,758,00 65,58 65,59 43,371 -4,774,11 332,26 399,94 292,07 107,87 3,708 16,900,00 13,092,00 16,267,44 12,758,00 65,58 66,59 43,371 -4,374,10 334,18 399,94 292,07 107,87 3,708 16,900,00 13,092,00 16,667,44 12,758,00 66,36 69,9 33,371 -4,474,10 335,15 399,94 290,28 109,66 3,647 17,000,00 13,092,00 16,667,44 12,758,00 66,37 67,94 33,371 -4,474,10 335,15 399,94 290,28 109,66 3,647 17,000,00 13,092,00 16,667,44 12,758,00 69,36 69,9 33,371 -4,674,09 337,07 399,94 28,89 111,45 3,588 17,100,00 13,092,00 16,667,44 12,758,00 71,14 72,00 -33,371 -4,774,09 337,07 399,94 28,89 111,45 3,581 17,200,00 13,092,00 16,667,44 12,758,00 72,54 73,6 33,371 -4,774,09 338,03 399,94 28,87 115,07 3,476 17,000,00 13,092,00 16,667,44 12,758,00 72,54 73,6 33,371 -4,874,08 339,96 399,94 28,87 115,07 3,476 17,500,00 13,092,00 17,067,44 12,758,00 75,34 76,10 -33,371 -4,974,08 339,96 399,94 28,87 115,07 3,476 17,500,00 13,092,00 17,067,44 12,758,00 75,34 76,10 -33,371 -4,974,08 339,96 399,94 28,87 115,07 3,476 17,500,00 13,092,00 17,067,44 12,758,00 75,34 76,10 -33,371 -4,974,08 339,96 399,94 28,122 118,72 3,389 17,500,00 13,092,00 17,667,44 12,758,00 78,14 78,85 33,371 -5,574,05 34,877 399,94 27,99 120,55 3,318 17,500,00 13,092,00 17,667,44 12,758,00 85,16 83,17 8,85 33,371 -5,574,05 34,877 399,94 27,99 120,55 3,318 18,000,00 13,092,00 17,667,44 12,758,00 85,16 83,9 33,371 -5,574,05 34,477 399,94 27,19 129,83 3,081 18,000,00 13,092,00 17,667,44 12,758,00 85,16 83,3371 -5,574,05 34,77 399,94 27,19 129,83 3,081 18,000,00 13,092,00 17,667,44 12,758,00 85,16 83,3371 -5,574,05 34,77 399,94 28,00 13,358 29,94 28,10 29,94 28,10 29,94 28,10 29,94 28,10 29,94 28,10 29,94 28,10 29,94 28,10 29,94 28,10 29,94 2	16,200.00	13,092.00	15,667.44	12,758.00	57.33	58.71	-33.372	-3,774.13	328.41	399.94	302.56	97.38	4.107		
16,500.00 13,092.00 16,967.44 12,758.00 61.44 62.61 -33.372 -4,074.12 331.30 399.94 297.37 102.67 3.899 16,600.00 13,092.00 16,067.44 12,758.00 62.81 63.93 -33.371 -4,174.11 332.26 399.94 295.81 104.33 3.833 16,700.00 13,092.00 16,167.44 12,758.00 65.56 65.9 -33.371 -4,274.11 332.26 399.94 295.81 104.33 3.833 16,900.00 13,092.00 16,467.44 12,758.00 65.59 66.59 -33.371 -4,374.10 334.18 399.94 292.07 107.67 3.708 16,900.00 13,092.00 16,367.44 12,758.00 66.97 67.94 -33.371 -4,474.10 355.15 399.94 292.07 107.67 3.708 17,000.00 13,092.00 16,467.44 12,758.00 69.75 70.64 -33.371 -4,474.10 356.15 399.94 292.07 107.67 3.588 17,200.00 13,092.00 16,667.44 12,758.00 69.75 70.64 -33.371 -4,674.09 337.07 399.94 286.68 113.26 3.531 17,200.00 13,092.00 16,667.44 12,758.00 71.14 72.00 -33.371 -4,774.09 338.03 399.94 286.48 113.26 3.531 17,200.00 13,092.00 16,667.44 12,758.00 71.14 72.00 -33.371 -4,747.09 338.03 399.94 286.68 113.26 3.531 17,200.00 13,092.00 16,667.44 12,758.00 73.94 74.73 -33.371 -4,874.08 339.00 399.94 283.05 116.89 3.422 17,500.00 13,092.00 16,667.44 12,758.00 73.94 74.73 -33.371 -4,874.08 339.00 399.94 283.05 116.89 3.422 17,500.00 13,092.00 16,667.44 12,758.00 73.94 74.73 -33.371 -4,974.08 339.90 399.94 283.05 116.89 3.422 17,500.00 13,092.00 17,667.44 12,758.00 73.94 74.73 -33.371 -5,074.07 340.92 399.94 279.39 120.55 3.318 17,600.00 13,092.00 17,667.44 12,758.00 78.14 78.85 -33.371 -5,074.07 341.88 399.94 277.54 122.40 3.268 17,500.00 13,092.00 17,667.44 12,758.00 78.14 78.85 -33.371 -5,574.05 344.77 399.94 277.34 125.10 3.72 17,900.00 13,092.00 17,667.44 12,758.00 8.95 81.62 -33.371 -5,574.05 344.77 399.94 277.38 122.40 3.268 18,000.00 13,092.00 17,667.44 12,758.00 8.95 81.62 -33.371 -5,574.05 344.77 399.94 277.38 122.40 3.268 18,000.00 13,092.00 17,667.44 12,758.00 8.95 81.62 -33.371 -5,574.05 345.73 399.94 277.38 122.40 3.268 18,000.00 13,092.00 17,667.44 12,758.00 8.95 81.52 -33.371 -5,574.05 345.73 399.94 277.38 125.60 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 8.95 81.53 83.371 -5,574.05 3	16,300.00	13,092.00	15,767.44	12,758.00	58.69	60.00	-33.372	-3,874.13	329.37	399.94	300.84	99.10	4.036		
16,600.00 13,092.00 16,067.44 12,758.00 62.81 63.93 -33.371 -4,174.11 332.26 399.44 295.61 104.33 3.833 16,700.00 13,092.00 16,167.44 12,758.00 65.58 66.59 -33.371 -4,274.11 332.26 399.44 295.07 107.877 3.708 16,900.00 13,092.00 16,367.44 12,758.00 65.58 66.59 -33.371 -4,374.10 335.15 399.44 292.07 107.877 3.708 16,900.00 13,092.00 16,367.44 12,758.00 66.97 67.94 33.371 -4,474.10 335.15 399.44 290.28 109.66 3.647 17,000.00 13,092.00 16,667.44 12,758.00 69.75 70.64 -33.371 -4,474.10 335.15 399.44 290.28 109.66 3.647 17,100.00 13,092.00 16,667.44 12,758.00 76.47 72.00 13,092.00 16,667.44 12,758.00 77.14 72.00 13.33.11 -4,674.09 37.07 399.44 288.49 111.45 3.588 173,000.00 13,092.00 16,667.44 12,758.00 77.14 72.00 13.33.11 -4,674.09 37.07 399.44 288.49 111.45 3.588 173,000.00 13,092.00 16,667.44 12,758.00 77.14 72.00 13.33.11 -4,674.09 37.07 399.44 288.69 113.26 3.531 173,000.00 13,092.00 16,667.44 12,758.00 77.25 73.36 33.371 -4,874.08 339.00 399.44 288.05 116.89 3.422 174,000.00 13,092.00 16,667.44 12,758.00 75.34 76.10 -33.371 -4,974.08 339.96 399.44 281.22 118.72 3.369 17,500.00 13,092.00 16,667.44 12,758.00 75.34 76.10 -33.371 -4,974.08 399.96 399.44 281.22 118.72 3.369 17,700.00 13,092.00 17,667.44 12,758.00 76.34 77.48 3.33.11 -5,074.07 340.92 399.44 277.54 122.40 3.219 17,800.00 13,092.00 17,667.44 12,758.00 76.14 77.48 3.33.11 -5,174.07 341.88 399.44 277.54 122.40 3.219 17,800.00 13,092.00 17,667.44 12,758.00 78.14 78.85 33.371 -5,574.06 343.81 399.94 277.54 122.40 3.219 17,800.00 13,092.00 17,667.44 12,758.00 89.5 81.62 33.371 -5,574.06 343.81 399.94 277.54 126.00 3.172 124.24 3.219 17,800.00 13,092.00 17,667.44 12,758.00 89.5 81.62 33.371 -5,574.06 343.81 399.94 277.54 126.00 3.172 124.24 3.219 127.96 34.14 12	16,400.00	13,092.00	15,867.44	12,758.00	60.06	61.30	-33.372	-3,974.12	330.33	399.94	299.11	100.83	3.967		
16,700.00 13,092.00 16,167.44 12,758.00 64.20 65.26 -33.371 -4,274.11 333.22 399.94 293.85 106.10 3.770 16,800.00 13,092.00 16,267.44 12,758.00 66.58 66.59 -33.371 -4,374.10 334.18 399.94 292.07 107.877 3.708 16,900.00 13,092.00 16,367.44 12,758.00 66.97 67.94 -33.371 -4,474.10 336.11 399.94 292.07 107.877 3.708 170.00.00 13,092.00 16,667.44 12,758.00 69.75 70.64 -33.371 -4,674.09 337.07 399.94 288.49 111.45 3.588 177.100.00 13,092.00 16,667.44 12,758.00 69.75 70.64 -33.371 -4,674.09 337.07 399.94 286.68 113.26 3.531 17.200.00 13,092.00 16,667.44 12,758.00 72.54 73.36 -33.371 -4,674.09 337.07 399.94 286.68 113.26 3.531 17.200.00 13,092.00 16,667.44 12,758.00 72.54 73.36 -33.371 -4,774.09 338.00 399.94 284.87 115.07 3.476 17.300.00 13,092.00 16,667.44 12,758.00 75.94 74.73 -33.371 -4,974.08 339.00 399.94 281.22 118.72 3.369 17.500.00 13,092.00 16,667.44 12,758.00 75.34 76.10 -33.371 -4,974.08 339.96 399.94 281.22 118.72 3.369 17.500.00 13,092.00 17,067.44 12,758.00 76.74 77.88 33.371 -5,074.07 340.92 399.94 279.39 120.55 3.318 17,600.00 13,092.00 17,067.44 12,758.00 76.74 77.88 33.371 -5,074.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,767.44 12,758.00 78.14 78.85 -33.371 -5,274.06 342.84 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,374.06 342.84 399.94 277.54 122.40 3.172 17,900.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,374.06 342.84 399.94 277.54 12.60 3.172 17,900.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,574.05 344.77 399.94 271.98 127.96 3.125 18.00 3.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,574.05 344.77 399.94 271.98 127.96 3.125 18.00 3.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,574.05 344.77 399.94 271.98 127.96 3.125 18.00 3.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,574.05 345.73 399.94 271.11 129.83 3.081 18.00 3.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,574.05 345.73 399.94 266.86 133.58 2.994 18.00 13.00 13,092.00 17,674.44 12,758.00 80.95 81.62 33.371 -5,574.05 34	16,500.00	13,092.00	15,967.44	12,758.00	61.44	62.61	-33.372	-4,074.12	331.30	399.94	297.37	102.57	3.899		
16,800.00 13,092.00 16,267.44 12,758.00 65.58 66.59 -33.371 -4,374.10 334.18 399.94 290.28 109.66 3.647 17,000.00 13,092.00 16,367.44 12,758.00 66.97 67.94 -33.371 -4,474.10 335.15 399.94 290.28 109.66 3.647 17,000.00 13,092.00 16,667.44 12,758.00 68.36 69.29 -33.371 -4,674.10 336.11 399.94 288.49 111.45 3.588 17,200.00 13,092.00 16,667.44 12,758.00 71.14 72.00 -33.371 -4,774.09 337.07 399.94 286.68 113.26 3.531 17,200.00 13,092.00 16,667.44 12,758.00 771.14 72.00 -33.371 -4,774.09 338.03 399.94 284.87 115.07 3.476 17,300.00 13,092.00 16,867.44 12,758.00 72.54 73.36 -33.371 -4,874.08 339.00 399.94 284.87 115.07 3.476 17,500.00 13,092.00 16,867.44 12,758.00 73.94 74.73 33.371 -4,874.08 399.96 399.94 281.22 118.72 3.369 17,500.00 13,092.00 16,967.44 12,758.00 75.34 76.10 -33.371 -5,074.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 78.14 78.85 33.371 -5,374.06 342.84 399.94 277.50 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 273.84 126.10 3.172 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 273.84 126.10 3.172 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 277.98 127.96 3.125 18,000.00 13,092.00 17,667.44 12,758.00 85.66 83.00 -33.371 -5,674.06 343.81 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,667.44 12,758.00 85.67 8-33.371 -5,674.06 346.62 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.67 8-33.371 -5,674.06 346.62 399.94 260.00 139.56 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.67 8-33.371 -5,674.00 346.62 399.94 260.00 139.56 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.67 8-33.371 -5,674.00 346.62 399.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 260.00 139.94 26	16,600.00	13,092.00	16,067.44	12,758.00	62.81	63.93	-33.371	-4,174.11	332.26	399.94	295.61	104.33	3.833		
16,900.00 13,092.00 16,367.44 12,758.00 66.97 67.94 -33.371 -4,474.10 335.15 399.94 290.28 109.66 3.647 17,000.00 13,092.00 16,467.44 12,758.00 68.36 69.29 -33.371 -4,574.10 336.11 399.94 288.49 111.45 3.588 17,100.00 13,092.00 16,667.44 12,758.00 69.75 70.64 -33.371 -4,674.09 337.07 399.94 286.68 113.26 3.531 17,200.00 13,092.00 16,667.44 12,758.00 72.54 73.36 -33.371 -4,774.09 339.94 284.67 115.07 3.476 17,300.00 13,092.00 16,867.44 12,758.00 72.54 73.36 -33.371 -4,974.08 339.00 399.94 281.02 116.89 3.422 17,400.00 13,092.00 16,867.44 12,758.00 73.94 74.73 -33.371 -4,974.08 339.96 399.94 281.02 118.72 3.369 17,500.00 13,092.00 16,967.44 12,758.00 75.34 76.10 -33.371 -5,074.07 340.92 399.94 279.39 120.55 3.318 17,600.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,074.07 340.92 399.94 277.54 122.40 3.268 17,600.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,274.06 343.81 399.94 277.54 122.40 3.268 17,600.00 13,092.00 17,367.44 12,758.00 78.14 78.65 -33.371 -5,274.06 343.81 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.62 33.371 -5,674.05 344.77 399.94 270.11 129.83 3.081 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.62 33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.62 33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.69 33.371 -5,674.05 345.73 399.94 264.48 135.46 2.952 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.69 33.371 -5,674.05 345.73 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.69 33.371 -5,674.00 345.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,667.44 12,758.00 80.95 81.91 35 -33.371 -5,674.00 345.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,667.44 12,758.00 90.81 91.35 -33.371 -5,674.00 345.39 399.94 264.88 135.46 2.952 18,000.00 13,092.00 18,667.44 12,758.00 90.81 91.35 -33.371 -5	16,700.00	13,092.00	16,167.44	12,758.00	64.20	65.26	-33.371	-4,274.11	333.22	399.94	293.85	106.10	3.770		
17,000.00 13,092.00 16,667.44 12,758.00 68.36 69.29 -33.371 4,574.10 336.11 399.94 288.49 111.45 3.588 171,100.00 13,092.00 16,667.44 12,758.00 69.75 70.64 -33.371 4,674.09 337.07 399.94 286.68 113.26 3.531 17,200.00 13,092.00 16,667.44 12,758.00 71.14 72.00 -33.371 4,674.09 337.07 399.94 284.87 115.07 3.476 17,300.00 13,092.00 16,767.44 12,758.00 72.54 73.36 33.371 4,674.08 339.00 399.94 283.05 116.89 3.422 17,400.00 13,092.00 16,667.44 12,758.00 73.94 74.73 -33.371 4,974.08 339.00 399.94 281.22 118.72 3.369 17,500.00 13,092.00 16,667.44 12,758.00 75.34 76.10 -33.371 -5,074.07 340.82 399.94 281.22 118.72 3.369 17,500.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,267.44 12,758.00 78.14 78.85 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 89.95 81.62 -33.371 -5,574.05 344.77 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 89.95 81.62 -33.371 -5,574.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,667.44 12,758.00 89.95 81.62 -33.371 -5,574.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,667.44 12,758.00 89.95 81.62 -33.371 -5,574.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,667.44 12,758.00 89.95 81.62 -33.371 -5,574.05 344.77 399.94 270.11 129.83 3.081 18,000.00 13,092.00 17,667.44 12,758.00 85.76 83.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,000.00 13,092.00 17,667.44 12,758.00 85.76 85.78 -33.371 -5,574.05 345.73 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.96 85.96 85.97 83.371 -5,574.05 345.73 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.96 85.96 85.97 83.371 -5,574.05 345.73 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.96 85.96 85.97 83.371 -5,574.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.96 85.96 85.97 83.371 -5,574.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.56 85.57 83.371 -5,	16,800.00	13,092.00	16,267.44	12,758.00	65.58	66.59	-33.371	-4,374.10	334.18	399.94	292.07	107.87	3.708		
17,100.00 13,092.00 16,567.44 12,758.00 69.75 70.64 -33.371 -4,674.09 337.07 399.44 286.68 113.26 3.531 17,200.00 13,092.00 16,667.44 12,758.00 71.14 72.00 -33.371 -4,774.09 338.03 399.44 284.87 115.07 3.476 17,300.00 13,092.00 16,674.44 12,758.00 72.54 73.36 -33.371 -4,874.08 339.00 399.94 283.05 116.89 3.422 17,400.00 13,092.00 16,867.44 12,758.00 73.94 74.73 -33.371 -4,974.08 339.96 399.94 281.22 118.72 3.369 17,500.00 13,092.00 17,067.44 12,758.00 75.34 76.10 -33.371 -5,074.07 340.92 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 78.14 78.55 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 79.55 80.23 -33.371 -5,374.06 343.81 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,367.44 12,758.00 80.95 81.62 33.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 85.17 85.78 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 85.17 85.78 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 85.17 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 86.58 87.17 5.33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 89.95 85.58 -33.371 -5,674.00 34.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 89.95 85.59 83.371 -5,674.00 34.	16,900.00	13,092.00	16,367.44	12,758.00	66.97	67.94	-33.371	-4,474.10	335.15	399.94	290.28	109.66	3.647		
17,200.00 13,092.00 16,667.44 12,758.00 71.14 72.00 -33.371 -4,774.09 338.03 399.94 284.87 115.07 3.476 17,300.00 13,092.00 16,767.44 12,758.00 72.54 73.36 -33.371 -4,974.08 339.00 399.94 283.05 116.89 3.422 17,400.00 13,092.00 16,867.44 12,758.00 73.94 74.73 -33.371 -4,974.08 339.96 399.94 281.22 118.72 3.369 17,500.00 13,092.00 16,967.44 12,758.00 76.74 77.48 -33.371 -5,074.07 340.92 399.94 279.39 120.55 3.318 17,700.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 76.74 77.48 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 79.55 80.23 -33.371 -5,374.06 343.81 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,567.44 12,758.00 80.95 81.62 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,667.44 12,758.00 82.36 83.00 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,667.44 12,758.00 82.36 83.00 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.58 87.17 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,400.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,674.04 346.69 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,400.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,674.04 346.60 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,674.04 346.60 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,867.44 12,758.00 89.95 88.56 33.371 -5,674.00 36.56 399.94 266.90 143.04 2.756 2.952 18,000.00 13,092.00 18,867.44 12,758.00 99.81 91.35 -33.371 -6,674	17,000.00	13,092.00	16,467.44	12,758.00	68.36	69.29	-33.371	-4,574.10	336.11	399.94	288.49	111.45	3.588		
17,300.00 13,092.00 16,767.44 12,758.00 73.94 74.73 -33.371 -4,874.08 339.00 399.94 283.05 116.89 3.422 17,400.00 13,092.00 16,867.44 12,758.00 73.94 74.73 -33.371 -4,974.08 339.96 399.94 281.22 118.72 3.369 17,500.00 13,092.00 17,067.44 12,758.00 75.34 76.10 -33.371 -5,074.07 340.92 399.94 279.39 120.55 3.318 17,600.00 13,092.00 17,167.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 78.14 78.85 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,900.00 13,092.00 17,267.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,367.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.04 346.69 399.94 266.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,767.44 12,758.00 85.78 -33.371 -5,674.04 346.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,767.44 12,758.00 89.90 88.56 -33.371 -5,674.04 346.69 399.94 264.88 135.46 2.952 18,000.00 13,092.00 17,767.44 12,758.00 99.81 91.35 -33.371 -6,074.03 349.58 399.94 264.89 144.95 2.759 144.95 2.759 144.90	17,100.00											113.26			
17,400.00 13,092.00 16,867.44 12,758.00 73.94 74.73 -33.371 -4,974.08 339.96 399.94 281.22 118.72 3.369 17,500.00 13,092.00 16,967.44 12,758.00 75.34 76.10 -33.371 -5,074.07 340.92 399.94 279.39 120.55 3.318 17,600.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 78.14 78.85 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 79.55 80.23 -33.371 -5,374.06 343.81 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,467.44 12,758.00 82.36 83.00 -33.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,200.00 13,092.00 17,667.44 12,758.00 85.17 </td <td>17,200.00</td> <td>13,092.00</td> <td>16,667.44</td> <td>12,758.00</td> <td>71.14</td> <td>72.00</td> <td>-33.371</td> <td>-4,774.09</td> <td>338.03</td> <td>399.94</td> <td>284.87</td> <td>115.07</td> <td>3.476</td> <td></td> <td></td>	17,200.00	13,092.00	16,667.44	12,758.00	71.14	72.00	-33.371	-4,774.09	338.03	399.94	284.87	115.07	3.476		
17,500.00 13,092.00 16,967.44 12,758.00 75.34 76.10 -33.371 -5,074.07 340.92 399.94 279.39 120.55 3.318 17,600.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 78.14 78.85 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 79.55 80.23 -33.371 -5,374.06 343.81 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 -33.371 -5,574.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,467.44 12,758.00 82.36 83.00 -33.371 -5,574.05 344.77 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.05 345.73 399.94 270.11 129.83 3.081 18,000.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 346.69 399.94 266.36 133.58 2.994 18,300.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,674.04 346.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 86.58 87.17 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,967.44 12,758.00 89.95 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,867.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,667.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 254.99 144.95 2.759 148.800.00 13,092.00 18,667.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 254.99 144.95 2.759 148.800.00 13,092.00 18,667.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 254.99 144.95 2.759 148.800.00 13,092.00 18,667.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 254.99 144.95 2.759 148.800.00 13,092.00 18,667.44 12,758.00 90.81 91.35 -33.371 -6,074.01 35	17,300.00	13,092.00	16,767.44	12,758.00	72.54	73.36	-33.371	-4,874.08	339.00	399.94	283.05	116.89	3.422		
17,600.00 13,092.00 17,067.44 12,758.00 76.74 77.48 -33.371 -5,174.07 341.88 399.94 277.54 122.40 3.268 17,700.00 13,092.00 17,167.44 12,758.00 78.14 78.85 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 79.55 80.23 -33.371 -5,374.06 343.81 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,467.44 12,758.00 82.36 83.00 -33.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,774.04 347.66 399.94 266.36 133.58 2.994 18,300.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 260.70 139.24 2.872 18,500.00 13,092.00 17,867.44 12,758.00 89.95 -33.371 -6,074.03 350.54 399.94 258.80 141.14 2.834 18,700.00 13,092.00 17,967.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 254.99 144.95 2.759 18,800.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,074.01 354.39 399.94 254.99 144.95 2.759 18,800.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 254.99 144.95 2.759 18,800.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 254.99 144.95 2.759	17,400.00	13,092.00	16,867.44	12,758.00	73.94	74.73	-33.371	-4,974.08	339.96	399.94	281.22	118.72	3.369		
17,700.00 13,092.00 17,167.44 12,758.00 78.14 78.85 -33.371 -5,274.06 342.84 399.94 275.70 124.24 3.219 17,800.00 13,092.00 17,267.44 12,758.00 79.55 80.23 -33.371 -5,374.06 343.81 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,467.44 12,758.00 82.36 83.00 -33.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,774.04 347.66 399.94 266.36 133.58 2.994 18,300.00 13,092.00 17,667.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,967.44 12,758.00 89.40 89.95 -33.371 -6,074.03 350.54 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 90.81 91.35 -33.371 -6,274.02 351.51 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,274.02 352.47 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 93.64 94.15 -33.371 -6,474.01 354.39 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 93.64 94.15 -33.371 -6,474.01 354.39 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 93.64 94.15 -33.371 -6,474.01 354.39 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 95.66 95.55 -33.371 -6,474.01 354.39 399.94 254.99 144.95 2.759	17,500.00		16,967.44	12,758.00	75.34	76.10	-33.371	-5,074.07	340.92	399.94	279.39	120.55	3.318		
17,800.00 13,092.00 17,267.44 12,758.00 79.55 80.23 -33.371 -5,374.06 343.81 399.94 273.84 126.10 3.172 17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,467.44 12,758.00 82.36 83.00 -33.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,774.04 347.66 399.94 266.36 133.58 2.994 18,300.00 13,092.00 17,767.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,967.44 12,758.00 89.40 89.95 -33.371 -6,074.03 350.54 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 90.81 91.35 -33.371 -6,274.02 351.51 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2.723	17,600.00		17,067.44		76.74		-33.371	-5,174.07				122.40	3.268		
17,900.00 13,092.00 17,367.44 12,758.00 80.95 81.62 -33.371 -5,474.05 344.77 399.94 271.98 127.96 3.125 18,000.00 13,092.00 17,467.44 12,758.00 82.36 83.00 -33.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,774.04 347.66 399.94 266.36 133.58 2.994 18,300.00 13,092.00 17,767.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,967.44 12,758.00 89.40 89.95 -33.371 -6,074.03 350.54 399.94 260.70 139.24 2.872 18,600.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,174.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2.759 18,800.00 13,092.00 18,367.44 12,758.00 93.64 94.15 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2.723															
18,000.00 13,092.00 17,467.44 12,758.00 82.36 83.00 -33.371 -5,574.05 345.73 399.94 270.11 129.83 3.081 18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 347.66 399.94 266.36 133.58 2.994 18,300.00 13,092.00 17,867.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,967.44 12,758.00 89.95 -33.371 -6,074.03 350.54 399.94 260.70 139.24 2.872 18,600.00 13,092.00 18,167.44 12,758.00 90.81 91.35 </td <td></td>															
18,100.00 13,092.00 17,567.44 12,758.00 83.76 84.39 -33.371 -5,674.04 346.69 399.94 268.24 131.70 3.037 18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,674.04 347.66 399.94 266.36 133.58 2,994 18,300.00 13,092.00 17,767.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,967.44 12,758.00 89.40 89.95 -33.371 -6,074.03 350.54 399.94 260.70 139.24 2.872 18,600.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,074.02 351.51 399.94 258.80 141.14 2.834 18,800.00 13,092.00 18,167.44 12,758.00 92.23 </td <td>17,900.00</td> <td>13,092.00</td> <td>17,367.44</td> <td>12,758.00</td> <td>80.95</td> <td>81.62</td> <td>-33.371</td> <td>-5,474.05</td> <td>344.77</td> <td>399.94</td> <td>271.98</td> <td>127.96</td> <td>3.125</td> <td></td> <td></td>	17,900.00	13,092.00	17,367.44	12,758.00	80.95	81.62	-33.371	-5,474.05	344.77	399.94	271.98	127.96	3.125		
18,200.00 13,092.00 17,667.44 12,758.00 85.17 85.78 -33.371 -5,774.04 347.66 399.94 266.36 133.58 2.994 18,300.00 13,092.00 17,767.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2.952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2.912 18,500.00 13,092.00 17,967.44 12,758.00 89.40 89.95 -33.371 -6,074.03 350.54 399.94 260.70 139.24 2.872 18,600.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,174.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,367.44 12,758.00 93.64 </td <td></td>															
18,300.00 13,092.00 17,767.44 12,758.00 86.58 87.17 -33.371 -5,874.04 348.62 399.94 264.48 135.46 2,952 18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2,912 18,500.00 13,092.00 17,967.44 12,758.00 89.40 89.95 -33.371 -6,074.03 350.54 399.94 260.70 139.24 2.872 18,600.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,174.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 95.65 </td <td></td>															
18,400.00 13,092.00 17,867.44 12,758.00 87.99 88.56 -33.371 -5,974.03 349.58 399.94 262.59 137.35 2,912 18,500.00 13,092.00 17,967.44 12,758.00 89.40 89.95 -33.371 -6,074.03 350.54 399.94 260.70 139.24 2.872 18,600.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,174.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2,759 18,900.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2,723															
18,600.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,174.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2.723															
18,600.00 13,092.00 18,067.44 12,758.00 90.81 91.35 -33.371 -6,174.02 351.51 399.94 258.80 141.14 2.834 18,700.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2.723		13 002 00													
18,700.00 13,092.00 18,167.44 12,758.00 92.23 92.75 -33.371 -6,274.02 352.47 399.94 256.90 143.04 2.796 18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2.723															
18,800.00 13,092.00 18,267.44 12,758.00 93.64 94.15 -33.371 -6,374.01 353.43 399.94 254.99 144.95 2.759 18,900.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2.723															
18,900.00 13,092.00 18,367.44 12,758.00 95.06 95.55 -33.371 -6,474.01 354.39 399.94 253.08 146.86 2.723															
	19,000.00	13,092.00	18,467.44		96.47	96.95	-33.371	-6,574.00	355.36	399.94	251.17	148.77	2.688		





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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method: Output errors are at

Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

	Jigii.	•	04 00111 (1	NAD83) - E	-r oumpoo	arr ou com	10011 011 1	1411 1 00 0 1					Offset Site Error:	0.00 us
urvey Prog	ram: 0-M	MWD+HRGM Off	in a t	Comi I	Maior Axis		Offset Wellb	ara Cantra	Die	Rule Assi	gned:		Offset Well Error:	1.00 us
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
19,100.00	13,092.00	18,567.44	12,758.00	97.89	98.35	-33.371	-6,674.00	356.32	399.94	249.25	150.69	2.654		
19,200.00	13,092.00	18,667.44	12,758.00	99.30	99.75	-33.371	-6,773.99	357.28	399.94	247.33	152.61	2.621		
19,300.00	13,092.00	18,767.44	12,758.00	100.72	101.16	-33.371	-6,873.99	358.24	399.94	245.40	154.53	2.588		
19,400.00	13,092.00	18,867.44	12,758.00	102.14	102.56	-33.371	-6,973.98	359.21	399.94	243.48	156.46	2.556		
19,500.00	13,092.00	18,967.44	12,758.00	103.55	103.97	-33.371	-7,073.98	360.17	399.94	241.55	158.39	2.525		
19,600.00	13,092.00	19,067.44	12,758.00	104.97	105.38	-33.371	-7,173.98	361.13	399.94	239.61	160.33	2.495		
19,700.00	13,092.00	19,167.44	12,758.00	106.39	106.79	-33.371	-7,273.97	362.09	399.94	237.68	162.26	2.465		
19,800.00	13,092.00	19,267.44	12,758.00	107.81	108.19	-33.370	-7,373.97	363.06	399.94	235.74	164.20	2.436		
19,900.00	13,092.00	19,367.44	12,758.00	109.23	109.60	-33.370	-7,473.96	364.02	399.94	233.79	166.14	2.407		
20,000.00	13,092.00	19,467.44	12,758.00	110.65	111.01	-33.370	-7,573.96	364.98	399.94	231.85	168.09	2.379		
20,100.00	13,092.00	19,567.44	12,758.00	112.07	112.43	-33.370	-7,673.95	365.94	399.94	229.90	170.04	2.352		
20,200.00	13,092.00	19,667.44	12,758.00	113.49	113.84	-33.370	-7,773.95	366.91	399.94	227.95	171.99	2.325		
20,300.00	13,092.00	19,767.44	12,758.00	114.91	115.25	-33.370	-7,873.94	367.87	399.94	226.00	173.94	2.299		
20,400.00	13,092.00	19,867.44	12,758.00	116.34	116.66	-33.370	-7,973.94	368.83	399.94	224.04	175.89	2.274		
20,500.00	13,092.00	19,967.44	12,758.00	117.76	118.08	-33.370	-8,073.93	369.79	399.94	222.09	177.85	2.249		
20,600.00	13,092.00	20,067.44	12,758.00	119.18	119.49	-33.370	-8,173.93	370.76	399.94	220.13	179.81	2.224		
20,700.00	13,092.00	20,167.44	12,758.00	120.60	120.91	-33.370	-8,273.92	371.72	399.94	218.16	181.77	2.200		
20,800.00	13,092.00	20,267.44	12,758.00	122.03	122.32	-33.370	-8,373.92	372.68	399.94	216.20	183.73	2.177		
20,900.00	13,092.00	20,367.44	12,758.00	123.45	123.74	-33.370	-8,473.92	373.64	399.94	214.24	185.70	2.154		
21,000.00	13,092.00	20,467.44	12,758.00	124.87	125.15	-33.370	-8,573.91	374.60	399.94	212.27	187.67	2.131		
21,100.00	13,092.00	20,567.44	12,758.00	126.30	126.57	-33.370	-8,673.91	375.57	399.94	210.30	189.64	2.109		
21,200.00	13,092.00	20,667.44	12,758.00	127.72	127.99	-33.370	-8,773.90	376.53	399.94	208.33	191.61	2.087		
21,300.00	13,092.00	20,767.44	12,758.00	129.15	129.41	-33.370	-8,873.90	377.49	399.93	206.36	193.58	2.066		
21,400.00	13,092.00	20,867.44	12,758.00	130.57	130.82	-33.370	-8,973.89	378.45	399.93	204.38	195.55	2.045		
21,500.00	13,092.00	20,967.44	12,758.00	132.00	132.24	-33.370	-9,073.89	379.42	399.93	202.41	197.53	2.025		
21,600.00	13,092.00	21,067.44	12,758.00	133.42	133.66	-33.370	-9,173.88	380.38	399.93	200.43	199.51	2.005		
21,700.00	13,092.00	21,167.44	12,758.00	134.85	135.08	-33.370	-9,273.88	381.34	399.93	198.45	201.49	1.985		
21,800.00	13,092.00	21,267.44	12,758.00	136.27	136.50	-33.370	-9,373.87	382.30	399.93	196.47	203.47	1.966		
21,900.00	13,092.00	21,367.44	12,758.00	137.70	137.92	-33.370	-9,473.87	383.27	399.93	194.49	205.45	1.947		
22,000.00	13,092.00	21,467.44	12,758.00	139.12	139.34	-33.370	-9,573.86	384.23	399.93	192.50	207.43	1.928		
22,100.00	13,092.00	21,567.44	12,758.00	140.55	140.76	-33.370	-9,673.86	385.19	399.93	190.52	209.41	1.910		
22,200.00 22,300.00	13,092.00 13,092.00	21,667.44 21,767.44	12,758.00 12,758.00	141.98 143.40	142.18 143.60	-33.370 -33.370	-9,773.85 -9,873.85	386.15 387.12	399.93 399.93	188.53 186.55	211.40 213.39	1.892 1.874		
22,400.00	13,092.00	21,867.44	12,758.00	144.83	145.03	-33.370	-9,973.85	388.08	399.93	184.56	215.38	1.857		
22,500.00 22,600.00	13,092.00 13,092.00	21,967.44 22,067.44	12,758.00 12,758.00	146.26 147.69	146.45 147.87	-33.370 -33.370	-10,073.84 -10,173.84	389.04 390.00	399.93 399.93	182.57 180.58	217.37 219.36	1.840 1.823		
22,000.00	13,092.00	22,007.44	12,138.00	147.09	147.87	-33.3/0	-10,1/3.84	390.00	399.93	160.58	∠19.30	1.623		
22,656.30	13,092.00	22,123.74	12,758.00	148.49	148.67	-33.370	-10,230.13	390.55	399.93	179.46	220.48	1.814 SF		
22,700.00	13,092.00	22,125.24	12,758.00	149.11	148.69	-33.370	-10,231.64	390.56	402.15	185.39	216.76	1.855		
22,728.24	13,092.00	22,125.24	12,758.00	149.52	148.69	-33.370	-10,231.64	390.56	406.09	192.88	213.21	1.905		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Offset Des	g	•	· ·		·		512H - OH - F			Dul- 4			Offset Site Error:	0.00 usf
urvey Progra Refer		MWD+HRGM Off	set	Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	1.00	1.00	-90.468	-10.05	-1,230.19	1,230.23					
100.00	100.00	100.00	100.00	1.08	1.08	-90.468	-10.05	-1,230.19	1,230.23	1,228.06	2.17	567.372		
200.00	200.00	200.00	200.00	1.60	1.60	-90.468	-10.05	-1,230.19	1,230.23	1,227.03	3.20	384.782		
300.00	300.00	300.00	300.00	2.01	2.01	-90.468	-10.05	-1,230.19	1,230.23	1,226.21	4.02	306.089		
400.00	400.00	400.00	400.00	2.35	2.35	-90.468	-10.05	-1,230.19	1,230.23	1,225.53	4.71	261.463		
500.00	500.00	500.00	500.00	2.65	2.65	-90.468	-10.05	-1,230.19	1,230.23	1,224.92	5.31	231.761		
600.00	600.00	600.00	600.00	2.93	2.93	-90.468	-10.05	-1,230.19	1,230.23	1,224.38	5.85	210.155		
700.00	700.00	700.00	700.00	3.18	3.18	-90.468	-10.05	-1,230.19	1,230.23	1,223.87	6.36	193.520		
800.00	800.00	800.00	800.00	3.41	3.41	-90.468	-10.05	-1,230.19	1,230.23	1,223.40	6.83	180.195		
900.00	900.00	900.00	900.00	3.64	3.64	-90.468	-10.05	-1,230.19	1,230.23	1,222.96	7.27	169.206		
1,000.00	1,000.00	1,000.00	1,000.00	3.85	3.85	-90.468	-10.05	-1,230.19	1,230.23	1,222.54	7.69	159.937		
1,100.00	1,100.00	1,100.00	1,100.00	4.05	4.05	-90.468	-10.05	-1,230.19	1,230.23	1,222.14	8.09	151.980		
1,200.00	1,200.00	1,200.00	1,200.00	4.24	4.24	-90.468	-10.05	-1,230.19	1,230.23	1,221.75	8.48	145.050		
1,300.00	1,300.00	1,300.00	1,300.00	4.43	4.43	-90.468	-10.05	-1,230.19	1,230.23	1,221.38	8.85	138.941		
1,400.00	1,400.00	1,400.00	1,400.00	4.61	4.61	-90.468	-10.05	-1,230.19	1,230.23	1,221.02	9.21	133.503		
1,500.00	1,500.00	1,500.00	1,500.00	4.78	4.78	-90.468	-10.05	-1,230.19	1,230.23	1,220.67	9.56	128.620 CC, E	S	
1,600.00	1,599.98	1,582.03	1,582.02	4.98	4.94	99.544	-11.07	-1,230.78	1,231.25	1,221.45	9.80	125.579		
1,620.70	1,620.67	1,600.00	1,599.98	4.99	4.99	99.544	-11.56	-1,231.07	1,231.72	1,221.88	9.83	125.262		
1,700.00	1,699.89	1,669.63	1,669.54	5.07	5.07	99.554	-14.24	-1,232.63	1,234.05	1,224.12	9.94	124.174		
1,800.00	1,799.81	1,769.58	1,769.38	5.23	5.21	99.554	-18.42	-1,235.06	1,237.22	1,227.04	10.17	121.646		
1,900.00	1,899.72	1,869.53	1,869.21	5.41	5.38	99.554	-22.59	-1,237.48	1,240.38	1,229.94	10.44	118.820		
2,000.00	1,999.63	1,969.48	1,969.04	5.60	5.57	99.554	-26.76	-1,239.91	1,243.54	1,232.82	10.71	116.064		
2,100.00	2,099.54	2,069.43	2,068.88	5.80	5.78	99.554	-30.93	-1,242.34	1,246.70	1,235.71	10.99	113.418		
2,200.00	2,199.45	2,169.38	2,168.71	6.02	6.00	99.554	-35.11	-1,244.77	1,249.86	1,238.59	11.27	110.879		
2,300.00	2,299.36	2,269.33	2,268.54	6.24	6.23	99.553	-39.28	-1,247.19	1,253.02	1,241.47	11.55	108.443		
2,400.00	2,399.27	2,369.28	2,368.38	6.47	6.46	99.553	-43.45	-1,249.62	1,256.18	1,244.34	11.84	106.104		
2,500.00	2,499.18	2,469.23	2,468.21	6.72	6.71	99.553	-47.62	-1,252.05	1,259.34	1,247.22	12.13	103.859		
2,600.00	2,599.10	2,569.18	2,568.04	6.96	6.96	99.553	-51.80	-1,254.48	1,262.50	1,250.09	12.41	101.703		
2,700.00	2,699.01	2,669.13	2,667.88	7.22	7.23	99.553	-55.97	-1,256.90	1,265.66	1,252.96	12.70	99.633		
2,800.00	2,798.92	2,769.08	2,767.71	7.48	7.49	99.553	-60.14	-1,259.33	1,268.83	1,255.83	12.99	97.644		
2,900.00	2,898.83	2,869.03	2,867.54	7.74	7.77	99.553	-64.31	-1,261.76	1,271.99	1,258.70	13.29	95.732		
3,000.00	2,998.74	2,968.98	2,967.38	8.01	8.04	99.553	-68.49	-1,264.19	1,275.15	1,261.57	13.58	93.894		
3,100.00	3,098.65	3,068.93	3,067.21	8.28	8.32	99.552	-72.66	-1,266.62	1,278.31	1,264.43	13.88	92.126		
3,200.00	3,198.56	3,168.88	3,167.04	8.56	8.61	99.552	-76.83	-1,269.04	1,281.47	1,267.30	14.17	90.425		
3,300.00	3,298.47	3,268.83	3,266.88	8.84	8.90	99.552	-81.00	-1,271.47	1,284.63	1,270.16	14.47	88.787		
3,400.00	3,398.39	3,368.78	3,366.71	9.13	9.19	99.552	-85.18	-1,273.90	1,287.79	1,273.02	14.77	87.210		
3,500.00	3,498.30	3,468.73	3,466.54	9.41	9.49	99.552	-89.35	-1,276.33	1,290.95	1,275.89	15.07	85.690		
3,600.00	3,598.21	3,568.68	3,566.38	9.70	9.79	99.552	-93.52	-1,278.75	1,294.11	1,278.75	15.37	84.224		
3,700.00	3,698.12	3,668.63	3,666.21	9.99	10.09	99.552	-97.69	-1,281.18	1,297.27	1,281.61	15.67	82.811		
3,800.00 3,900.00	3,798.03 3,897.94	3,768.58 3,868.53	3,766.04 3,865.88	10.29 10.58	10.39 10.70	99.551 99.551	-101.87 -106.04	-1,283.61 -1,286.04	1,300.44 1,303.60	1,284.47 1,287.33	15.97 16.27	81.448 80.131		
4,000.00	3,997.85	3,968.48	3,965.71	10.88	11.00	99.551	-110.21	-1,288.46	1,306.76	1,290.19	16.57	78.860		
4,100.00	4,097.76	4,068.43	4,065.54	11.18	11.31	99.551	-114.38	-1,290.89	1,300.70	1,293.05	16.87	77.632		
4,200.00	4,097.76	4,168.38	4,165.38	11.48	11.62	99.551	-114.56	-1,290.89	1,313.08	1,295.90	17.18	76.444		
4,300.00	4,297.59	4,268.33	4,265.21	11.78	11.93	99.551	-122.73	-1,295.75	1,316.24	1,298.76	17.18	75.296		
4,400.00	4,397.50	4,368.28	4,365.04	12.08	12.25	99.551	-126.90	-1,298.17	1,319.40	1,301.62	17.79	74.185		
4,500.00	4,497.41	4,468.23	4,464.88	12.39	12.56	99.551	-131.07	-1,300.60	1,322.56	1,304.47	18.09	73.110		
4,600.00	4,597.32	4,568.18	4,564.71	12.69	12.88	99.550	-135.25	-1,303.03	1,325.72	1,307.33	18.40	72.068		
4,700.00	4,697.23	4,668.13	4,664.54	13.00	13.19	99.550	-139.42	-1,305.46	1,328.88	1,310.18	18.70	71.059		
4,800.00	4,797.14	4,768.08	4,764.38	13.31	13.51	99.550	-143.59	-1,307.88	1,332.05	1,313.04	19.01	70.081		
4,900.00	4,897.05	4,868.03	4,864.21	13.62	13.83	99.550	-147.76	-1,310.31	1,335.21	1,315.89	19.31	69.133		
5,000.00	4,996.97	4,967.98	4,964.05	13.92	14.15	99.550	-151.94	-1,312.74	1,338.37	1,318.75	19.62	68.214		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

Measured Depth (usft) 5,100.00 5,200.00	rence Vertical	MWD+HRGM Off												
Depth (usft) 5,100.00			set	Semi M	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
5,100.00	Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5 200 00	5,096.88	5,067.93	5,063.88	14.23	14.47	99.550	-156.11	-1,315.17	1,341.53	1,321.60	19.93	67.321		
5,200.00	5,196.79	5,167.88	5,163.71	14.55	14.79	99.550	-160.28	-1,317.59	1,344.69	1,324.45	20.23	66.455		
5,300.00	5,296.70	5,267.83	5,263.55	14.86	15.11	99.550	-164.45	-1,320.02	1,347.85	1,327.31	20.54	65.614		
5,400.00	5,396.61	5,367.78	5,363.38	15.17	15.43	99.550	-168.63	-1,322.45	1,351.01	1,330.16	20.85	64.797		
5,500.00	5,496.52	5,467.73	5,463.21	15.48	15.76	99.549	-172.80	-1,324.88	1,354.17	1,333.01	21.16	64.003		
5,600.00	5,596.43	5,567.68	5,563.05	15.79	16.08	99.549	-176.97	-1,327.30	1,357.33	1,335.87	21.47	63.230		
5,700.00	5,696.34	5,667.63	5,662.88	16.11	16.40	99.549	-181.14	-1,329.73	1,360.49	1,338.72	21.78	62.480		
5,800.00	5,796.26	5,767.58	5,762.71	16.42	16.73	99.549	-185.32	-1,332.16	1,363.66	1,341.57	22.08	61.749		
5,900.00	5,896.17	5,867.53	5,862.55	16.74	17.05	99.549	-189.49	-1,334.59	1,366.82	1,344.42	22.39	61.038		
6,000.00	5,996.08	5,967.48	5,962.38	17.05	17.38	99.549	-193.66	-1,337.01	1,369.98	1,347.28	22.70	60.346		
6,100.00	6,095.99	6,067.43	6,062.21	17.37	17.71	99.549	-197.83	-1,339.44	1,373.14	1,350.13	23.01	59.672		
6,200.00	6,195.90	6,167.38	6,162.05	17.68	18.03	99.549	-202.01	-1,341.87	1,376.30	1,352.98	23.32	59.016		
6,300.00	6,295.81	6,267.33	6,261.88	18.00	18.36	99.548	-206.18	-1,344.30	1,379.46	1,355.83	23.63	58.376		
6,400.00	6,395.72	6,367.29	6,361.71	18.32	18.69	99.548	-210.35	-1,346.72	1,382.62	1,358.68	23.94	57.752		
6,500.00	6,495.63	6,467.24	6,461.55	18.63	19.01	99.548	-214.52	-1,349.15	1,385.78	1,361.53	24.25	57.144		
6,600.00	6,595.55	6,567.19	6,561.38	18.95	19.34	99.548	-218.70	-1,351.58	1,388.94	1,364.38	24.56	56.551		
6,700.00	6,695.46	6,667.14	6,661.21	19.27	19.67	99.548	-222.87	-1,354.01	1,392.10	1,367.23	24.87	55.973		
6,800.00	6,795.37	6,767.09	6,761.05	19.59	20.00	99.548	-227.04	-1,356.43	1,395.27	1,370.08	25.18	55.408		
6,900.00	6,895.28	6,867.04	6,860.88	19.91	20.33	99.548	-231.21	-1,358.86	1,398.43	1,372.93	25.49	54.857		
7,000.00	6,995.19	6,966.99	6,960.71	20.23	20.66	99.548	-235.39	-1,361.29	1,401.59	1,375.78	25.80	54.319		
7,100.00	7,095.10	7,066.94	7,060.55	20.54	20.99	99.548	-239.56	-1,363.72	1,404.75	1,378.63	26.11	53.794		
7,200.00	7,195.01	7,166.89	7,160.38	20.86	21.32	99.547	-243.73	-1,366.14	1,407.91	1,381.49	26.42	53.281		
7,300.00	7,294.92	7,266.84	7,260.21	21.18	21.65	99.547	-247.90	-1,368.57	1,411.07	1,384.34	26.74	52.779		
7,400.00	7,394.84	7,366.79	7,360.05	21.50	21.98	99.547	-252.08	-1,371.00	1,414.23	1,387.18	27.05	52.289		
7,500.00	7,494.75	7,466.74	7,459.88	21.82	22.31	99.547	-256.25	-1,373.43	1,417.39	1,390.03	27.36	51.809		
7,600.00	7,594.66	7,566.69	7,559.71	22.14	22.64	99.547	-260.42	-1,375.85	1,420.55	1,392.88	27.67	51.341		
7,700.00	7,694.57	7,666.64	7,659.55	22.46	22.97	99.547	-264.59	-1,378.28	1,423.71	1,395.73	27.98	50.882		
7,800.00	7,794.48	7,766.59	7,759.38	22.78	23.30	99.547	-268.77	-1,380.71	1,426.88	1,398.58	28.29	50.434		
7,900.00	7,894.39	7,866.54	7,859.21	23.10	23.63	99.547	-272.94	-1,383.14	1,430.04	1,401.43	28.60	49.995		
8,000.00	7,994.30	7,966.49	7,959.05	23.42	23.96	99.547	-277.11	-1,385.56	1,433.20	1,404.28	28.92	49.565		
8,100.00	8,094.21	8,066.44	8,058.88	23.75	24.29	99.547	-281.28	-1,387.99	1,436.36	1,407.13	29.23	49.145		
8,200.00	8,194.13	8,166.39	8,158.71	24.07	24.63	99.546	-285.46	-1,390.42	1,439.52	1,409.98	29.54	48.733		
8,300.00	8,294.04	8,266.34	8,258.55	24.39	24.96	99.546	-289.63	-1,392.85	1,442.68	1,412.83	29.85	48.329		
8,400.00	8,393.95	8,366.29	8,358.38	24.71	25.29	99.546	-293.80	-1,395.28	1,445.84	1,415.68	30.16	47.934		
8,500.00	8,493.86	8,466.24	8,458.21	25.03	25.62	99.546	-297.98	-1,397.70	1,449.00	1,418.53	30.47	47.547		
8,600.00	8,593.77	8,566.19	8,558.05	25.35	25.95	99.546	-302.15	-1,400.13	1,452.16	1,421.38	30.79	47.168		
8,700.00	8,693.68	8,666.14	8,657.88	25.67	26.29	99.546	-306.32	-1,402.56	1,455.32	1,424.23	31.10	46.796		
8,800.00	8,793.59	8,766.09	8,757.71	26.00	26.62	99.546	-310.49	-1,404.99	1,458.49	1,427.07	31.41	46.432		
8,900.00	8,893.50	8,866.04	8,857.55	26.32	26.95	99.546	-314.67	-1,407.41	1,461.65	1,429.92	31.72	46.074		
9,000.00	8,993.42	8,965.99	8,957.38	26.64	27.28	99.546	-318.84	-1,409.84	1,464.81	1,432.77	32.04	45.723		
9,100.00	9,093.33	9,065.94	9,057.21	26.96	27.62	99.546	-323.01	-1,412.27	1,467.97	1,435.62	32.35	45.380		
9,200.00	9,193.24	9,165.89	9,157.05	27.29	27.95	99.545	-327.18	-1,414.70	1,471.13	1,438.47	32.66	45.042		
9,300.00	9,293.15	9,265.84	9,256.88	27.61	28.28	99.545	-331.36	-1,417.12	1,474.29	1,441.32	32.97	44.711		
9,400.00	9,393.06	9,365.79	9,356.71	27.93	28.62	99.545	-335.53	-1,419.55	1,477.45	1,444.17	33.29	44.386		
9,500.00 9,600.00	9,492.97 9,592.88	9,465.74 9,565.69	9,456.55 9,556.38	28.25 28.58	28.95 29.28	99.545 99.545	-339.70 -343.87	-1,421.98 -1,424.41	1,480.61 1,483.77	1,447.01 1,449.86	33.60 33.91	44.067 43.754		
9,700.00	9,692.79	9,665.64	9,656.21	28.90	29.62	99.545	-348.05 -352.22	-1,426.83 -1,429.26	1,486.93	1,452.71	34.22	43.447		
9,800.00	9,792.71	9,765.59	9,756.05	29.22	29.95	99.545	-352.22 -356.30		1,490.10	1,455.56	34.54	43.145		
9,900.00	9,892.62	9,865.54	9,855.88	29.55	30.28 30.62	99.545	-356.39 -360.56	-1,431.69 -1,434.12	1,493.26	1,458.41	34.85 35.16	42.848		
10,000.00 10,100.00	9,992.53 10,092.44	9,965.49 10,065.44	9,955.71 10,055.55	29.87 30.19	30.62	99.545 99.545	-360.56 -364.74	-1,434.12 -1,436.54	1,496.42 1,499.58	1,461.25 1,464.10	35.16 35.48	42.557 42.271		
	10,092.44	10,165.39	10,055.55	30.19	31.29	99.544	-368.91	-1,438.97	1,502.74	1,466.95	35.79	41.989		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

The part	0.00 usf
	1.00 usf
1,000.000 1,00	
19.000.00 10.48220 10.48220 10.58519 10	
10,000 0 10,000 1 0,00	
10,700,00 0,6891 9 0,6861 9 0,6861 9 0,6864 9 32.3 32.6 9 69.44 38.9 7 4.4851 9 1,519.5 4 1,811.1 0,75 8 40.653 1,000,00 1,0	
1,000.00 10,791.82 10,706.00 10,794.82 32.46 32.06 99.44 -39.98 -1,485.96 1,524.77 1,484.96 37.67 40.999 -1,000.00 10,691.64 10,694.69 10,694.69 33.43 33.20 99.44 -40.22 -1,485.30 1,500.01 1,489.20 36.61 36.61 36.61 1,000.00 1,0091.60 10,694.69 11,505.20 33.43 34.20 99.44 -40.64 -1,469.20 1,531.10 1,482.20 36.61 36.61 36.61 1,000.00 1,291.37 17,284.60 13,535.50 34.60 34.60 99.44 -40.64 -1,469.20 1,531.10 1,482.20 36.61 36.	
1,000.00 1,000.00	
11,0000 1,09164 1,09499 1,09499 1,09490 2,311 338 9 9.544 40.029 1,583 1,582 3,480 3,940 3,940 1,12000 1,119146 1,14689 1,153.15 1,06484 1,1468 1,146	
11,100.00 11,091.55 11,094.94 11,543.86 33.43 34.26 96.544 41.06.86 11,460.86 15,331.95 14,462.86 38.62 30.622 11,100.00 11,291.27 11,252.86 31.62 32.62 3	
11,000.00	
11,0000 11,291,37 11,284.8 11,285.3 34.0 14.6 99.543	
11,000.00 11,391.29 11,364.79 11,365.39 34.40 35.30 90.543 418.98 1,468.10 1,540.67 1,501.12 39.55 38.988 11,500.00 11,491.00	
11,000 00 11,000	
11,0000 11,59111 11,596.69 11,595.05 35.06 35.67 99.543 4.273 2.1472.99 15,496.99 15,006.77 4.04 38.288 11,800.00 11,709.39 11,704.59 11,752.72 35.70 36.64 99.543 4.315.00 1.475.33 15.01 15.006.77 4.04 38.288 11,800.00 11,809.83 11,804.59 11,752.72 35.70 36.64 99.543 4.315.00 1.475.33 15.01 15.006.77 4.04 93.288 11,800.00 11,809.83 11,805.59 11,805.59 36.03 36.97 99.543 4.315.00 1.476.84 1.553.32 1.512.51 40.80 38.071 11,900.00 11,809.83 11,872.01 11,800.00 80.05 37.00 99.543 4.401.66 1.480.24 15.557 11,515.57 41.14 37.835 11,200.00 11,809.80 11,805.00 11,805.	
11,700.00	
11,900.00 11,909.91 11,764.59 11,752.72 35.70 36.64 99.543 4.39.67 1.477.81 1,553.32 1,512.51 40.80 38.071 11,900.00 11,900.81 11,864.54 11,862.55 36.03 36.97 99.543 4.39.84 1.480.24 1.566.48 15.155.36 41.12 37.852 11,900.00 11,900.80 11,905.00 11,973.81 36.33 37.00 99.543 4.40.16 1.480.26 1.556.48 15.155.36 41.12 37.852 11,200.00 11,900.80 11,905.00 11,973.81 36.33 37.37 99.549 4.44.01 1.482.68 1.559.01 1,517.76 41.45 37.815 11,200.00 12,000.80 12,102.90 12,000.00 36.36 37.44 -90.471 4.44.50 1.482.68 1.559.01 1,517.76 41.46 37.576 11,200.00 12,000.80 12,102.90 12,102.00 36.36 37.44 -90.471 4.44.50 1.482.96 1.559.27 1,517.77 41.50 37.576 11,200.00 12,900.80 12,202.89 12,200.00 36.36 37.48 -90.473 4.44.58 1.482.99 1.559.27 1,517.77 41.50 37.570 11,200.00 12,200.80 12,202.89 12,200.00 36.37 37.49 -90.473 4.44.58 1.482.99 1.559.27 1,517.77 41.50 37.570 12,200.00 12,400.80 12,202.89 12,400.00 36.37 37.49 -90.473 4.44.58 1.482.99 1.559.27 1,517.77 41.52 37.539 12,500.00 12,400.80 12,502.89 12,400.00 36.37 37.49 -90.473 4.44.58 1.482.99 1.559.27 1,517.77 41.55 37.539 12,500.00 12,500.80 12,402.80 12,502.89 12,400.00 36.37 37.49 -90.473 4.44.58 1.482.99 1.559.27 1,517.77 41.55 37.539 12,500.00 12,500.80 12,502.89 12,400.00 36.37 37.49 -90.473 4.44.58 1.482.99 1.559.27 1,517.77 41.55 37.539 12,500.00 12,500.80 12,500.80 12,500.80 36.37 37.69 90.002 4.44.60 1.482.99 1.559.27 1,517.73 41.54 37.533 12,500.00 12,500.80 12,500.80 12,500.80 36.37 37.69 90.002 4.44.60 1.482.99 1.559.27 1,517.73 41.54 37.533 12,500.00 12,500.80 12,500.80 12,500.80 37.50 90.002 4.44.60 1.482.99 1.559.27 1,517.73 41.54 37.533 12,500.00 12,500.80 12,500.	
11900.00 1,880.84 11,884.54 11,852.55 36.03 36.97 99.543 -4.90.84 -1.480.24 1,556.48 1,515.36 41.12 37.852 11,907.54 11,880.84 11,872.07 11,800.80 30.05 37.00 99.543 -4.40.16 -1.480.24 1,556.71 1,515.57 41.14 37.835 37.00 37	
11,907.5 1,889.38 1,872.07 1,860.08 36.05 37.00 98.643 4.40.16 -1,482.06 1,559.07 1,515.57 41.14 37.835 1,200.00 1,908.00 1,908.00 1,908.00 1,908.00 1,908.00 1,908.00 1,908.00 1,908.00 1,908.00 1,908.00 1,908.00 1,909.0	
12,000,00 1,990,80 1,986,90 1,973,81 8,833 37,37 99,549 4.44,01 -1,482,66 1,559,01 1,517,56 41,45 37,611 1,202,824 1,2019,04 12,019,08 12,102,08 1	
12,028,04 12,019,04 12,028,99 12,012.90 36.36 37.44 -90.471 -444.50 -1.482.95 1,559.27 1,517.75 41.50 37.576 12,100.00 12,090.80 12,100.80 12,100.80 36.36 37.48 -90.473 -444.58 -1.482.99 1,559.27 1,517.75 41.50 37.576 12,200.00 12,200.80 12,200.89 12,100.80 36.36 37.48 -90.473 -444.58 -1.482.99 1,559.27 1,517.75 41.52 37.557 12,400.00 12,300.80 12,202.89 12,200.80 36.36 37.48 -90.473 -444.58 -1.482.99 1,559.27 1,517.75 41.52 37.553 12,500.00 12,400.89 12,500.80 36.37 37.49 -90.473 -444.58 -1.482.99 1,559.27 1,517.75 41.52 37.533 12,559.00 12,500.00 12,400.80 12,502.80 12,400.80 36.37 37.49 -90.473 -444.58 -1.482.99 1,559.27 1,517.73 41.54 37.538 12,550.00 12,540.00 12,530.60 12,531.40 12,519.04 36.37 37.49 -90.473 -444.58 -1.482.99 1,559.27 1,517.73 41.54 37.538 12,550.00 12,540.79 12,552.20 12,540.83 36.40 37.50 90.092 -444.60 -1.482.99 1,559.27 1,517.73 41.54 37.538 12,550.00 12,540.79 12,552.50 12,540.93 37.50 90.092 -444.60 -1.482.99 1,559.27 1,517.73 41.54 37.538 12,550.00 12,580.60 12,	
12,100.00	
12,200.00	
12,300.00 12,290.80 12,302.89 12,302.89 12,302.80 36.36 37.48 -90.473 -444.58 -1,482.99 1,559.27 1,517.75 41.52 37.557 12,400.00 12,303.00 12,202.89 12,490.80 36.37 37.49 -90.473 -444.58 -1,482.99 1,559.27 1,517.75 41.55 37.550 12,550.00 12,500.00 12,502.89 12,490.80 36.37 37.49 -90.473 -444.58 1,482.99 1,559.27 1,517.73 41.54 37.538 12,550.00	
12,400,00	
12,500.00	
12,528.24	
12,550.00 12,540.79 12,552.92 12,540.83 36.40 37.50 90.992 -4.44.60 -1.482.99 1,559.27 1,517.73 41,54 37.537 12,600.00 12,590.61 12,603.24 12,591.06 36.63 37.66 90.143 -447.32 -1.482.99 1,559.27 1,517.67 41,60 37.478 12,600.00 12,639.89 12,653.68 12,640.97 36.95 37.92 90.193 -454.45 -1.482.89 1,559.27 1,517.56 41,71 37.383 12,700.00 12,688.24 12,704.24 12,690.19 37.29 38.20 90.241 -485.98 -1.482.78 1,559.27 1,517.56 41,71 37.383 12,750.00 12,735.30 12,754.92 12,738.30 37.62 38.49 90.288 -481.84 -1.482.62 1,559.27 1,517.22 42.05 37.079 12,800.00 12,800.70 12,800.00 12,80	
12,600.00 12,590.61 12,693.24 12,591.06 36.63 37.66 90.143 -447.32 -1,482.97 1,559.27 1,517.67 41.60 37.478 12,660.00 12,693.68 12,653.68 12,665.08 12,669.09 36.95 37.92 90.924 -465.98 1,559.27 1,517.42 41.86 37.250 12,750.00 12,735.30 12,754.92 12,738.30 37.29 38.29 90.288 -481.84 -1,482.62 1,559.27 1,517.22 42.05 37.079 12,800.00 12,780.72 12,805.70 12,784.92 37.96 38.78 90.332 -501.93 -1,482.42 1,559.27 1,516.98 42.29 36.870 12,800.00 12,806.00 12,805.60 12,809.67 38.29 39.07 90.314 -556.13 -1,482.47 1,559.27 1,516.89 42.58 36.620 12,900.00 12,805.60 12,995.86 72,120.9 38.0 39.61 90.413 -566.26 1,481.97 1,559.27 1,516.98 43.3	
12,650.00 12,639.89 12,653.68 12,640.97 36.95 37.92 90.193 -454.45 -1,482.89 1,599.27 1,517.56 41.71 37.383 12,700.00 12,688.24 12,704.24 12,690.19 37.29 38.20 90.241 -465.98 -1,482.78 1,559.27 1,517.22 42.05 37.079 12,800.00 12,780.72 12,800.70 12,784.92 12,784.92 37.96 38.78 90.288 -481.84 -1,482.62 1,559.27 1,516.98 42.29 36.870 12,800.00 12,824.15 12,856.60 12,289.67 38.29 39.07 90.374 -526.13 -1,482.42 1,559.27 1,516.69 42.29 36.870 12,900.00 12,862.66 12,290.59 12,872.18 38.60 39.35 90.413 -554.26 -1,481.59 1,559.27 1,516.99 42.29 36.330 12,950.00 12,993.73 12,958.66 12,949.07 39.18 39.81 90.449 -586.12 -1,481.57 1,559.26	
12,700.00	
12,750.00	
12,800.00 12,780.72 12,805.70 12,784.92 37.96 38.78 90.332 -501.93 -1,482.42 1,559.27 1,516.98 42.99 36.870 12,826.00 12,824.15 12,856.60 12,829.67 38.29 39.07 90.374 -526.13 -1,482.17 1,559.27 1,516.69 42.58 36.620 12,907.09 12,865.26 12,907.59 12,872.18 38.60 39.35 90.413 -554.26 -1,481.89 1,559.27 1,516.35 42.92 36.330 12,950.00 12,939.27 13,009.84 12,949.07 39.18 39.87 90.449 -586.12 -1,481.57 1,559.26 1,515.95 43.31 36.000 13,000.00 12,939.27 13,009.84 12,949.07 39.18 39.87 90.482 -621.46 -1,481.22 1,559.25 1,515.49 43.76 35.630 13,000.00 12,939.27 13,102.30 13,000.52 13,112.38 13,012.96 39.65 40.32 90.535 -701.49 -1,480.41 1,559.23 1,514.40 44.83 34.778 13,150.00 13,005.27 13,163.74 13,039.33 39.85 40.51 90.556 -745.54 -1,479.97 1,559.22 1,513.76 45.46 34.302 13,020.00 13,047.14 13,215.14 13,061.67 40.02 40.67 90.572 -791.81 -1,479.51 1,559.20 1,513.07 46.13 33.798 13,250.00 13,064.05 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 13,000.00 13,007.71 13,318.02 13,093.51 40.26 40.93 90.591 -889.49 -1,478.53 1,559.17 1,511.53 47.64 32.729 13,000.00 13,092.00 13,092.00 13,449.91 13,108.00 40.40 41.17 90.588 -1,092.03 -1,476.49 1,559.13 1,559.13 1,509.81 49.31 13.104 13,500.00 13,092.00 13,092.00 13,521.67 13,108.00 40.40 41.17 90.588 -1,092.03 -1,476.49 1,559.00 1,504.10 54.89 24.09 29.40 13,000.00 13,092.00 13	
12,850.00	
12,900.00	
12,950.00 12,903.73 12,958.67 12,912.09 38.90 39.61 90.449 -586.12 -1,481.57 1,559.26 1,515.95 43.31 36.000 13,000.00 12,939.27 13,009.84 12,949.07 39.18 39.87 90.482 -621.46 -1,481.22 1,559.25 1,515.49 43.76 35.630 13,050.00 12,971.62 13,061.08 12,982.78 39.43 40.10 90.510 -660.02 -1,480.83 1,559.24 1,514.97 44.27 35.222 13,100.00 13,000.52 13,112.38 13,012.96 39.65 40.32 90.535 -701.49 -1,480.41 1,559.23 1,514.40 44.83 34.778 13,150.00 13,025.76 13,163.74 13,039.33 39.85 40.51 90.556 -745.54 -1,479.97 1,559.22 1,513.76 45.46 34.302 13,250.00 13,047.14 13,215.14 13,061.67 40.02 40.67 90.572 -791.81 -1,479.51 1,559.20 1,513.07 46.13 33.798 13,250.00 13,064.50 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 13,350.00 13,064.50 13,369.48 13,102.75 40.33 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,428.24 13,092.00 13,449.91 13,108.00 40.49 41.17 90.588 -1,020.28 -1,477.50 1,559.13 1,509.81 49.81 31.304 13,360.00 13,092.00 13,521.67 13,108.00 40.46 41.40 90.588 -1,192.03 -1,476.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,521.67 13,108.00 40.46 41.40 90.588 -1,192.03 -1,476.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,821.67 13,108.00 40.46 41.40 90.588 -1,192.03 -1,476.49 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.46 41.40 90.588 -1,192.03 -1,476.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,821.67 13,108.00 40.46 41.40 90.588 -1,192.03 -1,476.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,821.67 13,108.00 40.46 41.40 90.588 -1,192.03 -1,476.49 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.46 41.40 90.588 -1,192.03 -1,476.49 1,559.92 1,499.90 59.01 26.417	
13,000.00 12,939.27 13,009.84 12,949.07 39.18 39.87 90.482 -621.46 -1,481.22 1,559.25 1,515.49 43.76 35.630 13,050.00 12,971.62 13,061.08 12,982.78 39.43 40.10 90.510 -660.02 -1,480.83 1,559.24 1,514.97 44.27 35.222 13,100.00 13,000.52 13,112.38 13,012.96 39.65 40.32 90.535 -701.49 -1,480.41 1,559.23 1,514.40 44.83 34.778 13,150.00 13,025.76 13,163.74 13,039.33 39.85 40.51 90.556 -745.54 -1,479.97 1,559.22 1,513.76 45.6 34.302 13,200.00 13,047.14 13,215.14 13,061.67 40.02 40.67 90.572 -791.81 -1,479.51 1,559.20 1,513.07 46.13 33.798 13,250.00 13,064.50 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 13,300.00 13,077.71 13,318.02 13,093.51 40.26 40.93 90.591 -889.49 -1,478.53 1,559.17 1,511.53 47.64 32.729 13,350.00 13,086.67 13,369.48 13,102.75 40.33 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,400.00 13,091.30 13,429.93 13,107.40 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.617 13,428.24 13,092.00 13,449.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.11 1,509.31 49.81 31.304 13,500.00 13,092.00 13,521.67 13,108.00 40.40 41.17 90.588 -1,020.28 -1,477.21 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,621.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.96 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,472.47 1,558.92 1,499.90 59.01 26.417	
13,050.00 12,971.62 13,061.08 12,982.78 39.43 40.10 90.510 -660.02 -1,480.83 1,559.24 1,514.97 44.27 35.222 13,100.00 13,000.52 13,112.38 13,012.96 39.65 40.32 90.535 -701.49 -1,480.41 1,559.23 1,514.40 44.83 34.778 13,150.00 13,025.76 13,163.74 13,039.33 39.85 40.51 90.556 -745.54 -1,479.97 1,559.22 1,513.76 45.46 34.302 13,200.00 13,047.14 13,215.14 13,061.67 40.02 40.67 90.572 -791.81 -1,479.51 1,559.20 1,513.07 46.13 33.798 13,250.00 13,064.50 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 13,300.00 13,077.71 13,318.02 13,093.51 40.26 40.93 90.591 -889.49 -1,478.53 1,559.17 1,511.53 47.64 32.729 13,400.00 13,093.03 13,429.93 13,107.40 40.38 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,400.00 13,093.03 13,429.93 13,107.40 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.617 13,428.24 13,092.00 13,449.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.11 1,509.31 49.81 31.304 13,500.00 13,092.00 13,521.67 13,108.00 40.40 41.47 90.588 -1,020.28 -1,477.21 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,192.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,292.02 -1,473.48 1,558.90 1,502.04 56.92 27.391 13,900.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.90 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.55 41.71 90.588 -1,492.01 -1,472.47 1,558.90 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.55 41.71 90.588 -1,492.01 -1,472.47 1,558.90 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.55 41.71 90.588 -1,492.01 -1,472.47 1,558.90 1,502.04 56.92 27.391	
13,100.00 13,000.52 13,112.38 13,012.96 39.65 40.32 90.535 -701.49 -1,480.41 1,559.23 1,514.40 44.83 34.778 13,150.00 13,025.76 13,163.74 13,039.33 39.85 40.51 90.556 -745.54 -1,479.97 1,559.22 1,513.76 45.46 34.302 13,200.00 13,047.14 13,215.14 13,061.67 40.02 40.67 90.572 -791.81 -1,479.51 1,559.20 1,513.07 46.13 33.798 13,250.00 13,064.50 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 13,300.00 13,077.71 13,318.02 13,093.51 40.26 40.93 90.591 -889.49 -1,478.53 1,559.15 1,511.53 47.64 32.729 13,300.00 13,086.67 13,369.48 13,102.75 40.33 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,400.00 13,091.30 13,420.93 13,107.4	
13,150.00 13,025.76 13,163.74 13,039.33 39.85 40.51 90.556 -745.54 -1,479.97 1,559.22 1,513.76 45.46 34.302 13,200.00 13,047.14 13,215.14 13,061.67 40.02 40.67 90.572 -791.81 -1,479.51 1,559.20 1,513.07 46.13 33.798 13,250.00 13,064.50 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 46.86 32.272 46.86 33.272 46.86 32.272 46.86 33.272 46.86	
13,200.00 13,047.14 13,215.14 13,061.67 40.02 40.67 90.572 -791.81 -1,479.51 1,559.20 1,513.07 46.13 33.798 13,250.00 13,064.50 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 13,300.00 13,077.71 13,318.02 13,093.51 40.26 40.93 90.591 -889.49 -1,478.53 1,559.17 1,511.53 47.64 32.729 13,350.00 13,086.67 13,369.48 13,102.75 40.33 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,400.00 13,091.30 13,420.93 13,107.40 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.617 13,428.24 13,092.00 13,449.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.11 1,509.31 49.81 31.304 13,600.00 13,092.00 13,621.67 13,108	
13,250.00 13,064.50 13,266.57 13,079.78 40.15 40.81 90.583 -839.92 -1,479.02 1,559.19 1,512.32 46.86 33.272 13,300.00 13,077.71 13,318.02 13,093.51 40.26 40.93 90.591 -889.49 -1,478.53 1,559.17 1,511.53 47.64 32.729 13,350.00 13,086.67 13,369.48 13,102.75 40.33 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,400.00 13,091.30 13,429.91 13,108.00 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.617 13,429.91 13,108.00 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.607 13,429.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.01 1,509.00 51.08 30.523 13,600.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03	
13,300.00 13,077.71 13,318.02 13,093.51 40.26 40.93 90.591 -889.49 -1,478.53 1,559.17 1,511.53 47.64 32.729 13,350.00 13,086.67 13,369.48 13,102.75 40.33 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,400.00 13,091.30 13,429.91 13,108.00 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.617 13,428.24 13,092.00 13,449.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.11 1,509.31 49.81 31.304 13,500.00 13,092.00 13,521.67 13,108.00 40.40 41.17 90.588 -1,092.03 -1,476.49 1,559.08 1,508.00 51.08 30.523 13,600.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03 -1,475.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.96 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.53 41.71 90.588 -1,492.01 -1,472.47 1,558.92 1,499.90 59.01 26.417	
13,350.00 13,086.67 13,369.48 13,102.75 40.33 41.02 90.593 -940.09 -1,478.02 1,559.15 1,510.69 48.46 32.175 13,400.00 13,091.30 13,420.93 13,107.40 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.617 13,428.24 13,092.00 13,449.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.11 1,509.31 49.81 31.304 13,600.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03 -1,476.49 1,559.04 1,508.00 51.08 30.523 13,700.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03 -1,475.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67	
13,400.00 13,091.30 13,420.93 13,107.40 40.38 41.08 90.591 -991.31 -1,477.50 1,559.13 1,509.81 49.31 31.617 13,428.24 13,092.00 13,449.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.11 1,509.31 49.81 31.304 13,500.00 13,092.00 13,521.67 13,108.00 40.40 41.17 90.588 -1,092.03 -1,476.49 1,559.08 1,508.00 51.08 30.523 13,600.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03 -1,475.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.90 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 <t< td=""><td></td></t<>	
13,428.24 13,092.00 13,449.91 13,108.00 40.39 41.11 90.588 -1,020.28 -1,477.21 1,559.11 1,509.31 49.81 31.304 13,500.00 13,092.00 13,521.67 13,108.00 40.40 41.17 90.588 -1,092.03 -1,476.49 1,559.04 1,508.00 51.08 30.523 13,600.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03 -1,475.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.04 1,506.10 52.94 29.450 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,900.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.96 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67	
13,500.00 13,092.00 13,521.67 13,108.00 40.40 41.17 90.588 -1,092.03 -1,476.49 1,559.08 1,508.00 51.08 30.523 13,600.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03 -1,475.49 1,559.04 1,509.00 15,081.00 29.450 13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.96 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.53 41.71 90.588 -1,492.01 -1,472.47 1,558.92 1,499.90 59.01 26.417	
13,600.00 13,092.00 13,621.67 13,108.00 40.43 41.27 90.588 -1,192.03 -1,475.49 1,559.04 1,506.10 52.94 29.450 13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.96 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.53 41.71 90.588 -1,492.01 -1,472.47 1,558.92 1,499.90 59.01 26.417	
13,700.00 13,092.00 13,721.67 13,108.00 40.46 41.40 90.588 -1,292.02 -1,474.48 1,559.00 1,504.11 54.89 28.403 13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.96 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.53 41.71 90.588 -1,492.01 -1,472.47 1,558.92 1,499.90 59.01 26.417	
13,800.00 13,092.00 13,821.67 13,108.00 40.50 41.54 90.588 -1,392.02 -1,473.48 1,558.96 1,502.04 56.92 27.391 13,900.00 13,092.00 13,921.67 13,108.00 40.53 41.71 90.588 -1,492.01 -1,472.47 1,558.92 1,499.90 59.01 26.417	
13,900.00 13,092.00 13,921.67 13,108.00 40.53 41.71 90.588 -1,492.01 -1,472.47 1,558.92 1,499.90 59.01 26.417	
14,000.00 13,092.00 14,021.67 13,108.00 40.58 41.92 90.588 -1,592.01 -1,471.47 1,558.88 1,497.70 61.17 25.484	
14,100.00 13,092.00 14,121.67 13,108.00 40.63 42.16 90.588 -1,692.00 -1,470.47 1,558.83 1,495.45 63.38 24.594	







 Company:
 Titus Oil & Gas Production, LLC

 Project:
 Lea County, NM - (NAD83 NME)

 Reference Site:
 El Campeon Fed Com (NAD83)

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

	sign: El (Offset Site Error:	0.00 usf
Survey Prog Refe	ram: 0-l rence	MWD+HRGM Off	set	Semi M	laior Axis		Offset Wellb	ore Centre	Dist	Rule Assi ance	gned:		Offset Well Error:	1.00 usf
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,200.00	13,092.00	14,221.67	13,108.00	40.69	42.44	90.588	-1,792.00	-1,469.46	1,558.79	1,493.14	65.65	23.745		
14,300.00	13,092.00	14,321.67	13,108.00	40.76	42.76	90.588	-1,891.99	-1,468.46	1,558.75	1,490.79	67.96	22.937		
14,400.00	13,092.00	14,421.67	13,108.00	40.85	43.14	90.588	-1,991.99	-1,467.45	1,558.71	1,488.40	70.31	22.170		
14,500.00	13,092.00	14,521.67	13,108.00	40.95	43.58	90.588	-2,091.98	-1,466.45	1,558.67	1,485.97	72.69	21.442		
14,600.00	13,092.00	14,621.67	13,108.00	41.10	44.09	90.588	-2,191.98	-1,465.44	1,558.63	1,483.51	75.11	20.750		
14,700.00	13,092.00	14,721.67	13,108.00	41.29	44.66	90.588	-2,291.97	-1,464.44	1,558.58	1,481.02	77.56	20.094		
14,800.00	13,092.00	14,821.67	13,108.00	41.57	45.31	90.588	-2,391.97	-1,463.44	1,558.54	1,478.50	80.04	19.472		
14,900.00	13,092.00	14,921.67	13,108.00	41.99	46.03	90.588	-2,491.96	-1,462.43	1,558.50	1,475.96	82.54	18.881		
15,000.00	13,092.00	15,021.67	13,108.00	42.60	46.82	90.588	-2,591.96	-1,461.43	1,558.46	1,473.39	85.07	18.320		
15,100.00	13,092.00	15,121.67	13,108.00	43.42	47.68	90.588	-2,691.95	-1,460.42	1,558.42	1,470.80	87.62	17.786		
15,200.00	13,092.00	15,221.67	13,108.00	44.43	48.60	90.588	-2,791.95	-1,459.42	1,558.38	1,468.19	90.18	17.280		
15,300.00	13,092.00	15,321.67	13,108.00	45.56	49.58	90.588	-2,891.94	-1,458.41	1,558.33	1,465.57	92.77	16.798		
15,400.00	13,092.00	15,421.67	13,108.00	46.76	50.60	90.588	-2,991.94	-1,457.41	1,558.29	1,462.92	95.37	16.340		
15,500.00	13,092.00	15,521.67	13,108.00	48.01	51.67	90.588	-3,091.93	-1,456.41	1,558.25	1,460.27	97.98	15.903		
15,600.00	13,092.00	15,621.67	13,108.00	49.30	52.78	90.588	-3,191.93	-1,455.40	1,558.21	1,457.60	100.61	15.487		
15,700.00	13,092.00	15,721.67	13,108.00	50.61	53.92	90.588	-3,291.92	-1,454.40	1,558.17	1,454.91	103.26	15.090		
15,800.00	13,092.00	15,821.67	13,108.00	51.93	55.09	90.588	-3,391.92	-1,453.39	1,558.13	1,452.22	105.91	14.712		
15,900.00	13,092.00	15,921.67	13,108.00	53.27	56.29	90.588	-3,491.91	-1,452.39	1,558.08	1,449.51	108.57	14.350		
16,000.00	13,092.00	16,021.67	13,108.00	54.61	57.50	90.588	-3,591.91	-1,451.38	1,558.04	1,446.79	111.25	14.005		
16,100.00	13,092.00	16,121.67	13,108.00	55.97	58.73	90.588	-3,691.90	-1,450.38	1,558.00	1,444.07	113.93	13.674		
16,200.00	13,092.00	16,221.67	13,108.00	57.33	59.98	90.588	-3,791.90	-1,449.38	1,557.96	1,441.33	116.63	13.358		
16,300.00	13,092.00	16,321.67	13,108.00	58.69	61.25	90.588	-3,891.89	-1,448.37	1,557.92	1,438.59	119.33	13.056		
16,400.00	13,092.00	16,421.67	13,108.00	60.06	62.53	90.588	-3,991.89	-1,447.37	1,557.88	1,435.84	122.04	12.765		
16,500.00	13,092.00	16,521.67	13,108.00	61.44	63.81	90.588	-4,091.88	-1,446.36	1,557.84	1,433.08	124.76	12.487		
16,600.00	13,092.00	16,621.67	13,108.00	62.81	65.11	90.588	-4,191.88	-1,445.36	1,557.79	1,430.31	127.48	12.220		
16,700.00	13,092.00	16,721.67	13,108.00	64.20	66.42	90.589	-4,291.87	-1,444.35	1,557.75	1,427.54	130.21	11.963		
16,800.00	13,092.00	16,821.67	13,108.00	65.58	67.73	90.589	-4,391.87	-1,443.35	1,557.71	1,424.76	132.95	11.717		
16,900.00	13,092.00	16,921.67	13,108.00	66.97	69.06	90.589	-4,491.86	-1,442.35	1,557.67	1,421.98	135.69	11.480		
17,000.00	13,092.00	17,021.67	13,108.00	68.36	70.38	90.589	-4,591.85	-1,441.34	1,557.63	1,419.19	138.43	11.252		
17,100.00	13,092.00	17,121.67	13,108.00	69.75	71.72	90.589	-4,691.85	-1,440.34	1,557.59	1,416.40	141.19	11.032		
17,200.00	13,092.00	17,221.67	13,108.00	71.14	73.06	90.589	-4,791.84	-1,439.33	1,557.54	1,413.60	143.94	10.821		
17,300.00	13,092.00	17,321.67	13,108.00	72.54	74.40	90.589	-4,891.84	-1,438.33	1,557.50	1,410.80	146.70	10.617		
17,400.00	13,092.00	17,421.67	13,108.00	73.94	75.75	90.589	-4,991.83	-1,437.32	1,557.46	1,407.99	149.47	10.420		
17,500.00	13,092.00	17,521.67	13,108.00	75.34	77.11	90.589	-5,091.83	-1,436.32	1,557.42	1,405.18	152.24	10.230		
17,600.00	13,092.00	17,621.67	13,108.00	76.74	78.47	90.589	-5,191.82	-1,435.32	1,557.38	1,402.37	155.01	10.047		
17,700.00	13,092.00	17,721.67	13,108.00	78.14	79.83	90.589	-5,291.82	-1,434.31	1,557.34	1,399.55	157.79	9.870		
17,800.00	13,092.00	17,821.67	13,108.00	79.55	81.19	90.589	-5,391.81	-1,433.31	1,557.29	1,396.73	160.56	9.699		
17,900.00	13,092.00	17,921.67	13,108.00	80.95	82.56	90.589	-5,491.81	-1,432.30	1,557.25	1,393.91	163.35	9.533		
18,000.00	13,092.00	18,021.67	13,108.00	82.36	83.93	90.589	-5,591.80	-1,431.30	1,557.21	1,391.08	166.13	9.373		
18,100.00	13,092.00	18,121.67	13,108.00	83.76	85.30	90.589	-5,691.80	-1,430.29	1,557.17	1,388.25	168.92	9.218		
18,200.00	13,092.00	18,221.67		85.17	86.68	90.589	-5,791.79	-1,429.29	1,557.13	1,385.41	171.71	9.068		
18,300.00	13,092.00	18,321.67	13,108.00	86.58	88.06	90.589	-5,891.79	-1,428.29	1,557.09	1,382.58	174.51	8.923		
18,400.00	13,092.00	18,421.67	13,108.00	87.99	89.44	90.589	-5,991.78	-1,427.28	1,557.04	1,379.74	177.30	8.782		
18,500.00	13,092.00	18,521.67	13,108.00	89.40	90.82	90.589	-6,091.78	-1,426.28	1,557.00	1,376.90	180.10	8.645		
18,600.00	13,092.00	18,621.67		90.81	92.20	90.589	-6,191.77	-1,425.27	1,556.96	1,374.06	182.90	8.512		
18,700.00	13,092.00	18,721.67	13,108.00	92.23	93.59	90.589	-6,291.77	-1,424.27	1,556.92	1,371.21	185.71	8.384		
18,800.00	13,092.00	18,821.67	13,108.00	93.64	94.98	90.589	-6,391.76	-1,423.26	1,556.88	1,368.37	188.51	8.259		
18,900.00	13,092.00	18,921.67	13,108.00	95.06	96.37	90.589	-6,491.76	-1,422.26	1,556.84	1,365.52	191.32	8.137		
19,000.00	13,092.00	19,021.67	13,108.00	96.47	97.76	90.589	-6,591.75	-1,421.26	1,556.80	1,362.67	194.13	8.019		
19,100.00	13,092.00	19,121.67	13,108.00	97.89	99.15	90.589	-6,691.75	-1,420.25	1,556.75	1,359.81	196.94	7.905		
19,200.00	13,092.00	19,221.67	13,108.00	99.30	100.54	90.589	-6,791.74	-1,419.25	1,556.71	1,356.96	199.75	7.793		
19,300.00	13,092.00	19,321.67	13,108.00	100.72	101.94	90.589	-6,891.74	-1,418.24	1,556.67	1,354.10	202.57	7.685		







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

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

North Reference:
Survey Calculation Method:

Output errors are at Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma

													Offset Site Error:	
urvey Prog Refe	ram: 0-l rence	MWD+HRGM Off	set	Semi N	lajor Axis		Offset Wellb	ore Centre	Dist	Rule Assi	gned:		Offset Well Error:	1.00 us
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
19,400.00	13,092.00	19,421.67	13,108.00	102.14	103.33	90.589	-6,991.73	-1,417.24	1,556.63	1,351.25	205.38	7.579		
19,500.00	13,092.00	19,521.67	13,108.00	103.55	104.73	90.589	-7,091.73	-1,416.23	1,556.59	1,348.39	208.20	7.476		
19,600.00	13,092.00	19,621.67	13,108.00	104.97	106.13	90.589	-7,191.72	-1,415.23	1,556.55	1,345.53	211.02	7.376		
19,700.00	13,092.00	19,721.67	13,108.00	106.39	107.53	90.589	-7,291.72	-1,414.23	1,556.50	1,342.66	213.84	7.279		
19,800.00	13,092.00	19,821.67	13,108.00	107.81	108.93	90.589	-7,391.71	-1,413.22	1,556.46	1,339.80	216.66	7.184		
19,900.00	13,092.00	19,921.67	13,108.00	109.23	110.33	90.589	-7,491.71	-1,412.22	1,556.42	1,336.94	219.49	7.091		
20,000.00	13,092.00	20,021.67	13,108.00	110.65	111.74	90.589	-7,591.70	-1,411.21	1,556.38	1,334.07	222.31	7.001		
20,100.00	13,092.00	20,121.67	13,108.00	112.07	113.14	90.589	-7,691.70	-1,410.21	1,556.34	1,331.20	225.14	6.913		
20,200.00	13,092.00	20,221.67	13,108.00	113.49	114.55	90.589	-7,791.69	-1,409.20	1,556.30	1,328.33	227.96	6.827		
20,300.00	13,092.00	20,321.67	13,108.00	114.91	115.95	90.589	-7,891.69	-1,408.20	1,556.25	1,325.46	230.79	6.743		
20,400.00	13,092.00	20,421.67	13,108.00	116.34	117.36	90.589	-7,991.68	-1,407.20	1,556.21	1,322.59	233.62	6.661		
20,500.00	13,092.00	20,521.67	13,108.00	117.76	118.76	90.589	-8,091.68	-1,406.19	1,556.17	1,319.72	236.45	6.581		
20,600.00	13,092.00	20,621.67	13,108.00	119.18	120.17	90.589	-8,191.67	-1,405.19	1,556.13	1,316.85	239.28	6.503		
20,700.00	13,092.00	20,721.67	13,108.00	120.60	121.58	90.589	-8,291.67	-1,404.18	1,556.09	1,313.98	242.11	6.427		
20,800.00	13,092.00	20,821.67	13,108.00	122.03	122.99	90.589	-8,391.66	-1,403.18	1,556.05	1,311.10	244.94	6.353		
20,900.00	13,092.00	20,921.67	13,108.00	123.45	124.40	90.589	-8,491.66	-1,402.17	1,556.00	1,308.23	247.78	6.280		
21,000.00	13,092.00	21,021.67	13,108.00	124.87	125.81	90.589	-8,591.65	-1,401.17	1,555.96	1,305.35	250.61	6.209		
21,100.00	13,092.00	21,121.67	13,108.00	126.30	127.22	90.589	-8,691.65	-1,400.17	1,555.92	1,302.47	253.45	6.139		
21,200.00	13,092.00	21,221.67	13,108.00	127.72	128.63	90.589	-8,791.64	-1,399.16	1,555.88	1,299.59	256.29	6.071		
21,300.00	13,092.00	21,321.67	13,108.00	129.15	130.05	90.589	-8,891.64	-1,398.16	1,555.84	1,296.72	259.12	6.004		
21,400.00	13,092.00	21,421.67	13,108.00	130.57	131.46	90.589	-8,991.63	-1,397.15	1,555.80	1,293.84	261.96	5.939		
21,500.00	13,092.00	21,521.67	13,108.00	132.00	132.87	90.589	-9,091.63	-1,396.15	1,555.76	1,290.96	264.80	5.875		
21,600.00	13,092.00	21,621.67	13,108.00	133.42	134.29	90.589	-9,191.62	-1,395.14	1,555.71	1,288.08	267.64	5.813		
21,700.00	13,092.00	21,721.67	13,108.00	134.85	135.70	90.589	-9,291.62	-1,394.14	1,555.67	1,285.19	270.48	5.752		
21,800.00	13,092.00	21,821.67	13,108.00	136.27	137.12	90.589	-9,391.61	-1,393.14	1,555.63	1,282.31	273.32	5.692		
21,900.00	13,092.00	21,921.67	13,108.00	137.70	138.53	90.589	-9,491.61	-1,392.13	1,555.59	1,279.43	276.16	5.633		
22,000.00	13,092.00	22,021.67	13,108.00	139.12	139.95	90.589	-9,591.60	-1,391.13	1,555.55	1,276.54	279.00	5.575		
22,100.00	13,092.00	22,121.67	13,108.00	140.55	141.36	90.589	-9,691.60	-1,390.12	1,555.51	1,273.66	281.85	5.519		
22,200.00	13,092.00	22,221.67	13,108.00	141.98	142.78	90.589	-9,791.59	-1,389.12	1,555.46	1,270.78	284.69	5.464		
22,300.00	13,092.00	22,321.67	13,108.00	143.40	144.20	90.589	-9,891.59	-1,388.11	1,555.42	1,267.89	287.53	5.410		
22,400.00	13,092.00	22,421.67	13,108.00	144.83	145.61	90.589	-9,991.58	-1,387.11	1,555.38	1,265.00	290.38	5.356		
22,500.00	13,092.00	22,521.67	13,108.00	146.26	147.03	90.589	-10,091.58	-1,386.11	1,555.34	1,262.12	293.22	5.304		
22,600.00	13,092.00	22,621.67	13,108.00	147.69	148.45	90.589	-10,191.57	-1,385.10	1,555.30	1,259.23	296.07	5.253		
22,700.00	13,092.00	22,721.67	13,108.00	149.11	149.87	90.589	-10,291.57	-1,384.10	1,555.26	1,256.34	298.91	5.203		
22,728.24	13,092.00	22,749.91	13,108.00	149.52	150.27	90.589	-10,319.81	-1,383.81	1,555.24	1,255.53	299.72	5.189 SF		





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

Site Error: 0.00 usft

El Campeon Fed Com 513H Reference Well:

Reference Depths are relative to RKB @ 3200.50usft (TBD)

Well Error: 1.00 usft Reference Wellbore ОН

Plan 1 08-31-22 Reference Design:

Offset Depths are relative to Offset Datum

Local Co-ordinate Reference:

Well El Campeon Fed Com 513H TVD Reference: RKB @ 3200.50usft (TBD) MD Reference: RKB @ 3200.50usft (TBD)

North Reference: Grid

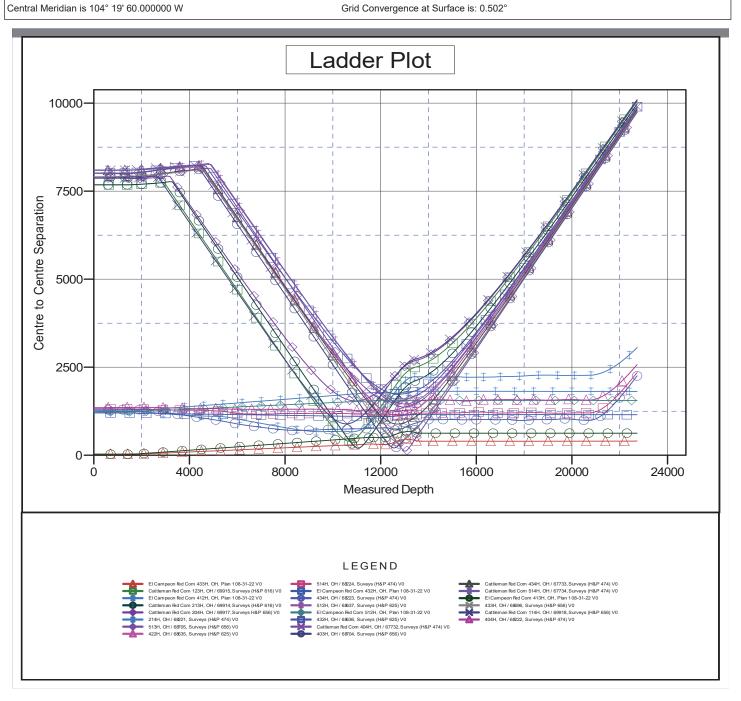
Minimum Curvature **Survey Calculation Method:** Output errors are at 2.00 sigma

Database: **USA Compass** Offset TVD Reference: Reference Datum

Coordinates are relative to: El Campeon Fed Com 513H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.502°







 Company:
 Titus Oil & Gas Production, LLC

 Project:
 Lea County, NM - (NAD83 NME)

 Reference Site:
 El Campeon Fed Com (NAD83)

Site Error: 0.00 usft

Reference Well: El Campeon Fed Com 513H

Well Error: 1.00 usft
Reference Wellbore OH

Reference Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:
Output errors are at
Database:

Offset TVD Reference:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature 2.00 sigma USA Compass

eference: Reference Datum

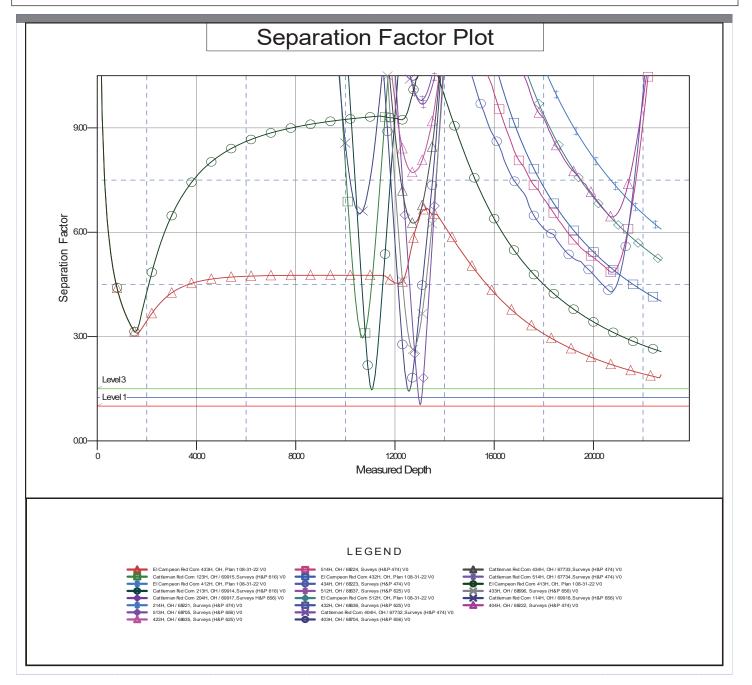
Reference Depths are relative to RKB @ 3200.50usft (TBD)

Offset Depths are relative to Offset Datum Central Meridian is 104° 19' 60.000000 W

Coordinates are relative to: El Campeon Fed Com 513H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.502°



1600 2000 2400 2800

3200 3600

5200

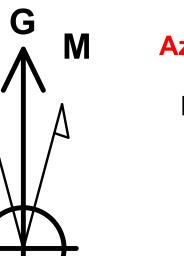
Vertical Section at 179.45° (400 usft/in)

6000

Project: Lea County, NM - (NAD83 NME)
Site: El Campeon Fed Com (NAD83)
Well: El Campeon Fed Com 513H
Wellbore: OH

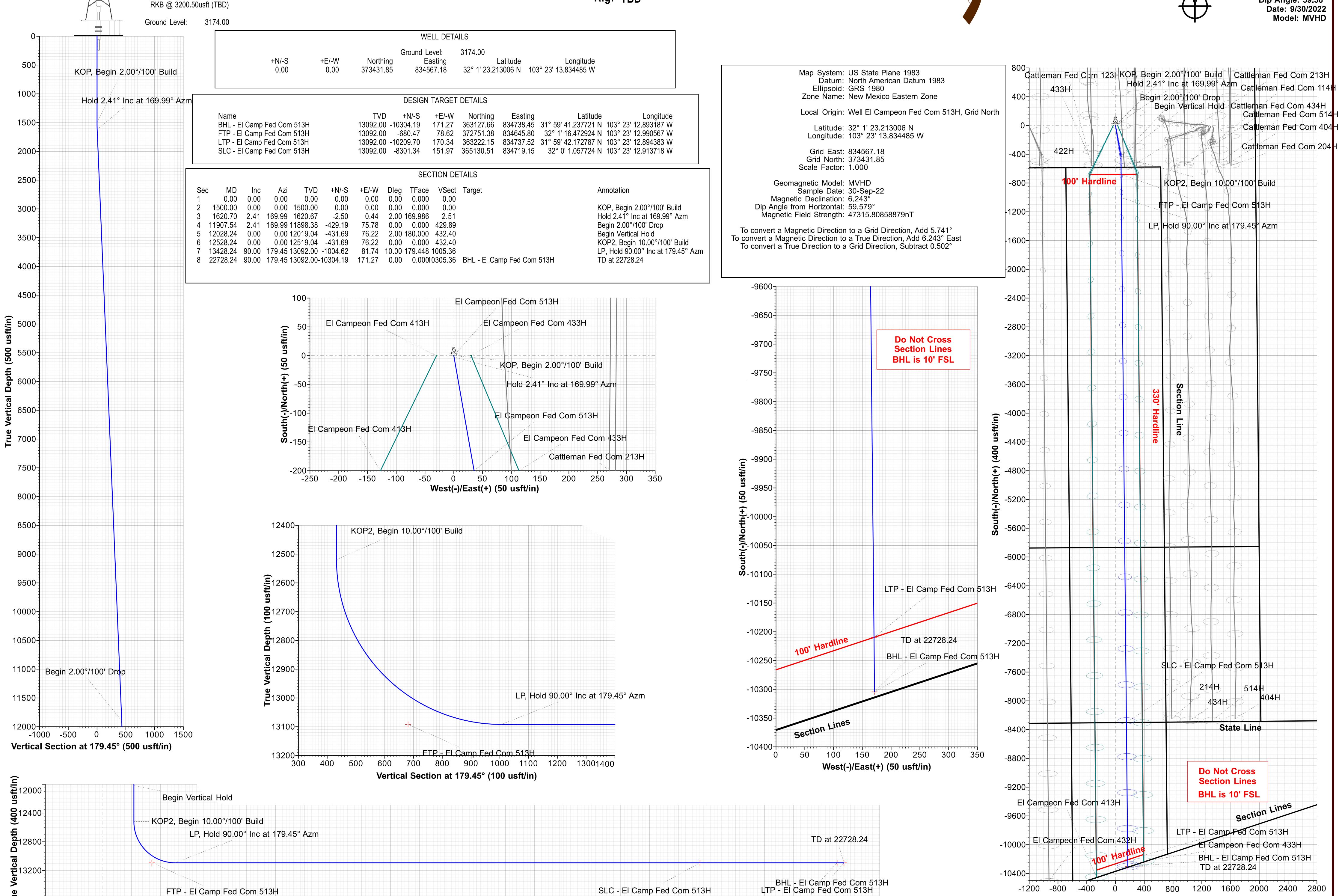
Design: Plan 1 08-31-22 Rig: TBD





Azimuths to Grid North
True North: -0.50°
Magnetic North: 5.74°

Magnetic Field Strength: 47315.8nT Dip Angle: 59.58° Date: 9/30/2022 Model: MVHD



7200

7600

8000 8400

9200 9600 10000 10400 10800

West(-)/East(+) (400 usft/in)



Titus Oil & Gas Production, LLC

Lea County, NM - (NAD83 NME) El Campeon Fed Com (NAD83) El Campeon Fed Com 513H

OH

Plan: Plan 1 08-31-22

Standard Planning Report

31 August, 2022







Database: USA Compass

 Company:
 Titus Oil & Gas Production, LLC

 Project:
 Lea County, NM - (NAD83 NME)

 Site:
 El Campeon Fed Com (NAD83)

Well: El Campeon Fed Com 513H

Wellbore: OH

Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Minimum Curvature

Project Lea County, NM - (NAD83 NME)

Map System:US State Plane 1983Geo Datum:North American Datum 1983Map Zone:New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site El Campeon Fed Com (NAD83)

Northing: 373,195.63 usft Site Position: Latitude: 32° 1' 20.984376 N From: Мар Easting: 833,309.19 usft Longitude: 103° 23' 28.469580 W **Position Uncertainty:** 0.00 usft Slot Radius: 13-3/16 " Grid Convergence: 0.500

Well El Campeon Fed Com 513H

 Well Position
 +N/-S
 236.22 usft
 Northing:
 373,431.85 usft
 Latitude:
 32° 1′ 23.213006 N

 +E/-W
 1,257.99 usft
 Easting:
 834,567.18 usft
 Longitude:
 103° 23′ 13.834485 W

Position Uncertainty 1.00 usft Wellhead Elevation: Ground Level: 3,174.00 usft

Wellbore ОН Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (°) (nT) (°) 47,315.80858880 **MVHD** 9/30/2022 6.243 59.579

Plan 1 08-31-22 Design Audit Notes: Version: Phase: **PLAN** Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.00 0.00 0.00 179.45

Plan Survey Tool Program Date 8/31/2022

Depth From Depth To (usft) (usft)

(usft) Survey (Well

Survey (Wellbore) Tool Name Remarks

1 0.00 22,728.24 Plan 1 08-31-22 (OH) MWD+HRGM

OWSG MWD + HRGM

Plan Sections Measured Vertical Dogleg Build Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (usft) (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (°) (°) (°) **Target** 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.000 0.00 0.00 1,500.00 0.00 0.00 1,500.00 0.00 0.00 0.00 0.00 0.00 0.000 1,620.70 2.41 1,620.67 2.00 2.00 0.00 169.99 -2.500.44 169.986 11.907.54 2.41 169.99 11.898.38 -429.19 75.78 0.00 0.00 0.00 0.000 12,028.24 0.00 0.01 12,019.04 -431.69 76.22 2.00 -2.00 0.00 180.000 12,528.24 0.00 0.01 12,519.04 -431.69 76.22 0.00 0.00 0.00 0.000 13,428.24 90.00 179.45 13,092.00 -1,004.6281.74 10.00 10.00 0.00 179.448 22,728.24 90.00 179 45 13,092.00 -10,304.19 171.27 0.00 0.00 0.00 0.000 BHL - El Camp Fed C





Database: USA Compass

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

Well: El Campeon Fed Com 513H

Wellbore: OH

Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

ed Survey									
Measured Depth (usft)	d Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0 1,500.0		0.00 0.00	0.00 1,500.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
	gin 2.00°/100' Build		1,222122						
1,600.0	•	169.99	1,599.98	-1.72	0.30	1.72	2.00	2.00	0.00
1,620.7	70 2.41	169.99	1,620.67	-2.50	0.44	2.51	2.00	2.00	0.00
Hold 2.41	1° Inc at 169.99° Azn	n							
1,700.0	00 2.41	169.99	1,699.89	-5.79	1.02	5.80	0.00	0.00	0.00
1,800.0	00 2.41	169.99	1,799.81	-9.94	1.76	9.96	0.00	0.00	0.00
1,900.0		169.99	1,899.72	-14.09	2.49	14.11	0.00	0.00	0.00
2,000.0		169.99	1,999.63	-18.24	3.22	18.27	0.00	0.00	0.00
2,100.0		169.99	2,099.54	-22.38	3.95	22.42	0.00	0.00	0.00
2,200.0		169.99	2,199.45	-26.53	4.68	26.58	0.00	0.00	0.00
		169.99	2,299.36	-30.68	5.42	30.73	0.00	0.00	0.00
2,300.0 2,400.0		169.99	2,299.36	-30.68 -34.83	5.42 6.15	30.73 34.89	0.00	0.00	0.00
2,400.0		169.99	2,399.27 2,499.18	-34.63 -38.98	6.88	39.04	0.00	0.00	0.00
2,600.0		169.99	2,599.10	-43.12	7.61	43.19	0.00	0.00	0.00
2,700.0		169.99	2,699.01	-47.27	8.35	47.35	0.00	0.00	0.00
2,800.0	00 2.41	169.99	2,798.92	-51.42	9.08	51.50	0.00	0.00	0.00
2,900.0		169.99	2,898.83	-55.57	9.81	55.66	0.00	0.00	0.00
3,000.0		169.99	2,998.74	-59.71	10.54	59.81	0.00	0.00	0.00
3,100.0	00 2.41	169.99	3,098.65	-63.86	11.28	63.97	0.00	0.00	0.00
3,200.0	00 2.41	169.99	3,198.56	-68.01	12.01	68.12	0.00	0.00	0.00
3,300.0	00 2.41	169.99	3,298.47	-72.16	12.74	72.28	0.00	0.00	0.00
3,400.0		169.99	3,398.39	-76.31	13.47	76.43	0.00	0.00	0.00
3,500.0		169.99	3,498.30	-80.45	14.21	80.59	0.00	0.00	0.00
3,600.0	00 2.41	169.99	3,598.21	-84.60	14.94	84.74	0.00	0.00	0.00
3,700.0	00 2.41	169.99	3,698.12	-88.75	15.67	88.90	0.00	0.00	0.00
3,800.0	00 2.41	169.99	3,798.03	-92.90	16.40	93.05	0.00	0.00	0.00
3,900.0		169.99	3,897.94	-97.05	17.14	97.21	0.00	0.00	0.00
4,000.0		169.99	3,997.85	-101.19	17.87	101.36	0.00	0.00	0.00
4,100.0		169.99	4,097.76	-105.34	18.60	105.51	0.00	0.00	0.00
4,200.0	00 2.41	169.99	4,197.68	-109.49	19.33	109.67	0.00	0.00	0.00
4,300.0		169.99	4,297.59	-113.64	20.07	113.82	0.00	0.00	0.00
4,400.0		169.99	4,397.50	-117.78	20.80	117.98	0.00	0.00	0.00
4,500.0		169.99	4,497.41	-121.93	21.53	122.13	0.00	0.00	0.00
4,600.0		169.99	4,597.32	-126.08	22.26	126.29	0.00	0.00	0.00
4,700.0	00 2.41	169.99	4,697.23	-130.23	22.99	130.44	0.00	0.00	0.00
4,800.0	00 2.41	169.99	4,797.14	-134.38	23.73	134.60	0.00	0.00	0.00
4,900.0		169.99	4,897.05	-138.52	24.46	138.75	0.00	0.00	0.00
5,000.0		169.99	4,996.97	-142.67	25.19	142.91	0.00	0.00	0.00
5,100.0		169.99	5,096.88	-146.82	25.92	147.06	0.00	0.00	0.00
5,200.0	00 2.41	169.99	5,196.79	-150.97	26.66	151.22	0.00	0.00	0.00
5,300.0	00 2.41	169.99	5,296.70	-155.12	27.39	155.37	0.00	0.00	0.00
5,400.0	00 2.41	169.99	5,396.61	-159.26	28.12	159.53	0.00	0.00	0.00
5,500.0		169.99	5,496.52	-163.41	28.85	163.68	0.00	0.00	0.00
5,600.0		169.99	5,596.43	-167.56	29.59	167.84	0.00	0.00	0.00
5,700.0	00 2.41	169.99	5,696.34	-171.71	30.32	171.99	0.00	0.00	0.00
5,800.0		169.99	5,796.26	-175.85	31.05	176.14	0.00	0.00	0.00
5,900.0		169.99	5,896.17	-180.00	31.78	180.30	0.00	0.00	0.00
6,000.0		169.99	5,996.08	-184.15	32.52	184.45	0.00	0.00	0.00
6,100.0		169.99	6,095.99	-188.30	33.25	188.61	0.00	0.00	0.00
6,200.0	00 2.41	169.99	6,195.90	-192.45	33.98	192.76	0.00	0.00	0.00
6,300.0	00 2.41	169.99	6,295.81	-196.59	34.71	196.92	0.00	0.00	0.00





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Lea County, NM - (NAD83 NME)
Site: El Campeon Fed Com (NAD83)
Well: El Campeon Fed Com 513H

Wellbore: OH

Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

sigii.									
anned Survey									
Measured			Vertical			Vertical	Doglag	Build	Turn
							Dogleg		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
6,400.00	2.41	169.99	6,395.72	-200.74	35.45	201.07	0.00	0.00	0.00
6,500.00	2.41	169.99	6,495.63	-204.89	36.18	205.23	0.00	0.00	0.00
6,600.00	2.41	169.99	6,595.55	-209.04	36.91	209.38	0.00	0.00	0.00
6,700.00	2.41	169.99	6,695.46	-213.19	37.64	213.54	0.00	0.00	0.00
6,800.00	2.41	169.99	6,795.37	-217.33	38.38	217.69	0.00	0.00	0.00
6,900.00	2.41	169.99	6,895.28	-221.48	39.11	221.85	0.00	0.00	0.00
7,000.00	2.41	169.99	6,995.19	-225.63	39.84	226.00	0.00	0.00	0.00
7,100.00	2.41	169.99	7,095.10	-229.78	40.57	230.16	0.00	0.00	0.00
7,200.00	2.41	169.99	7,195.01	-233.92	41.30	234.31	0.00	0.00	0.00
7,300.00	2.41	169.99	7,294.92	-238.07	42.04	238.46	0.00	0.00	0.00
7,400.00	2.41	169.99	7,394.84	-242.22	42.77	242.62	0.00	0.00	0.00
7,500.00	2.41	169.99	7,494.75	-246.37	43.50	246.77	0.00	0.00	0.00
7,600.00	2.41	169.99	7,594.66	-250.52	44.23	250.93	0.00	0.00	0.00
7,700.00	2.41	169.99	7,694.57	-254.66	44.97	255.08	0.00	0.00	0.00
7,800.00	2.41	169.99	7,794.48	-258.81	45.70	259.24	0.00	0.00	0.00
7,900.00	2.41	169.99	7,894.39	-262.96	46.43	263.39	0.00	0.00	0.00
	2.41		7,094.39			263.39	0.00	0.00	
8,000.00		169.99		-267.11	47.16				0.00
8,100.00	2.41	169.99 169.99	8,094.21	-271.26 275.40	47.90 48.63	271.70	0.00 0.00	0.00 0.00	0.00 0.00
8,200.00	2.41		8,194.13	-275.40	48.63	275.86			
8,300.00	2.41	169.99	8,294.04	-279.55	49.36	280.01	0.00	0.00	0.00
8,400.00	2.41	169.99	8,393.95	-283.70	50.09	284.17	0.00	0.00	0.00
8,500.00	2.41	169.99	8,493.86	-287.85	50.83	288.32	0.00	0.00	0.00
8,600.00	2.41	169.99	8,593.77	-291.99	51.56	292.48	0.00	0.00	0.00
8,700.00	2.41	169.99	8,693.68	-296.14	52.29	296.63	0.00	0.00	0.00
8,800.00	2.41	169.99	8,793.59	-300.29	53.02	300.79	0.00	0.00	0.00
8,900.00	2.41	169.99	8,893.50	-304.44	53.76	304.94	0.00	0.00	0.00
9,000.00	2.41	169.99	8,993.42	-308.59	54.49	309.09	0.00	0.00	0.00
9,100.00	2.41	169.99	9,093.33	-312.73	55.22	313.25	0.00	0.00	0.00
9,200.00	2.41	169.99	9,193.24	-316.88	55.95	317.40	0.00	0.00	0.00
9,300.00	2.41	169.99	9,293.15	-321.03	56.69	321.56	0.00	0.00	0.00
9,400.00	2.41	169.99	9,393.06	-325.18	57.42	325.71	0.00	0.00	0.00
9,500.00	2.41	169.99	9,492.97	-329.32	58.15	329.87	0.00	0.00	0.00
9,600.00	2.41	169.99	9,592.88	-333.47	58.88	334.02	0.00	0.00	0.00
9,700.00	2.41	169.99	9,692.79	-337.62	59.61	338.18	0.00	0.00	0.00
9,800.00	2.41	169.99	9,792.71	-341.77	60.35	342.33	0.00	0.00	0.00
9,900.00	2.41	169.99	9,892.62	-345.92	61.08	346.49	0.00	0.00	0.00
10,000.00	2.41	169.99	9,992.53	-350.06	61.81	350.64	0.00	0.00	0.00
10,100.00	2.41	169.99	10,092.44	-354.21	62.54	354.80	0.00	0.00	0.00
10,200.00	2.41	169.99	10,192.35	-358.36	63.28	358.95	0.00	0.00	0.00
,									
10,300.00	2.41	169.99	10,292.26	-362.51	64.01	363.11	0.00	0.00	0.00
10,400.00	2.41	169.99	10,392.17	-366.66	64.74	367.26	0.00	0.00	0.00
10,500.00	2.41	169.99	10,492.08	-370.80	65.47	371.41	0.00	0.00	0.00
10,600.00	2.41	169.99	10,592.00	-374.95	66.21	375.57	0.00	0.00	0.00
10,700.00	2.41	169.99	10,691.91	-379.10	66.94	379.72	0.00	0.00	0.00
10,800.00	2.41	169.99	10,791.82	-383.25	67.67	383.88	0.00	0.00	0.00
10,900.00	2.41	169.99	10,891.73	-387.39	68.40	388.03	0.00	0.00	0.00
11,000.00	2.41	169.99	10,991.64	-391.54	69.14	392.19	0.00	0.00	0.00
11,100.00	2.41	169.99	11,091.55	-395.69	69.87	396.34	0.00	0.00	0.00
11,200.00	2.41	169.99	11,191.46	-399.84	70.60	400.50	0.00	0.00	0.00
11,300.00	2.41	169.99	11,291.37	-403.99	71.33	404.65	0.00	0.00	0.00
11,400.00	2.41	169.99	11,391.29	-408.13	72.07	408.81	0.00	0.00	0.00
11,500.00	2.41	169.99	11,491.20	-412.28	72.80	412.96	0.00	0.00	0.00
11,600.00	2.41	169.99	11,591.11	-416.43	73.53	417.12	0.00	0.00	0.00
11,700.00	2.41	169.99	11,691.02	-420.58	74.26	421.27	0.00	0.00	0.00





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Lea County, NM - (NAD83 NME)
Site: El Campeon Fed Com (NAD83)
Well: El Campeon Fed Com 513H

Wellbore: OH

Design: Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

Design:		Plan 1 08-31-2								
Planne	d 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)
	11,800.00	2.41	169.99	11,790.93	-424.73	75.00	425.43	0.00	0.00	0.00
	11,900.00	2.41	169.99	11,890.84	-428.87	75.73	429.58	0.00	0.00	0.00
	11,907.54	2.41	169.99	11,898.38	-429.19	75.78	429.89	0.00	0.00	0.00
	Begin 2.00°/1									
	12,000.00	0.56	169.99	11,990.80	-431.55	76.20	432.26	2.00	-2.00	0.00
	12,028.24	0.00	0.01	12,019.04	-431.69	76.22	432.40	2.00	-2.00	0.00
	Begin Vertica	al Hold								
	12,528.24	0.00	0.00	12,519.04	-431.69	76.22	432.40	0.00	0.00	0.00
		10.00°/100' Buil		40 500 04	100.10	70.07	400.00	40.00	40.00	0.00
	12,600.00	7.18 17.18	179.45 179.45	12,590.61 12,688.24	-436.18	76.27	436.89	10.00 10.00	10.00 10.00	0.00
	12,700.00 12,800.00	27.18	179.45	12,000.24	-457.24 -494.94	76.47 76.83	457.95 495.65	10.00	10.00	0.00 0.00
	12,900.00	37.18	179.45	12,865.26	-548.12	77.35	548.83	10.00	10.00	0.00
	13,000.00	47.18 57.18	179.45 179.45	12,939.27 13,000.52	-615.17 -694.06	77.99 78.75	615.89 694.78	10.00 10.00	10.00 10.00	0.00 0.00
	13,100.00 13,200.00	67.18	179.45	13,000.52	-094.06 -782.38	76.75 79.60	783.11	10.00	10.00	0.00
	13,300.00	77.18	179.45	13,077.71	-877.45	80.52	878.18	10.00	10.00	0.00
	13,400.00	87.18	179.45	13,091.30	-976.39	81.47	977.13	10.00	10.00	0.00
	13,428.24	90.00	179.45	13,092.00	-1,004.62	81.74	1,005.36	10.00	10.00	0.00
	,	90.00 00° Inc at 179.45		13,092.00	-1,004.62	01.74	1,005.36	10.00	10.00	0.00
	13,500.00	90.00	179.45	13,092.00	-1,076.38	82.43	1,077.12	0.00	0.00	0.00
	13,600.00	90.00	179.45	13,092.00	-1,176.37	83.39	1,077.12	0.00	0.00	0.00
	13,700.00	90.00	179.45	13,092.00	-1,276.37	84.36	1,277.12	0.00	0.00	0.00
	13,800.00	90.00	179.45	13,092.00	-1,376.36	85.32	1,377.12	0.00	0.00	0.00
	13,900.00	90.00	179.45	13,092.00	-1,476.36	86.28	1,477.12	0.00	0.00	0.00
	14,000.00	90.00	179.45	13,092.00	-1,576.35	87.24	1,577.12	0.00	0.00	0.00
	14,100.00	90.00	179.45	13,092.00	-1,676.35	88.21	1,677.12	0.00	0.00	0.00
	14,200.00	90.00	179.45	13,092.00	-1,776.34	89.17	1,777.12	0.00	0.00	0.00
	14,300.00	90.00	179.45	13,092.00	-1,876.34	90.13	1,877.12	0.00	0.00	0.00
	14,400.00	90.00	179.45	13,092.00	-1,976.33	91.10	1,977.12	0.00	0.00	0.00
	14,500.00	90.00	179.45	13,092.00	-2,076.33	92.06	2,077.12	0.00	0.00	0.00
	14,600.00	90.00	179.45	13,092.00	-2,176.32	93.02	2,177.12	0.00	0.00	0.00
	14,700.00	90.00	179.45	13,092.00	-2,276.32	93.98	2,277.12	0.00	0.00	0.00
	14,800.00	90.00	179.45	13,092.00	-2,376.31	94.95	2,377.12	0.00	0.00	0.00
	14,900.00	90.00	179.45	13,092.00	-2,476.31	95.91	2,477.12	0.00	0.00	0.00
	15,000.00	90.00	179.45	13,092.00	-2,576.31	96.87	2,577.12	0.00	0.00	0.00
	15,100.00	90.00	179.45	13,092.00	-2,676.30	97.83	2,677.12	0.00	0.00	0.00
	15,200.00	90.00	179.45	13,092.00	-2,776.30	98.80	2,777.12	0.00	0.00	0.00
	15,300.00	90.00	179.45	13,092.00	-2,876.29	99.76	2,877.12	0.00	0.00	0.00
	15,400.00	90.00	179.45	13,092.00	-2,976.29	100.72	2,977.12	0.00	0.00	0.00
	15,500.00	90.00	179.45	13,092.00	-3,076.28	101.69	3,077.12	0.00	0.00	0.00
	15,600.00	90.00	179.45	13,092.00	-3,176.28	102.65	3,177.12	0.00	0.00	0.00
	15,700.00 15,800.00	90.00 90.00	179.45 179.45	13,092.00 13,092.00	-3,276.27 -3,376.27	103.61 104.57	3,277.12 3,377.12	0.00 0.00	0.00 0.00	0.00 0.00
	15,900.00	90.00	179.45	13,092.00	-3,476.26	105.54	3,477.12	0.00	0.00	0.00
	16,000.00	90.00	179.45 170.45	13,092.00	-3,576.26 -3,676.25	106.50	3,577.12	0.00	0.00	0.00
	16,100.00 16,200.00	90.00 90.00	179.45 179.45	13,092.00 13,092.00	-3,676.25 -3,776.25	107.46 108.42	3,677.12 3,777.12	0.00 0.00	0.00 0.00	0.00 0.00
	16,300.00	90.00	179.45	13,092.00	-3,876.25	109.39	3,877.12	0.00	0.00	0.00
	,									
	16,400.00	90.00	179.45	13,092.00	-3,976.24	110.35	3,977.12	0.00	0.00	0.00
	16,500.00 16,600.00	90.00 90.00	179.45 179.45	13,092.00 13,092.00	-4,076.24 -4,176.23	111.31 112.27	4,077.12 4,177.12	0.00 0.00	0.00 0.00	0.00 0.00
	16,700.00	90.00	179.45	13,092.00	-4,276.23	113.24	4,177.12	0.00	0.00	0.00
	16,800.00	90.00	179.45	13,092.00	-4,376.22	114.20	4,377.12	0.00	0.00	0.00





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Lea County, NM - (NAD83 NME)
Site: El Campeon Fed Com (NAD83)
Well: El Campeon Fed Com 513H

Wellbore: OH

Design: OH Plan 1 08-31-22

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well El Campeon Fed Com 513H

RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid

_									
Planned 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)
16,900.00	90.00	179.45	13,092.00	-4,476.22	115.16	4,477.12	0.00	0.00	0.00
17,000.00	90.00	179.45	13,092.00	-4,576.21	116.13	4,577.12	0.00	0.00	0.00
17,100.00	90.00	179.45	13,092.00	-4,676.21	117.09	4,677.12	0.00	0.00	0.00
17,200.00	90.00	179.45	13,092.00	-4,776.20	118.05	4,777.12	0.00	0.00	0.00
17,300.00	90.00	179.45	13,092.00	-4,876.20	119.01	4,877.12	0.00	0.00	0.00
17,400.00	90.00	179.45	13,092.00	-4,976.19	119.98	4,977.12	0.00	0.00	0.00
17,500.00	90.00	179.45	13.092.00	-5,076.19	120.94	5,077.12	0.00	0.00	0.00
17,600.00	90.00	179.45	13,092.00	-5,176.19	121.90	5,177.12	0.00	0.00	0.00
17,700.00	90.00	179.45	13,092.00	-5,276.18	122.86	5,277.12	0.00	0.00	0.00
17,800.00	90.00	179.45	13,092.00	-5,376.18	123.83	5,377.12	0.00	0.00	0.00
17,900.00	90.00	179.45	13,092.00	-5,476.17	124.79	5,477.12	0.00	0.00	0.00
18,000.00	90.00	179.45	13,092.00	-5,576.17	125.75	5,577.12	0.00	0.00	0.00
18,100.00	90.00	179.45	13,092.00	-5,676.16	126.71	5,677.12	0.00	0.00	0.00
18,200.00	90.00	179.45	13,092.00	-5,776.16	127.68	5,777.12	0.00	0.00	0.00
18,300.00	90.00	179.45	13,092.00	-5,876.15	128.64	5,877.12	0.00	0.00	0.00
10,300.00	90.00	179.45	13,092.00	-5,670.15	120.04	3,077.12	0.00	0.00	0.00
18,400.00	90.00	179.45	13,092.00	-5,976.15	129.60	5,977.12	0.00	0.00	0.00
18,500.00	90.00	179.45	13,092.00	-6,076.14	130.57	6,077.12	0.00	0.00	0.00
18,600.00	90.00	179.45	13,092.00	-6,176.14	131.53	6,177.12	0.00	0.00	0.00
18,700.00	90.00	179.45	13,092.00	-6,276.13	132.49	6,277.12	0.00	0.00	0.00
18,800.00	90.00	179.45	13,092.00	-6,376.13	133.45	6,377.12	0.00	0.00	0.00
10,000.00		179.43	13,092.00	-0,370.13	133.43	0,377.12	0.00		
18,900.00	90.00	179.45	13,092.00	-6,476.12	134.42	6,477.12	0.00	0.00	0.00
19,000.00	90.00	179.45	13,092.00	-6,576.12	135.38	6,577.12	0.00	0.00	0.00
19,100.00	90.00	179.45	13,092.00	-6,676.12	136.34	6,677.12	0.00	0.00	0.00
19,200.00	90.00	179.45	13,092.00	-6,776.11	137.30	6,777.12	0.00	0.00	0.00
19,300.00	90.00	179.45	13,092.00	-6,876.11	138.27	6,877.12	0.00	0.00	0.00
19,400.00	90.00	179.45	13,092.00	-6,976.10	139.23	6,977.12	0.00	0.00	0.00
19,500.00	90.00	179.45	13,092.00	-7,076.10	140.19	7,077.12	0.00	0.00	0.00
19,600.00	90.00	179.45	13,092.00	-7,176.09	141.16	7,177.12	0.00	0.00	0.00
19,700.00	90.00	179.45	13,092.00	-7,276.09	142.12	7,277.12	0.00	0.00	0.00
19,800.00	90.00	179.45	13,092.00	-7,376.08	143.08	7,377.12	0.00	0.00	0.00
40,000,00	00.00	470.45	12 000 00	7 470 00	444.04		0.00	0.00	0.00
19,900.00	90.00	179.45	13,092.00	-7,476.08	144.04	7,477.12	0.00	0.00	0.00
20,000.00	90.00	179.45	13,092.00	-7,576.07	145.01	7,577.12	0.00	0.00	0.00
20,100.00	90.00	179.45	13,092.00	-7,676.07	145.97	7,677.12	0.00	0.00	0.00
20,200.00	90.00	179.45	13,092.00	-7,776.06	146.93	7,777.12	0.00	0.00	0.00
20,300.00	90.00	179.45	13,092.00	-7,876.06	147.89	7,877.12	0.00	0.00	0.00
20,400,00	00.00	170.45	12 002 00	-7.976.06	110 06	7 077 12	0.00	0.00	0.00
20,400.00	90.00	179.45	13,092.00	,	148.86	7,977.12	0.00	0.00	0.00
20,500.00	90.00	179.45	13,092.00	-8,076.05	149.82	8,077.12	0.00	0.00	0.00
20,600.00	90.00	179.45	13,092.00	-8,176.05	150.78	8,177.12	0.00	0.00	0.00
20,700.00	90.00	179.45	13,092.00	-8,276.04	151.74	8,277.12	0.00	0.00	0.00
20,800.00	90.00	179.45	13,092.00	-8,376.04	152.71	8,377.12	0.00	0.00	0.00
20,900.00	90.00	179.45	13,092.00	-8,476.03	153.67	8,477.12	0.00	0.00	0.00
21,000.00	90.00	179.45	13,092.00	-8,576.03	154.63	8,577.12	0.00	0.00	0.00
				-8,676.02		,			
21,100.00	90.00	179.45	13,092.00	,	155.60	8,677.12	0.00	0.00	0.00
21,200.00	90.00	179.45	13,092.00	-8,776.02	156.56	8,777.12	0.00	0.00	0.00
21,300.00	90.00	179.45	13,092.00	-8,876.01	157.52	8,877.12	0.00	0.00	0.00
21,400.00	90.00	179.45	13,092.00	-8,976.01	158.48	8,977.12	0.00	0.00	0.00
21,500.00	90.00	179.45	13,092.00	-9,076.00	159.45	9,077.12	0.00	0.00	0.00
21,600.00	90.00	179.45	13,092.00	-9,176.00	160.41	9,177.12	0.00	0.00	0.00
21,700.00	90.00	179.45	13,092.00	-9,276.00	161.37	9,277.12	0.00	0.00	0.00
21,800.00	90.00	179.45	13,092.00	-9,276.00 -9,375.99	162.33	9,277.12	0.00	0.00	0.00
∠1,000.00	90.00	179.40	13,092.00	-9,375.99	102.33	9,311.12	0.00	0.00	0.00
21,900.00	90.00	179.45	13,092.00	-9,475.99	163.30	9,477.12	0.00	0.00	0.00
22,000.00	90.00	179.45	13,092.00	-9,575.98	164.26	9,577.12	0.00	0.00	0.00
22,100.00		179.45	13,092.00	-9,675.98	165.22	9,677.12	0.00	0.00	0.00
22,200.00	90.00	179.45	13,092.00	-9,775.97	166.18	9,777.12	0.00	0.00	0.00
۷۵,۷00.00	30.00	113.43	10,002.00	-0,110.31	100.10	٥,١١٢.١٧	0.00	0.00	0.00



Project:

Design:

Site:

Planning Report



USA Compass Database: Company:

Titus Oil & Gas Production, LLC Lea County, NM - (NAD83 NME) El Campeon Fed Com (NAD83)

Well:

Wellbore: ОН Plan 1 08-31-22

El Campeon Fed Com 513H

Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: **Survey Calculation Method:**

Well El Campeon Fed Com 513H RKB @ 3200.50usft (TBD) RKB @ 3200.50usft (TBD)

Grid Minimum Curvature

Planned 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)
22,300.00	90.00	179.45	13,092.00	-9,875.97	167.15	9,877.12	0.00	0.00	0.00
22,400.00 22,500.00 22,600.00 22,700.00 22,728.24	90.00 90.00 90.00 90.00 90.00	179.45 179.45 179.45 179.45 179.45	13,092.00 13,092.00 13,092.00 13,092.00 13,092.00	-9,975.96 -10,075.96 -10,175.95 -10,275.95 -10,304.19	168.11 169.07 170.04 171.00 171.27	9,977.12 10,077.12 10,177.12 10,277.12 10,305.36	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
TD at 22728.	.24								

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
LTP - El Camp Fed Con - plan misses targel - Point			13,092.00 3.75usft MD	-10,209.70 (13092.00 TV	170.34 'D, -10209.70	363,222.15 N, 170.36 E)	834,737.52	31° 59' 42.172787 N	103° 23' 12.894383 W
SLC - El Camp Fed Cor - plan misses target - Point			13,092.00 5.30usft MD	-8,301.34 (13092.00 TV	151.97 /D, -8301.34 N	365,130.51 N, 151.99 E)	834,719.15	32° 0' 1.057724 N	103° 23' 12.913718 W
FTP - El Camp Fed Con - plan misses target - Point			-,	-680.47 D (13016.47 T	78.62 VD, -720.31 N	372,751.38 N, 79.00 E)	834,645.80	32° 1' 16.472924 N	103° 23' 12.990567 W
BHL - El Camp Fed Cor - plan hits target ce - Point		0.00	13,092.00	-10,304.19	171.27	363,127.66	834,738.45	31° 59' 41.237722 N	103° 23' 12.893188 W

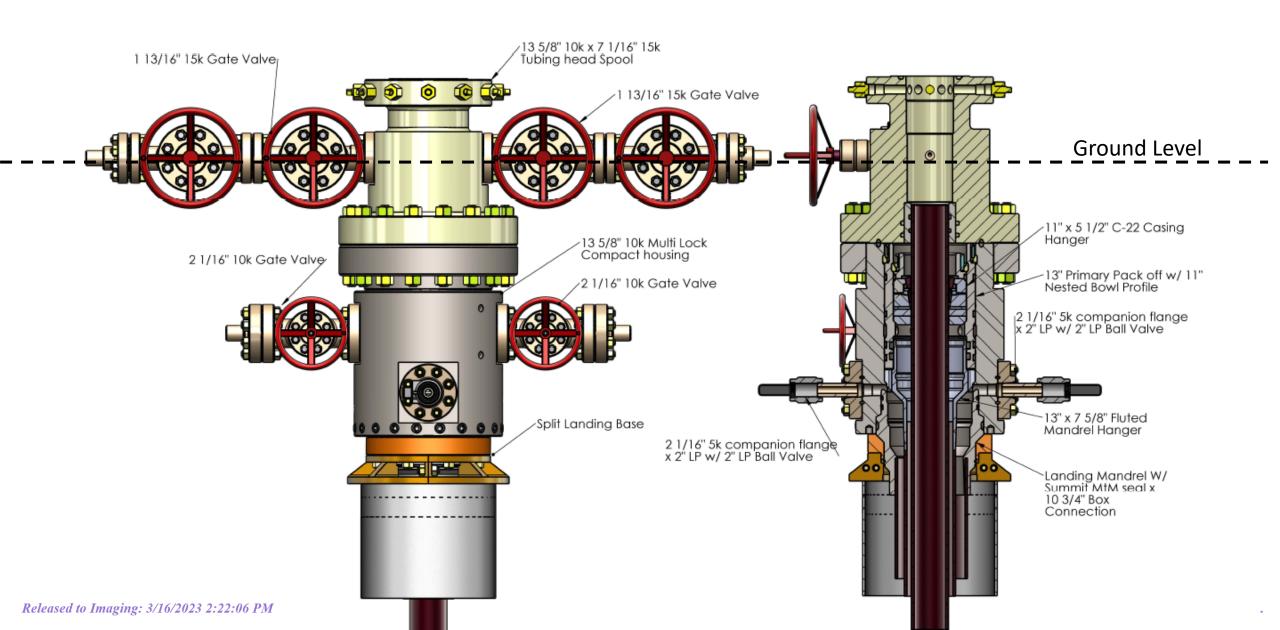
Casing Points							
	Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (")	Hole Diameter (")	
		(,	0011 0 :	Name	20	24	
	23,045.45		20" Casing		20	24	

Plan Annotations				
Measured	Vertical	Local Coor	dinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
1,500.00	1,500.00	0.00	0.00	KOP, Begin 2.00°/100' Build
1,620.70	1,620.67	-2.50	0.44	Hold 2.41° Inc at 169.99° Azm
11,907.54	11,898.38	-429.19	75.78	Begin 2.00°/100' Drop
12,028.24	12,019.04	-431.69	76.22	Begin Vertical Hold
12,528.24	12,519.04	-431.69	76.22	KOP2, Begin 10.00°/100' Build
13,428.24	13,092.00	-1,004.62	81.74	LP, Hold 90.00° Inc at 179.45° Azm
22,728.24	13,092.00	-10,304.19	171.27	TD at 22728.24



13 5/8" 10k Multi Lock Wellhead System 3 String Slim Hole 10 3/4" x 7 5/8" x 5 1/2"

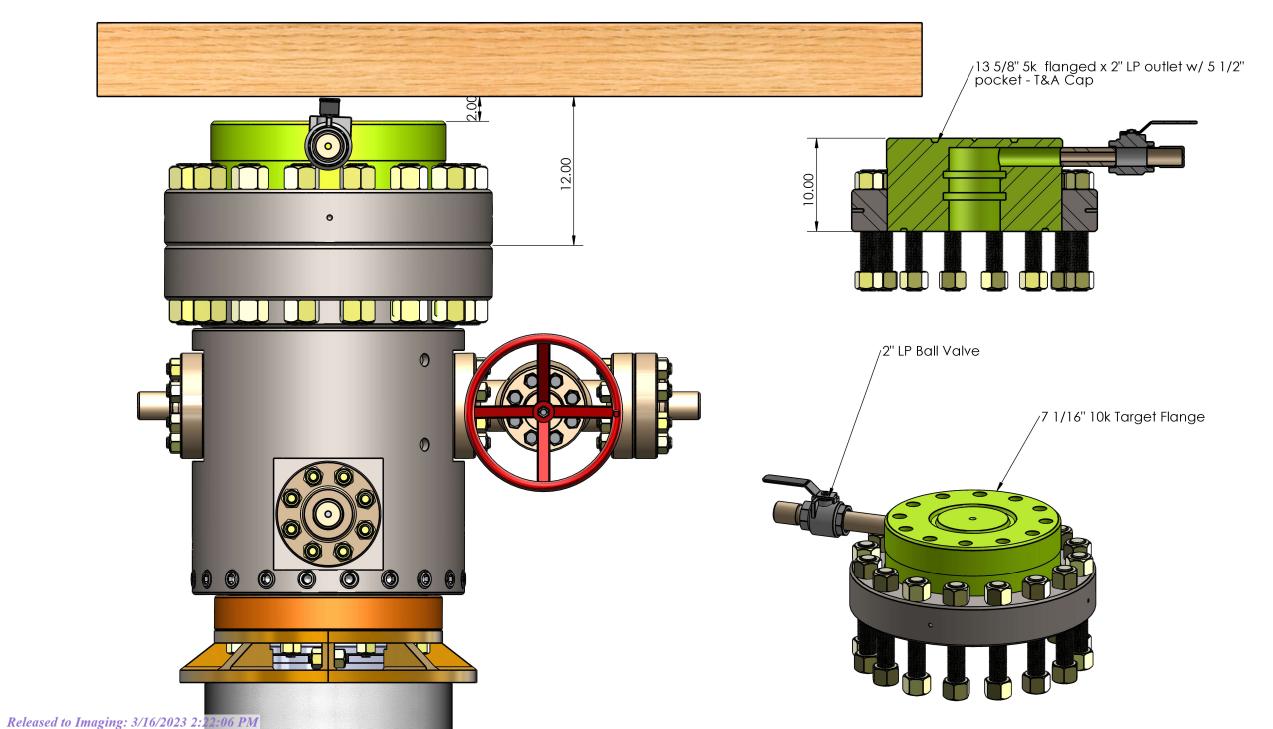






13 5/8" 5k T&A Cap





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 Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. **Santa Fe, NM 87505**

CONDITIONS

Action 195532

CONDITIONS

Operator:	OGRID:
Earthstone Operating, LLC	331165
1400 Woodloch Forest; Ste 300	Action Number:
The Woodlands, TX 77380	195532
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
pkautz	None	3/16/2023