

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.  
NMNM0405444

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on page 2**1. Type of Well  
☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.  
MALDIVES 15-27 FED COM 232H2. Name of Operator  
DEVON ENERGY PRODUCTION COMPANY  
Contact: JENNIFER HARMS  
Email: jennifer.harms@dvn.com9. API Well No.  
30-015-45384-00-X13a. Address  
333 WEST SHERIDAN AVENUE  
OKLAHOMA, OK 731023b. Phone No. (include area code)  
Ph: 405-552-656010. Field and Pool or Exploratory Area  
JAMES RANCH

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 15 T23S R31E NWNW 400FNL 540FWL  
32.310638 N Lat, 103.772484 W Lon11. County or Parish, State  
EDDY COUNTY, NM**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Devon Energy Production Co., L. P. (Devon) respectfully requests to change the plans for the above referenced well as originally approved on 10-25-2018.  
The SHL is currently permitted as 400 FNL, 540 FWL 15-23S-31E, and will change to 400 FNL, 810 FWL, 15-23S-31E.

The BHL is currently permitted as 2350 FNL, 650 FWL, 22-23S-31E and will change to 20 FSL, 1360 FWL, 27-23S-31E. The last take point will be 100 FSL, 1360 FWL, SESW 27-23S-31E.

The federal lease numbers the lateral will be passing through are as follows:

NMNM0405444, NMNM0405444A, NMNM0418220A.

The permitted well name is MALDIVES 15-22 FED COM 511H and will change to MALDIVES 15-27 FED COM 232H.

Please find attached the revised plats, drilling plan, directional plan. Thank you.

RECEIVED

JUL 03 2019

DISTRICT II-ARTESIA O.C.D.

14. I hereby certify that the foregoing is true and correct.	
<b>Electronic Submission #458282 verified by the BLM Well Information System For DEVON ENERGY PRODUCTION COMPANY LP, sent to the Carlsbad Committed to AFMSS for processing by PRISCILLA PEREZ on 03/19/2019 (19PP1398SE)</b>	
Name (Printed/Typed) JENNIFER HARMS	Title REGULATORY COMPLIANCE ANALYST
Signature (Electronic Submission)	Date 03/18/2019

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <u>CODY LAYTON</u>	Title <u>ASSIST FIELD MANAGER LANDS MINERALS</u>	Date <u>03/26/2019</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		
Office Carlsbad		

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

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

## Revisions to Operator-Submitted EC Data for Sundry Notice #458282

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM0405444	NMNM0405444
Agreement:		
Operator:	DEVON ENERGY PRODUCTION COMPAN 333 WEST SHERIDAN AVENUE OKLAHOMA CITY, OK 73102-5015 Ph: 405-552-6560	DEVON ENERGY PRODUCTION COM LP 333 WEST SHERIDAN AVENUE OKLAHOMA, OK 73102 Ph: 405 552 6571
Admin Contact:	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com  Ph: 405-552-6560	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com  Ph: 405-552-6560
Tech Contact:	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com  Ph: 405-552-6560	JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com  Ph: 405-552-6560
Location:		
State:	NM	NM
County:	EDDY	EDDY
Field/Pool:	JAMES RANCH; BONESPRING	JAMES RANCH
Well/Facility:	MALDIVES 15-22 FED COM 511H Sec 15 T23S R31E NWNW 400FNL 540FWL	MALDIVES 15-27 FED COM 232H Sec 15 T23S R31E NWNW 400FNL 540FWL 32.310638 N Lat, 103.772484 W Lon

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	DEVON ENERGY PRODUCTION COMPANY LP
<b>LEASE NO.:</b>	NMNM0405444
<b>WELL NAME &amp; NO.:</b>	232H- MALDIVES 15-27 FED COM
<b>SURFACE HOLE FOOTAGE:</b>	400'/N & 540'/W
<b>BOTTOM HOLE FOOTAGE:</b>	2350'/N & 650'/W
<b>LOCATION:</b>	Section.15.,T23S., R.31E., NMP
<b>COUNTY:</b>	EDDY County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input type="radio"/> None	<input checked="" type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

**All Previous COAs Still Apply**

## A. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **608 feet** (a minimum of 25 feet 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 **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing shall be set at approximately **6000 feet** is:

**Option 1 (Single Stage):**

- Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

**Option 2:**

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate, contact the appropriate BLM office.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

**Operator has proposed to pump down 13-3/8" X 9-5/8" annulus. Operator must run a CBL from TD of the 9-5/8" casing to surface. Submit results to BLM.**

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
  - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.  
**Cement excess is less than 25%, more cement might be required.**

## **B. 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.

### **Option 1:**

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **5000 (5M)** psi.

### **Option 2:**

1. 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 **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.

## 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)
- ☒ Chaves and Roosevelt Counties  
Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.  
During office hours call (575) 627-0272.  
After office hours call (575)
- ☒ Eddy County  
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822
- ☒ Lea County  
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612
1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
    - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
    - b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2<sup>nd</sup> 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.
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.
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: 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



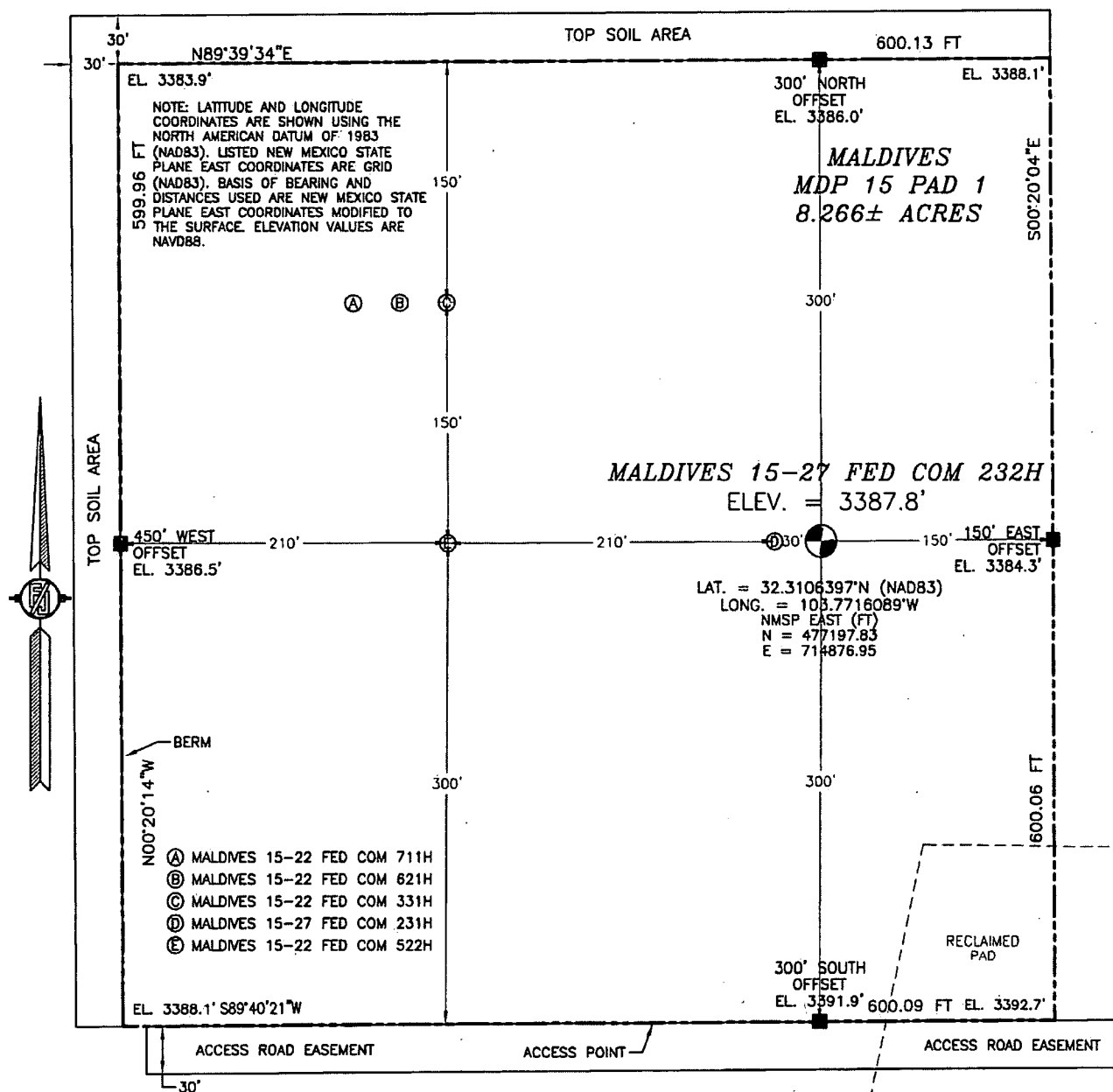
plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not 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.
- 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.

SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
SITE MAP



SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM STATE HWY. 128 & CR. 798 (RED ROAD) GO NORTH ON RED ROAD 2.2 MILES, TURN LEFT ON CALICHE ROAD AND GO NORTHWEST 1.8 MILES, TURN RIGHT AND GO NORTH 0.6 MILE, TURN LEFT AND GO WEST 0.25 MILE, TURN RIGHT AND GO NORTH 0.25 MILE, TO THE TODD 15C FED-3 WELL. FROM SOUTHWEST EDGE OF PAD FOLLOW FLAGS WEST--SOUTHWEST 72' TO THE SOUTHEAST CORNER OF PAD 2, THEN FOLLOW FLAGS WEST 1110' TO THE SOUTHEAST CORNER OF PAD FOR THIS LOCATION.

**DEVON ENERGY PRODUCTION COMPANY, L.P.  
MALDIVES 15-27 FED COM 232H  
LOCATED 400 FT. FROM THE NORTH LINE  
AND 810 FT. FROM THE WEST LINE OF  
SECTION 15, TOWNSHIP 23 SOUTH,  
RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO**

FEBRUARY 25, 2019

**SURVEY NO. 5295A**

**MADRON SURVEYING, INC.** 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
(575) 234-3341

The diagram is a site plan for 'MALDIVES MDP 15 PAD 1' with a total area of 8.266± ACRES. It features several key areas and dimensions:

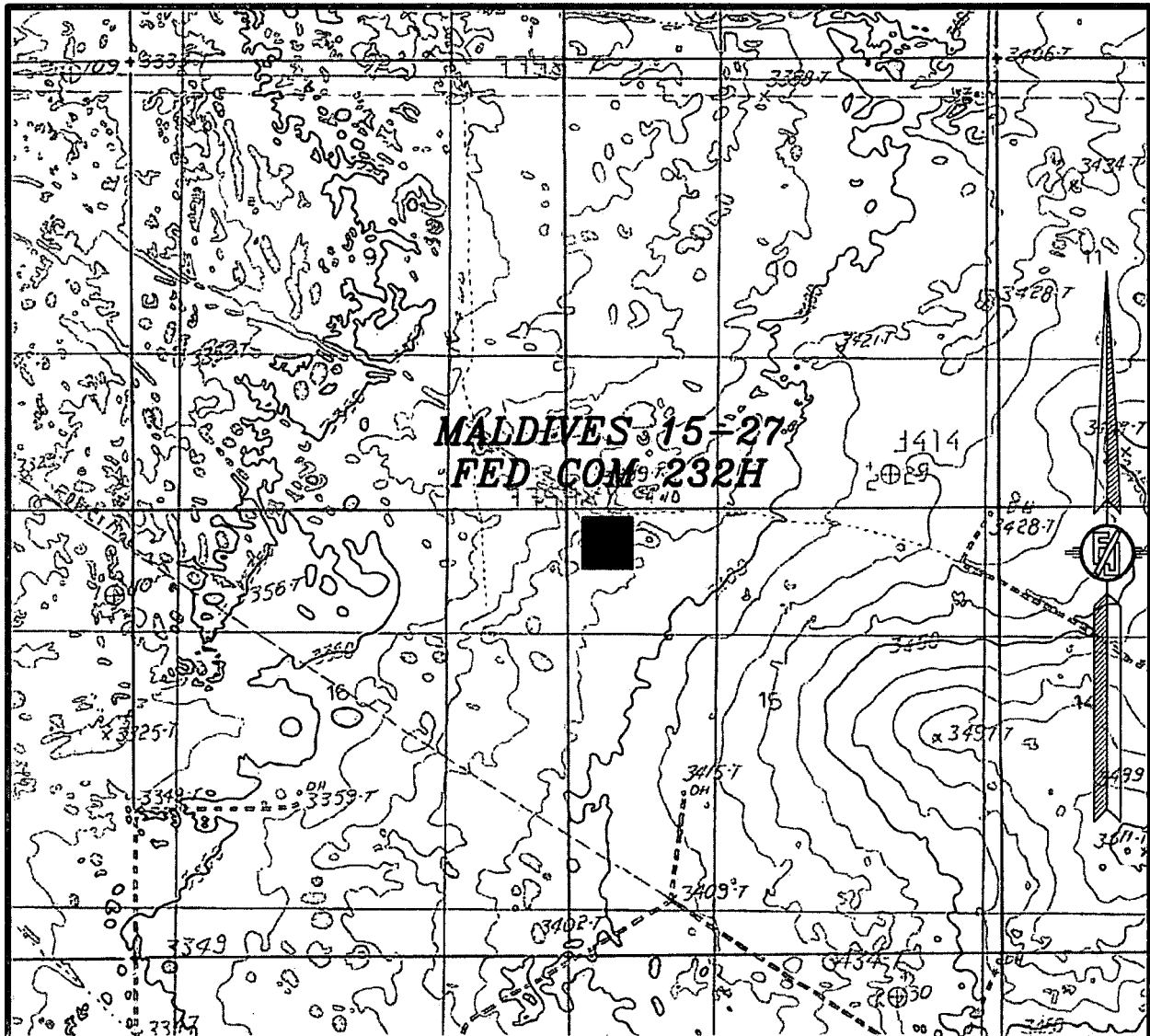
- TOP SOIL AREA:** Located at the top and left, with a width of 30' and a height of 420'.
- Access Road Easement:** Located at the bottom, with a width of 30'.
- Access Point:** Located at the bottom center, with a width of 30'.
- Internal Dimensions:**
  - Horizontal dimensions: 120', 120', 270', 180', 210', 120', 245'.
  - Vertical dimensions: 120', 150', 120', 120', 180'.
- Points A-F:** Six points marked with circles and letters, distributed across the plan.
- Legend:**
  - (A) MALDIVES 15-22 FED COM 711H
  - (B) MALDIVES 15-22 FED COM 621H
  - (C) MALDIVES 15-22 FED COM 331H
  - (D) MALDIVES 15-27 FED COM 231H
  - (E) MALDIVES 15-27 FED COM 232H
  - (F) MALDIVES 15-22 FED COM 522H

**DEVON ENERGY PRODUCTION COMPANY, L.P.**  
**MALDIVES 15-27 FED COM 232H**  
 LOCATED 400 FT. FROM THE NORTH LINE  
 AND 810 FT. FROM THE WEST LINE OF  
 SECTION 15, TOWNSHIP 23 SOUTH,  
 RANGE 31 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 25, 2019 SURVEY NO. 5295A

**MADRON SURVEYING, INC.** 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 LOCATION VERIFICATION MAP



USGS QUAD MAP:  
 LOS MEDANOS

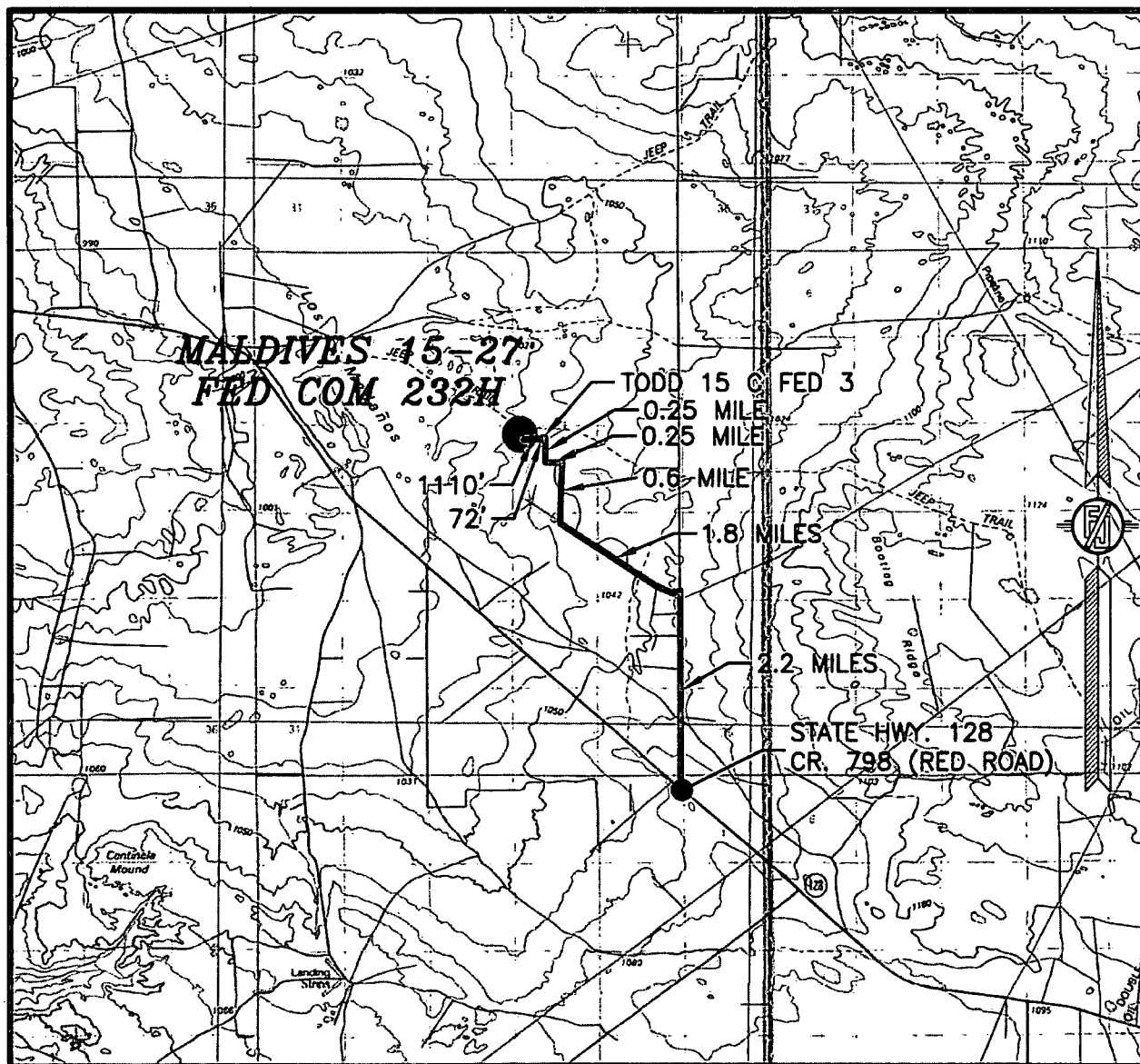
NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.  
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 EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 25, 2019

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO SURVEY NO. 5295A

SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

**DIRECTIONS TO LOCATION**

FROM STATE HWY. 128 & CR. 798 (RED ROAD) GO NORTH ON RED ROAD 2.2 MILES, TURN LEFT ON CALICHE ROAD AND GO NORTHWEST 1.8 MILES, TURN RIGHT AND GO NORTH 0.6 MILE, TURN LEFT AND GO WEST 0.25 MILE, TURN RIGHT AND GO NORTH 0.25 MILE, TO THE TODD 15C FED 3 WELL. FROM SOUTHWEST EDGE OF PAD FOLLOW FLAGS WEST-SOUTHWEST 72' TO THE SOUTHEAST CORNER OF PAD 2, THEN FOLLOW FLAGS WEST 1110' TO THE SOUTHEAST CORNER OF PAD FOR THIS LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

**MALDIVES 15-27 FED COM 232H**

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SECTION 15, TOWNSHIP 23 SOUTH,  
RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 25, 2019

SURVEY NO. 5295A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
**AERIAL PHOTO**



NOT TO SCALE  
AERIAL PHOTO:  
GOOGLE EARTH  
FEB. 2017

**DEVON ENERGY PRODUCTION COMPANY, L.P.**  
**MALDIVES 15-27 FED COM 232H**  
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AND 810 FT. FROM THE WEST LINE OF  
SECTION 15, TOWNSHIP 23 SOUTH,  
RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 25, 2019

SURVEY NO. 5295A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 AERIAL ACCESS ROUTE MAP



NOT TO SCALE  
 AERIAL PHOTO:  
 GOOGLE EARTH  
 FEB. 2017

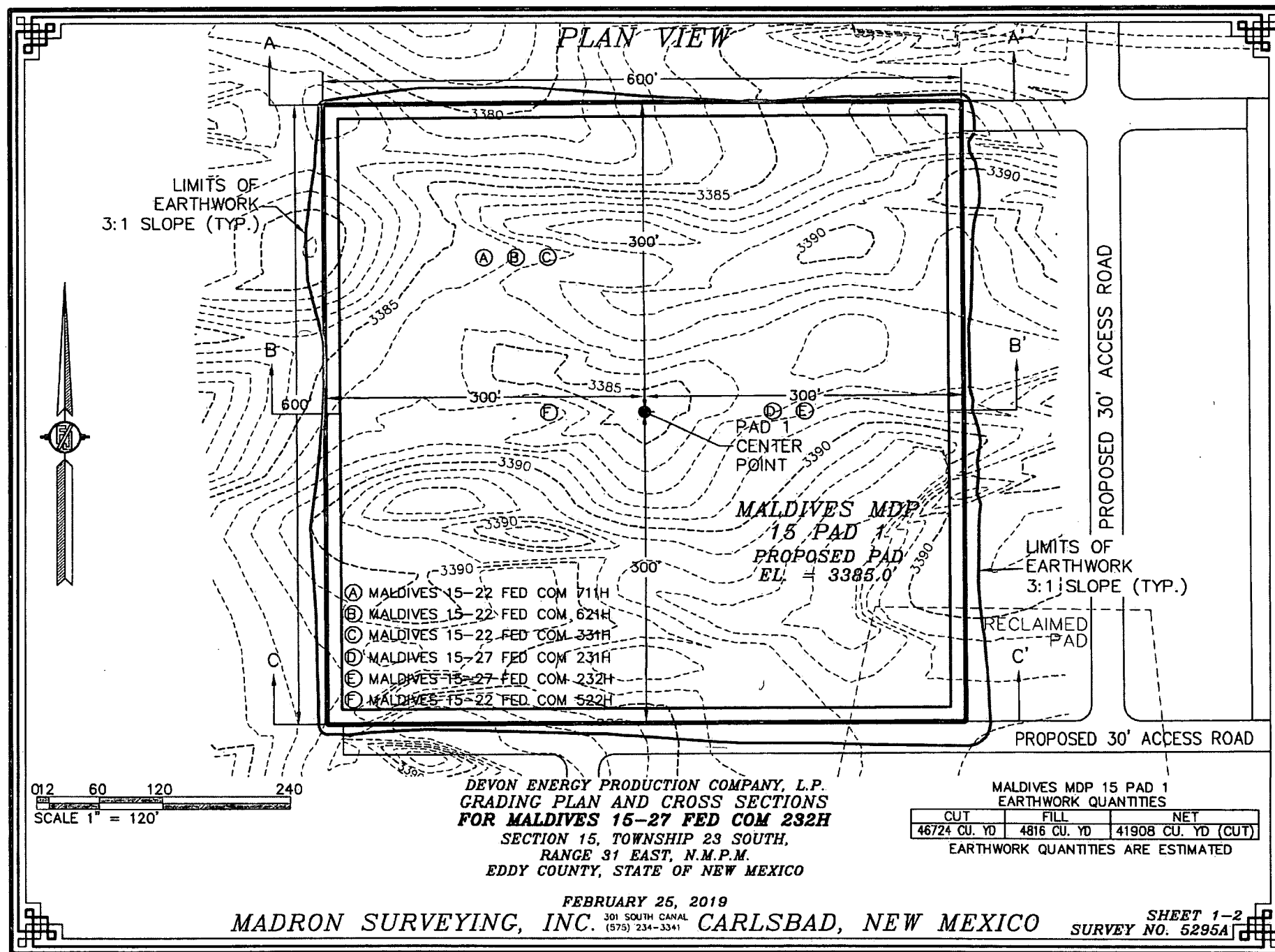
DEVON ENERGY PRODUCTION COMPANY, L.P.  
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FEBRUARY 25, 2019

SURVEY NO. 5295A

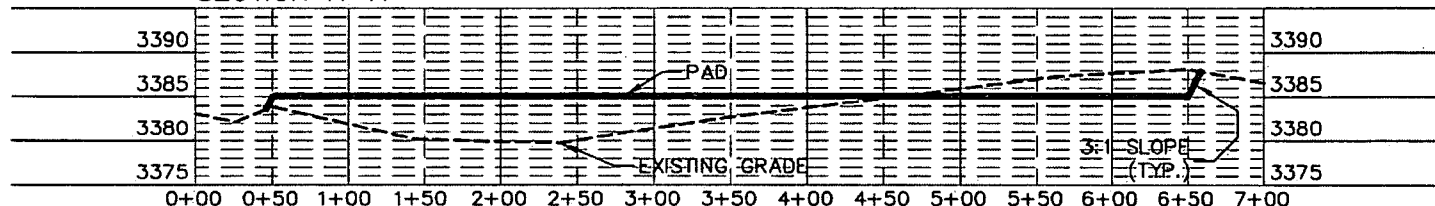
MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO



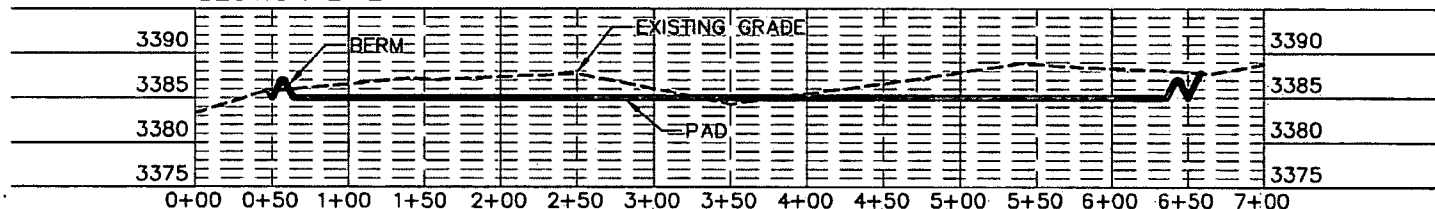


# CROSS-SECTIONS

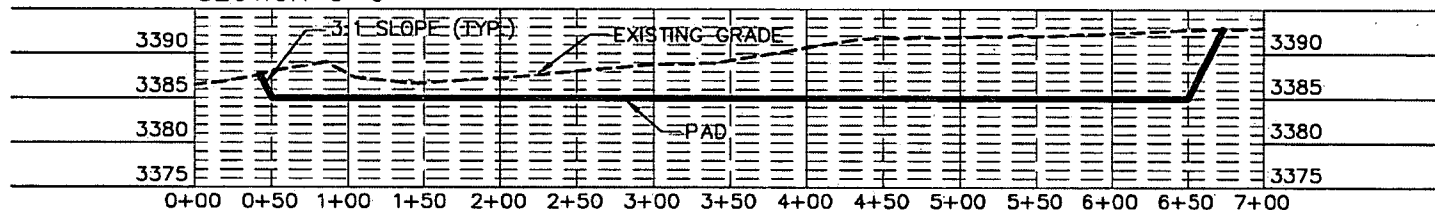
SECTION A-A'



SECTION B-B'



SECTION C-C'



0 12 60 120 240  
SCALE 1" = 120' - 1" = 20' VER

DEVON ENERGY PRODUCTION COMPANY, L.P.  
GRADING PLAN AND CROSS SECTIONS  
FOR MALDIVES 15-27 FED COM 232H  
SECTION 15, TOWNSHIP 23 SOUTH,  
RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

MALDIVES MDP 15 PAD 1  
EARTHWORK QUANTITIES

CUT	FILL	NET
46724 CU. YD	4816 CU. YD	41908 CU. YD (CUT)

EARTHWORK QUANTITIES ARE ESTIMATED

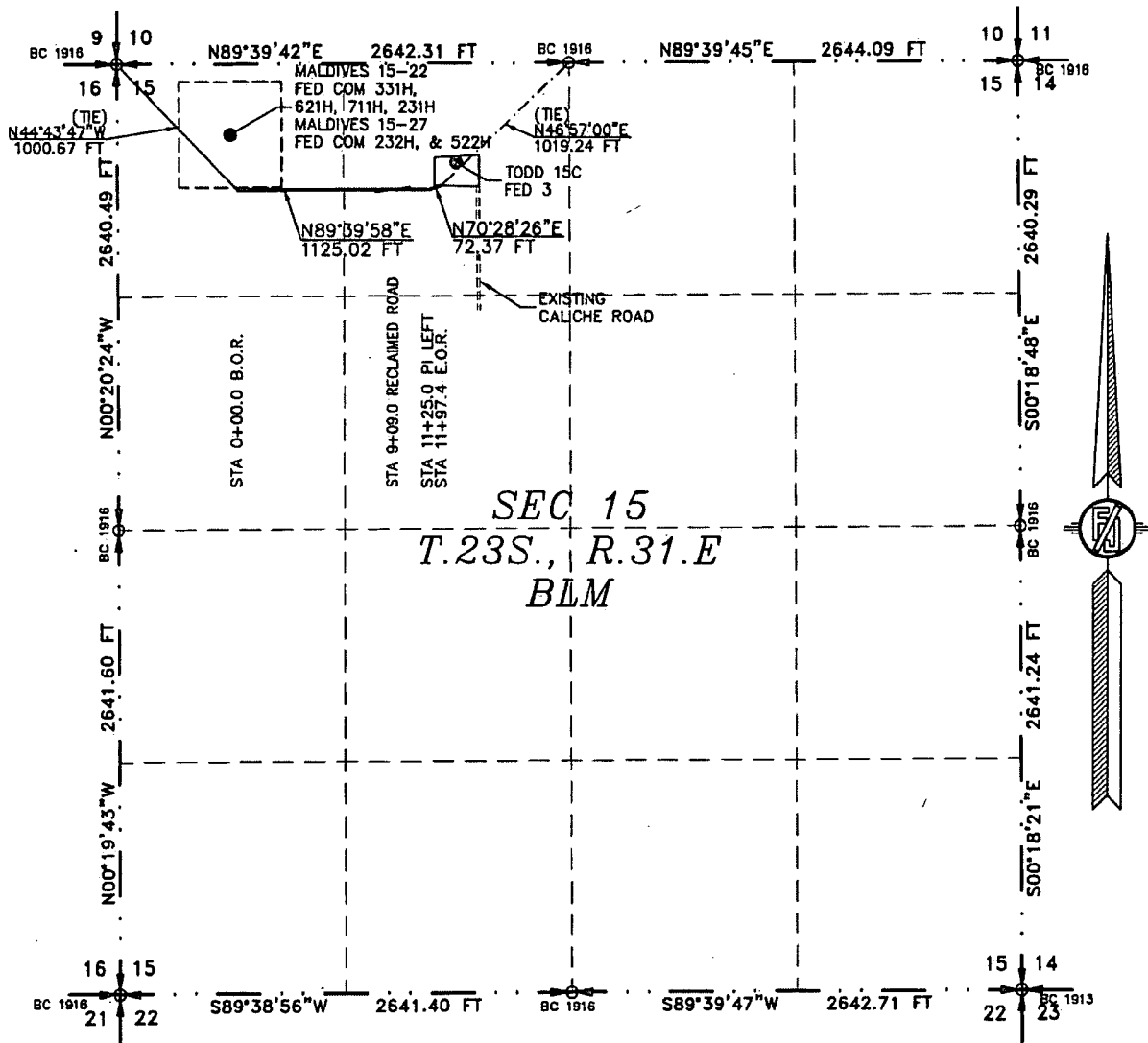
MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO  
(575) 234-3341

SHEET 2-2  
SURVEY NO. 5295A

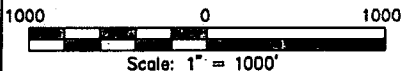
# ACCESS ROAD PLAT

ACCESS ROAD FOR MALDIVES 15-22 FED COM 331H, 621H, 711H, & 522H  
AND MALDIVES 15-27 FED COM 231H & 232H

DEVON ENERGY PRODUCTION COMPANY, L.P.  
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
FEBRUARY 25, 2019



SEE NEXT SHEET (2-2) FOR DESCRIPTION



## GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 1-2

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

## SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 25 DAY OF FEBRUARY 2019

FILMON F. JARAMILLO PLS. 12797

MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

SURVEY NO. 5295A

### ACCESS ROAD PLAT

ACCESS ROAD FOR MALDIVES 15-22 FED COM 331H, 621H, 711H, & 522H  
AND MALDIVES 15-27 FED COM 231H & 232H

DEVON ENERGY PRODUCTION COMPANY, L.P.  
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING  
SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO  
FEBRUARY 25, 2019

### DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE NW/4 NW/4 OF SAID SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE NORTHWEST CORNER OF SAID SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N44°43'47"W, A DISTANCE OF 1000.67 FEET;  
THENCE N89°39'58"E A DISTANCE OF 1125.02 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
THENCE N70°28'26"E A DISTANCE OF 72.37 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE NORTH QUARTER CORNER OF SAID SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N46°57'00"E, A DISTANCE OF 1019.24 FEET;

SAID STRIP OF LAND BEING 1197.39 FEET OR 72.57 RODS IN LENGTH, CONTAINING 0.825 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NW/4 NW/4	621.02 L.F.	37.64 RODS	0.428 ACRES
NE/4 NW/4	576.37 L.F.	34.93 RODS	0.397 ACRES

### SURVEYOR CERTIFICATE

I, FILMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD,  
NEW MEXICO, THIS 25<sup>TH</sup> DAY OF FEBRUARY, 2019

### GENERAL NOTES

1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 2-2

MADRON SURVEYING, INC. CARLSBAD, NEW MEXICO

MADRON SURVEYING, INC.  
301 SOUTH CANAL  
CARLSBAD, NEW MEXICO 88220  
Phone (575) 234-3341

SURVEY NO. 5295A

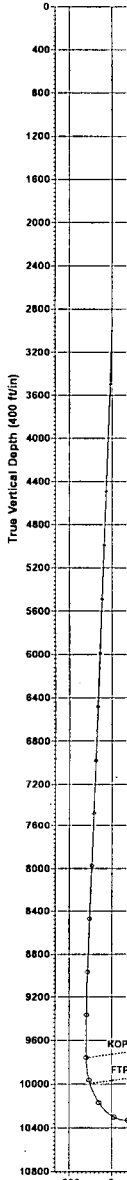
# Devon Energy

WELL DETAILS: Maldives 15-27 Fed Com 232H

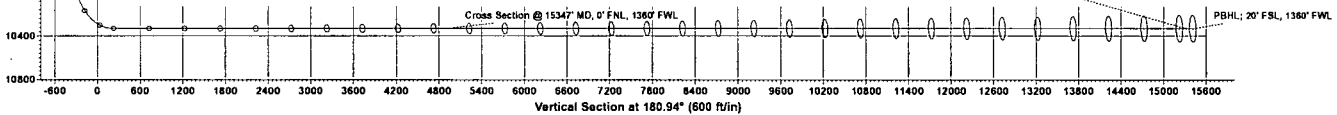
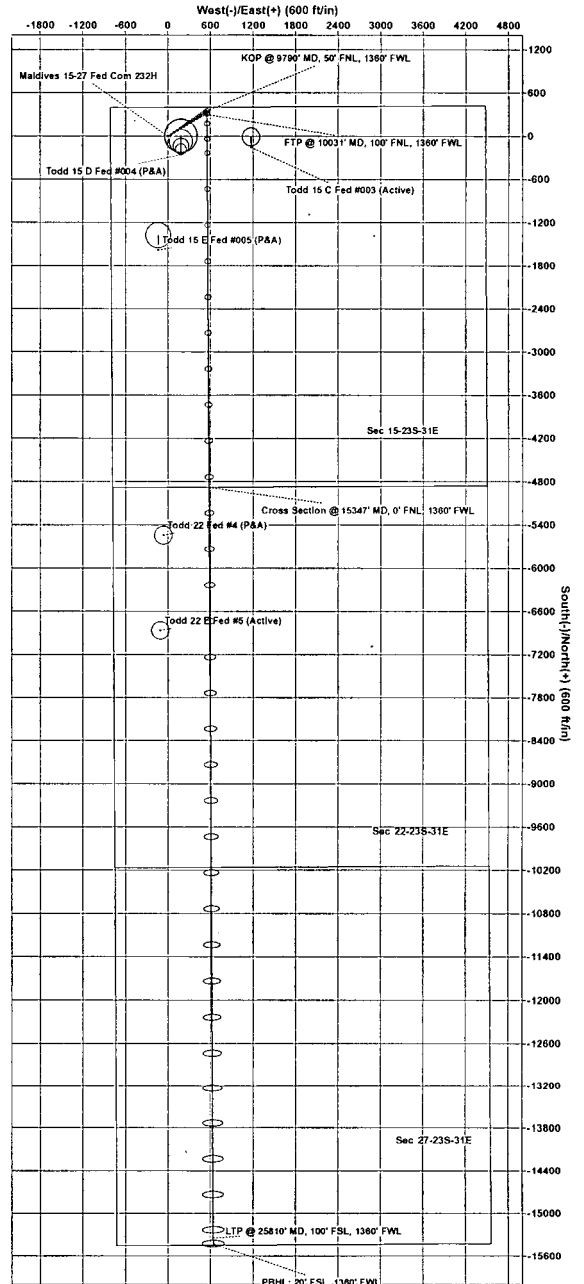
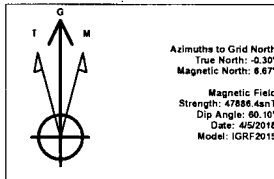
RKB @ 3412.50ft  
3387.80  
Northing 477197.83 Easting 714876.95 Latitude 32.310640 Longitude -103.771609

## SECTION DETAILS Permit Plan 2

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2700.00	0.00	0.00	2700.00	0.00	0.00	0.00	0.00	
3299.59	6.00	57.53	3298.50	16.83	26.44	1.00	-17.26	
9040.50	6.00	57.53	9008.00	338.78	532.37	0.00	-347.50	
9440.23	0.00	0.00	9407.00	350.00	550.00	1.50	-359.01	
9790.27	0.00	0.00	9757.04	350.00	550.00	0.00	-359.01	KOP @ 9790' MD, 50' FNL, 1360' FWL
10690.27	90.00	179.68	10330.00	-222.95	553.18	10.00	213.81	
25889.54	90.00	179.68	10330.00	-15421.98	637.43	0.00	15409.39	PBHL: 20' FSL, 1360' FWL



# devon



# **WCDSC Permian NM**

**Eddy County (NAD 83 NM Eastern)**

**Sec 15-T23S-R31E**

**Maldives 15-27 Fed Com 232H**

**Wellbore #1**

**Plan: Permit Plan 2**

## **Standard Planning Report - Geographic**

**14 March, 2019**

# Planning Report - Geographic

<b>Database:</b>	EDM r5000.141_Prod US	<b>Local Co-ordinate Reference:</b>	Well Maldives 15-27 Fed Com 232H
<b>Company:</b>	WCDSC Permian NM	<b>TVD Reference:</b>	RKB @ 3412.50ft
<b>Project:</b>	Eddy County (NAD 83 NM Eastern)	<b>MD Reference:</b>	RKB @ 3412.50ft
<b>Site:</b>	Sec 15-T23S-R31E	<b>North Reference:</b>	Grid
<b>Well:</b>	Maldives 15-27 Fed Com 232H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permit Plan 2		

<b>Project</b>	Eddy County (NAD 83 NM Eastern)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site	Sec 15-T23S-R31E				
Site Position:		Northing:	477,592.96 usft	Latitude:	32.311738
From:	Map	Easting:	714,064.76 usft	Longitude:	-103.774231
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.30

Well		Maldives 15-27 Fed Com 232H				
Well Position	+N/-S	0.00 ft	Northing:	477,197.83 usft	Latitude:	32.310640
	+E/-W	0.00 ft	Easting:	714,876.95 usft	Longitude:	-103.771609
Position Uncertainty		0.50 ft	Wellhead Elevation:		Ground Level:	3,387.80 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	IGRF2015	4/5/2018	6.97	60.10	47,886.37940923

<b>Design</b>	Permit Plan 2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	180.94

<b>Plan Survey Tool Program</b>	<b>Date</b>	3/14/2019		
<b>Depth From</b>	<b>Depth To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
(ft)	(ft)			
1	0.00	25,889.54 Permit Plan 2 (Wellbore #1)	MWD+IFR1	
			OWSG MWD + IFR1	

<b>Plan Sections</b>										
<b>Measured</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Dogleg</b>	<b>Build</b>	<b>Turn</b>	<b>TFO</b>	<b>Target</b>
<b>Depth</b>	(°)	(°)	<b>Depth</b>	(ft)	(ft)	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>	(°)	
(ft)			(ft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,299.59	6.00	57.53	3,298.50	16.83	26.44	1.00	1.00	0.00	57.53	
9,040.50	6.00	57.53	9,008.00	338.78	532.37	0.00	0.00	0.00	0.00	
9,440.23	0.00	0.00	9,407.00	350.00	550.00	1.50	-1.50	0.00	180.00	
9,790.27	0.00	0.00	9,757.04	350.00	550.00	0.00	0.00	0.00	0.00	
10,690.27	90.00	179.68	10,330.00	-222.95	553.18	10.00	10.00	0.00	179.68	PBHL - Maldives 15-2
25,889.54	90.00	179.68	10,330.00	-15,421.98	637.43	0.00	0.00	0.00	0.00	PBHL - Maldives 15-2

# Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Maldives 15-27 Fed Com 232H
Company:	WCDCS Permian NM	TVD Reference:	RKB @ 3412.50ft
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3412.50ft
Site:	Sec 15-T23S-R31E	North Reference:	Grid
Well:	Maldives 15-27 Fed Com 232H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
100.00	0.00	0.00	100.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
200.00	0.00	0.00	200.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
300.00	0.00	0.00	300.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
400.00	0.00	0.00	400.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
500.00	0.00	0.00	500.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
600.00	0.00	0.00	600.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
700.00	0.00	0.00	700.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
800.00	0.00	0.00	800.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
900.00	0.00	0.00	900.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,000.00	0.00	0.00	1,000.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,100.00	0.00	0.00	1,100.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,200.00	0.00	0.00	1,200.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,300.00	0.00	0.00	1,300.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,400.00	0.00	0.00	1,400.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,500.00	0.00	0.00	1,500.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,600.00	0.00	0.00	1,600.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,700.00	0.00	0.00	1,700.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,800.00	0.00	0.00	1,800.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
1,900.00	0.00	0.00	1,900.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,000.00	0.00	0.00	2,000.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,100.00	0.00	0.00	2,100.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,200.00	0.00	0.00	2,200.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,300.00	0.00	0.00	2,300.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,400.00	0.00	0.00	2,400.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,500.00	0.00	0.00	2,500.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,600.00	0.00	0.00	2,600.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,700.00	0.00	0.00	2,700.00	0.00	0.00	477,197.83	714,876.95	32.310640	-103.771609
2,800.00	1.00	57.53	2,799.99	0.47	0.74	477,198.30	714,877.68	32.310641	-103.771607
2,900.00	2.00	57.53	2,899.96	1.87	2.94	477,199.70	714,879.89	32.310645	-103.771600
3,000.00	3.00	57.53	2,999.86	4.22	6.62	477,202.05	714,883.57	32.310651	-103.771588
3,100.00	4.00	57.53	3,099.68	7.49	11.77	477,205.32	714,888.72	32.310660	-103.771571
3,200.00	5.00	57.53	3,199.37	11.71	18.39	477,209.54	714,895.34	32.310672	-103.771549
3,299.59	6.00	57.53	3,298.50	16.83	26.44	477,214.66	714,903.39	32.310686	-103.771523
3,300.00	6.00	57.53	3,298.90	16.85	26.48	477,214.68	714,903.43	32.310686	-103.771523
3,400.00	6.00	57.53	3,398.36	22.46	35.29	477,220.29	714,912.24	32.310701	-103.771495
3,500.00	6.00	57.53	3,497.81	28.07	44.11	477,225.90	714,921.05	32.310716	-103.771466
3,600.00	6.00	57.53	3,597.26	33.68	52.92	477,231.51	714,929.86	32.310732	-103.771437
3,700.00	6.00	57.53	3,696.72	39.28	61.73	477,237.11	714,938.68	32.310747	-103.771409
3,800.00	6.00	57.53	3,796.17	44.89	70.54	477,242.72	714,947.49	32.310762	-103.771380
3,900.00	6.00	57.53	3,895.62	50.50	79.36	477,248.33	714,956.30	32.310777	-103.771351
4,000.00	6.00	57.53	3,995.07	56.11	88.17	477,253.94	714,965.11	32.310793	-103.771323
4,100.00	6.00	57.53	4,094.53	61.72	96.98	477,259.55	714,973.93	32.310808	-103.771294
4,200.00	6.00	57.53	4,193.98	67.32	105.79	477,265.15	714,982.74	32.310823	-103.771266
4,300.00	6.00	57.53	4,293.43	72.93	114.61	477,270.76	714,991.55	32.310839	-103.771237
4,400.00	6.00	57.53	4,392.89	78.54	123.42	477,276.37	715,000.37	32.310854	-103.771208
4,500.00	6.00	57.53	4,492.34	84.15	132.23	477,281.98	715,009.18	32.310869	-103.771180
4,600.00	6.00	57.53	4,591.79	89.76	141.04	477,287.59	715,017.99	32.310884	-103.771151
4,700.00	6.00	57.53	4,691.25	95.36	149.86	477,293.19	715,026.80	32.310900	-103.771122
4,800.00	6.00	57.53	4,790.70	100.97	158.67	477,298.80	715,035.62	32.310915	-103.771094
4,900.00	6.00	57.53	4,890.15	106.58	167.48	477,304.41	715,044.43	32.310930	-103.771065
5,000.00	6.00	57.53	4,989.60	112.19	176.30	477,310.02	715,053.24	32.310946	-103.771037
5,100.00	6.00	57.53	5,089.06	117.80	185.11	477,315.63	715,062.05	32.310961	-103.771008
5,200.00	6.00	57.53	5,188.51	123.40	193.92	477,321.23	715,070.87	32.310976	-103.770979
5,300.00	6.00	57.53	5,287.96	129.01	202.73	477,326.84	715,079.68	32.310992	-103.770951



# Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Maldives 15-27 Fed Com 232H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3412.50ft
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3412.50ft
Site:	Sec 15-T23S-R31E	North Reference:	Grid
Well:	Maldives 15-27 Fed Com 232H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,400.00	6.00	57.53	5,387.42	134.62	211.55	477,332.45	715,088.49	32.311007	-103.770922
5,500.00	6.00	57.53	5,486.87	140.23	220.36	477,338.06	715,097.30	32.311022	-103.770894
5,600.00	6.00	57.53	5,586.32	145.84	229.17	477,343.67	715,106.12	32.311037	-103.770865
5,700.00	6.00	57.53	5,685.77	151.44	237.98	477,349.27	715,114.93	32.311053	-103.770836
5,800.00	6.00	57.53	5,785.23	157.05	246.80	477,354.88	715,123.74	32.311068	-103.770808
5,900.00	6.00	57.53	5,884.68	162.66	255.61	477,360.49	715,132.55	32.311083	-103.770779
6,000.00	6.00	57.53	5,984.13	168.27	264.42	477,366.10	715,141.37	32.311099	-103.770750
6,100.00	6.00	57.53	6,083.59	173.88	273.23	477,371.71	715,150.18	32.311114	-103.770722
6,200.00	6.00	57.53	6,183.04	179.48	282.05	477,377.31	715,158.99	32.311129	-103.770693
6,300.00	6.00	57.53	6,282.49	185.09	290.86	477,382.92	715,167.81	32.311144	-103.770665
6,400.00	6.00	57.53	6,381.95	190.70	299.67	477,388.53	715,176.62	32.311160	-103.770636
6,500.00	6.00	57.53	6,481.40	196.31	308.49	477,394.14	715,185.43	32.311175	-103.770607
6,600.00	6.00	57.53	6,580.85	201.92	317.30	477,399.75	715,194.24	32.311190	-103.770579
6,700.00	6.00	57.53	6,680.30	207.52	326.11	477,405.35	715,203.06	32.311206	-103.770550
6,800.00	6.00	57.53	6,779.76	213.13	334.92	477,410.96	715,211.87	32.311221	-103.770521
6,900.00	6.00	57.53	6,879.21	218.74	343.74	477,416.57	715,220.68	32.311236	-103.770493
7,000.00	6.00	57.53	6,978.66	224.35	352.55	477,422.18	715,229.49	32.311251	-103.770464
7,100.00	6.00	57.53	7,078.12	229.96	361.36	477,427.79	715,238.31	32.311267	-103.770436
7,200.00	6.00	57.53	7,177.57	235.57	370.17	477,433.40	715,247.12	32.311282	-103.770407
7,300.00	6.00	57.53	7,277.02	241.17	378.99	477,439.00	715,255.93	32.311297	-103.770378
7,400.00	6.00	57.53	7,376.47	246.78	387.80	477,444.61	715,264.74	32.311313	-103.770350
7,500.00	6.00	57.53	7,475.93	252.39	396.61	477,450.22	715,273.56	32.311328	-103.770321
7,600.00	6.00	57.53	7,575.38	258.00	405.42	477,455.83	715,282.37	32.311343	-103.770292
7,700.00	6.00	57.53	7,674.83	263.61	414.24	477,461.44	715,291.18	32.311358	-103.770264
7,800.00	6.00	57.53	7,774.29	269.21	423.05	477,467.04	715,299.99	32.311374	-103.770235
7,900.00	6.00	57.53	7,873.74	274.82	431.86	477,472.65	715,308.81	32.311389	-103.770207
8,000.00	6.00	57.53	7,973.19	280.43	440.67	477,478.26	715,317.62	32.311404	-103.770178
8,100.00	6.00	57.53	8,072.65	286.04	449.49	477,483.87	715,326.43	32.311420	-103.770149
8,200.00	6.00	57.53	8,172.10	291.65	458.30	477,489.48	715,335.25	32.311435	-103.770121
8,300.00	6.00	57.53	8,271.55	297.25	467.11	477,495.08	715,344.06	32.311450	-103.770092
8,400.00	6.00	57.53	8,371.00	302.86	475.93	477,500.69	715,352.87	32.311465	-103.770064
8,500.00	6.00	57.53	8,470.46	308.47	484.74	477,506.30	715,361.68	32.311481	-103.770035
8,600.00	6.00	57.53	8,569.91	314.08	493.55	477,511.91	715,370.50	32.311496	-103.770006
8,700.00	6.00	57.53	8,669.36	319.69	502.36	477,517.52	715,379.31	32.311511	-103.769978
8,800.00	6.00	57.53	8,768.82	325.29	511.18	477,523.12	715,388.12	32.311527	-103.769949
8,900.00	6.00	57.53	8,868.27	330.90	519.99	477,528.73	715,396.93	32.311542	-103.769920
9,000.00	6.00	57.53	8,967.72	336.51	528.80	477,534.34	715,405.75	32.311557	-103.769892
9,040.50	6.00	57.53	9,008.00	338.78	532.37	477,536.61	715,409.32	32.311563	-103.769880
9,100.00	5.10	57.53	9,067.22	341.87	537.22	477,539.70	715,414.17	32.311572	-103.769864
9,200.00	3.60	57.53	9,166.93	345.95	543.63	477,543.78	715,420.57	32.311583	-103.769844
9,300.00	2.10	57.53	9,266.80	348.62	547.83	477,546.45	715,424.77	32.311590	-103.769830
9,400.00	0.60	57.53	9,366.77	349.89	549.82	477,547.72	715,426.77	32.311594	-103.769824
9,440.23	0.00	0.00	9,407.00	350.00	550.00	477,547.83	715,426.94	32.311594	-103.769823
9,500.00	0.00	0.00	9,466.77	350.00	550.00	477,547.83	715,426.94	32.311594	-103.769823
9,600.00	0.00	0.00	9,566.77	350.00	550.00	477,547.83	715,426.94	32.311594	-103.769823
9,700.00	0.00	0.00	9,666.77	350.00	550.00	477,547.83	715,426.94	32.311594	-103.769823
9,790.27	0.00	0.00	9,757.04	350.00	550.00	477,547.83	715,426.94	32.311594	-103.769823
KOP @ 9790' MD, 50' FNL, 1360' FWL									
9,800.00	0.97	179.68	9,766.77	349.92	550.00	477,547.75	715,426.95	32.311594	-103.769823
9,900.00	10.97	179.68	9,866.10	339.52	550.06	477,537.35	715,427.00	32.311565	-103.769823
10,000.00	20.97	179.68	9,962.12	312.04	550.21	477,509.87	715,427.16	32.311490	-103.769823
10,031.42	24.12	179.68	9,991.13	300.00	550.28	477,497.83	715,427.22	32.311456	-103.769823
FTP @ 10031' MD, 100' FNL, 1360' FWL									
10,100.00	30.97	179.68	10,051.90	268.30	550.45	477,466.13	715,427.40	32.311369	-103.769823

# Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Maldives 15-27 Fed Com 232H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3412.50ft
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3412.50ft
Site:	Sec 15-T23S-R31E	North Reference:	Grid
Well:	Maldives 15-27 Fed Com 232H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,200.00	40.97	179.68	10,132.73	209.64	550.78	477,407.47	715,427.72	32.311208	-103.769823
10,300.00	50.97	179.68	10,202.14	137.83	551.18	477,335.66	715,428.12	32.311011	-103.769823
10,400.00	60.97	179.68	10,258.03	55.06	551.64	477,252.89	715,428.58	32.310783	-103.769823
10,500.00	70.97	179.68	10,298.70	-36.16	552.14	477,161.67	715,429.09	32.310532	-103.769823
10,600.00	80.97	179.68	10,322.90	-133.05	552.68	477,064.78	715,429.62	32.310266	-103.769823
10,690.27	90.00	179.68	10,330.00	-222.95	553.18	476,974.88	715,430.12	32.310019	-103.769822
10,700.00	90.00	179.68	10,330.00	-232.68	553.23	476,965.15	715,430.17	32.309992	-103.769822
10,800.00	90.00	179.68	10,330.00	-332.68	553.78	476,865.15	715,430.73	32.309717	-103.769822
10,900.00	90.00	179.68	10,330.00	-432.68	554.34	476,765.16	715,431.28	32.309443	-103.769822
11,000.00	90.00	179.68	10,330.00	-532.67	554.89	476,665.16	715,431.84	32.309168	-103.769822
11,100.00	90.00	179.68	10,330.00	-632.67	555.45	476,565.16	715,432.39	32.308893	-103.769822
11,200.00	90.00	179.68	10,330.00	-732.67	556.00	476,465.16	715,432.95	32.308618	-103.769822
11,300.00	90.00	179.68	10,330.00	-832.67	556.56	476,365.16	715,433.50	32.308343	-103.769822
11,400.00	90.00	179.68	10,330.00	-932.67	557.11	476,265.16	715,434.06	32.308068	-103.769822
11,500.00	90.00	179.68	10,330.00	-1,032.67	557.66	476,165.17	715,434.61	32.307793	-103.769822
11,600.00	90.00	179.68	10,330.00	-1,132.67	558.22	476,065.17	715,435.16	32.307518	-103.769822
11,700.00	90.00	179.68	10,330.00	-1,232.66	558.77	475,965.17	715,435.72	32.307243	-103.769822
11,800.00	90.00	179.68	10,330.00	-1,332.66	559.33	475,865.17	715,436.27	32.306969	-103.769821
11,900.00	90.00	179.68	10,330.00	-1,432.66	559.88	475,765.17	715,436.83	32.306694	-103.769821
12,000.00	90.00	179.68	10,330.00	-1,532.66	560.44	475,665.17	715,437.38	32.306419	-103.769821
12,100.00	90.00	179.68	10,330.00	-1,632.66	560.99	475,565.18	715,437.94	32.306144	-103.769821
12,200.00	90.00	179.68	10,330.00	-1,732.66	561.55	475,465.18	715,438.49	32.305869	-103.769821
12,300.00	90.00	179.68	10,330.00	-1,832.65	562.10	475,365.18	715,439.04	32.305594	-103.769821
12,400.00	90.00	179.68	10,330.00	-1,932.65	562.65	475,265.18	715,439.60	32.305319	-103.769821
12,500.00	90.00	179.68	10,330.00	-2,032.65	563.21	475,165.18	715,440.15	32.305044	-103.769821
12,600.00	90.00	179.68	10,330.00	-2,132.65	563.76	475,065.19	715,440.71	32.304770	-103.769821
12,700.00	90.00	179.68	10,330.00	-2,232.65	564.32	474,965.19	715,441.26	32.304495	-103.769821
12,800.00	90.00	179.68	10,330.00	-2,332.65	564.87	474,865.19	715,441.82	32.304220	-103.769820
12,900.00	90.00	179.68	10,330.00	-2,432.65	565.43	474,765.19	715,442.37	32.303945	-103.769820
13,000.00	90.00	179.68	10,330.00	-2,532.64	565.98	474,665.19	715,442.92	32.303670	-103.769820
13,100.00	90.00	179.68	10,330.00	-2,632.64	566.53	474,565.19	715,443.48	32.303395	-103.769820
13,200.00	90.00	179.68	10,330.00	-2,732.64	567.09	474,465.20	715,444.03	32.303120	-103.769820
13,300.00	90.00	179.68	10,330.00	-2,832.64	567.64	474,365.20	715,444.59	32.302845	-103.769820
13,400.00	90.00	179.68	10,330.00	-2,932.64	568.20	474,265.20	715,445.14	32.302571	-103.769820
13,500.00	90.00	179.68	10,330.00	-3,032.64	568.75	474,165.20	715,445.70	32.302296	-103.769820
13,600.00	90.00	179.68	10,330.00	-3,132.63	569.31	474,065.20	715,446.25	32.302021	-103.769820
13,700.00	90.00	179.68	10,330.00	-3,232.63	569.86	473,965.20	715,446.81	32.301746	-103.769820
13,800.00	90.00	179.68	10,330.00	-3,332.63	570.41	473,865.21	715,447.36	32.301471	-103.769820
13,900.00	90.00	179.68	10,330.00	-3,432.63	570.97	473,765.21	715,447.91	32.301196	-103.769819
14,000.00	90.00	179.68	10,330.00	-3,532.63	571.52	473,665.21	715,448.47	32.300921	-103.769819
14,100.00	90.00	179.68	10,330.00	-3,632.63	572.08	473,565.21	715,449.02	32.300646	-103.769819
14,200.00	90.00	179.68	10,330.00	-3,732.63	572.63	473,465.21	715,449.58	32.300372	-103.769819
14,300.00	90.00	179.68	10,330.00	-3,832.62	573.19	473,365.21	715,450.13	32.300097	-103.769819
14,400.00	90.00	179.68	10,330.00	-3,932.62	573.74	473,265.22	715,450.69	32.299822	-103.769819
14,500.00	90.00	179.68	10,330.00	-4,032.62	574.29	473,165.22	715,451.24	32.299547	-103.769819
14,600.00	90.00	179.68	10,330.00	-4,132.62	574.85	473,065.22	715,451.79	32.299272	-103.769819
14,700.00	90.00	179.68	10,330.00	-4,232.62	575.40	472,965.22	715,452.35	32.298997	-103.769819
14,800.00	90.00	179.68	10,330.00	-4,332.62	575.96	472,865.22	715,452.90	32.298722	-103.769819
14,900.00	90.00	179.68	10,330.00	-4,432.61	576.51	472,765.23	715,453.46	32.298447	-103.769819
15,000.00	90.00	179.68	10,330.00	-4,532.61	577.07	472,665.23	715,454.01	32.298173	-103.769818
15,100.00	90.00	179.68	10,330.00	-4,632.61	577.62	472,565.23	715,454.57	32.297898	-103.769818
15,200.00	90.00	179.68	10,330.00	-4,732.61	578.18	472,465.23	715,455.12	32.297623	-103.769818
15,300.00	90.00	179.68	10,330.00	-4,832.61	578.73	472,365.23	715,455.67	32.297348	-103.769818

# Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Maldives 15-27 Fed Com 232H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3412.50ft
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3412.50ft
Site:	Sec 15-T23S-R31E	North Reference:	Grid
Well:	Maldives 15-27 Fed Com 232H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,347.00	90.00	179.68	10,330.00	-4,879.61	578.99	472,318.23	715,455.93	32.297219	-103.769818
<b>Cross Section @ 15347' MD, 0' FNL, 1360' FWL</b>									
15,400.00	90.00	179.68	10,330.00	-4,932.61	579.28	472,265.23	715,456.23	32.297073	-103.769818
15,500.00	90.00	179.68	10,330.00	-5,032.61	579.84	472,165.24	715,456.78	32.296798	-103.769818
15,600.00	90.00	179.68	10,330.00	-5,132.60	580.39	472,065.24	715,457.34	32.296523	-103.769818
15,700.00	90.00	179.68	10,330.00	-5,232.60	580.95	471,965.24	715,457.89	32.296248	-103.769818
15,800.00	90.00	179.68	10,330.00	-5,332.60	581.50	471,865.24	715,458.45	32.295974	-103.769818
15,900.00	90.00	179.68	10,330.00	-5,432.60	582.06	471,765.24	715,459.00	32.295699	-103.769818
16,000.00	90.00	179.68	10,330.00	-5,532.60	582.61	471,665.24	715,459.55	32.295424	-103.769818
16,100.00	90.00	179.68	10,330.00	-5,632.60	583.16	471,565.25	715,460.11	32.295149	-103.769817
16,200.00	90.00	179.68	10,330.00	-5,732.59	583.72	471,465.25	715,460.66	32.294874	-103.769817
16,300.00	90.00	179.68	10,330.00	-5,832.59	584.27	471,365.25	715,461.22	32.294599	-103.769817
16,400.00	90.00	179.68	10,330.00	-5,932.59	584.83	471,265.25	715,461.77	32.294324	-103.769817
16,500.00	90.00	179.68	10,330.00	-6,032.59	585.38	471,165.25	715,462.33	32.294049	-103.769817
16,600.00	90.00	179.68	10,330.00	-6,132.59	585.94	471,065.25	715,462.88	32.293775	-103.769817
16,700.00	90.00	179.68	10,330.00	-6,232.59	586.49	470,965.26	715,463.44	32.293500	-103.769817
16,800.00	90.00	179.68	10,330.00	-6,332.59	587.04	470,865.26	715,463.99	32.293225	-103.769817
16,900.00	90.00	179.68	10,330.00	-6,432.58	587.60	470,765.26	715,464.54	32.292950	-103.769817
17,000.00	90.00	179.68	10,330.00	-6,532.58	588.15	470,665.26	715,465.10	32.292675	-103.769817
17,100.00	90.00	179.68	10,330.00	-6,632.58	588.71	470,565.26	715,465.65	32.292400	-103.769816
17,200.00	90.00	179.68	10,330.00	-6,732.58	589.26	470,465.26	715,466.21	32.292125	-103.769816
17,300.00	90.00	179.68	10,330.00	-6,832.58	589.82	470,365.27	715,466.76	32.291850	-103.769816
17,400.00	90.00	179.68	10,330.00	-6,932.58	590.37	470,265.27	715,467.32	32.291575	-103.769816
17,500.00	90.00	179.68	10,330.00	-7,032.57	590.92	470,165.27	715,467.87	32.291301	-103.769816
17,600.00	90.00	179.68	10,330.00	-7,132.57	591.48	470,065.27	715,468.42	32.291026	-103.769816
17,700.00	90.00	179.68	10,330.00	-7,232.57	592.03	469,965.27	715,468.98	32.290751	-103.769816
17,800.00	90.00	179.68	10,330.00	-7,332.57	592.59	469,865.28	715,469.53	32.290476	-103.769816
17,900.00	90.00	179.68	10,330.00	-7,432.57	593.14	469,765.28	715,470.09	32.290201	-103.769816
18,000.00	90.00	179.68	10,330.00	-7,532.57	593.70	469,665.28	715,470.64	32.289926	-103.769816
18,100.00	90.00	179.68	10,330.00	-7,632.57	594.25	469,565.28	715,471.20	32.289651	-103.769816
18,200.00	90.00	179.68	10,330.00	-7,732.56	594.81	469,465.28	715,471.75	32.289376	-103.769815
18,300.00	90.00	179.68	10,330.00	-7,832.56	595.36	469,365.28	715,472.30	32.289102	-103.769815
18,400.00	90.00	179.68	10,330.00	-7,932.56	595.91	469,265.29	715,472.86	32.288827	-103.769815
18,500.00	90.00	179.68	10,330.00	-8,032.56	596.47	469,165.29	715,473.41	32.288552	-103.769815
18,600.00	90.00	179.68	10,330.00	-8,132.56	597.02	469,065.29	715,473.97	32.288277	-103.769815
18,700.00	90.00	179.68	10,330.00	-8,232.56	597.58	468,965.29	715,474.52	32.288002	-103.769815
18,800.00	90.00	179.68	10,330.00	-8,332.55	598.13	468,865.29	715,475.08	32.287727	-103.769815
18,900.00	90.00	179.68	10,330.00	-8,432.55	598.69	468,765.29	715,475.63	32.287452	-103.769815
19,000.00	90.00	179.68	10,330.00	-8,532.55	599.24	468,665.30	715,476.18	32.287177	-103.769815
19,100.00	90.00	179.68	10,330.00	-8,632.55	599.79	468,565.30	715,476.74	32.286903	-103.769815
19,200.00	90.00	179.68	10,330.00	-8,732.55	600.35	468,465.30	715,477.29	32.286628	-103.769815
19,300.00	90.00	179.68	10,330.00	-8,832.55	600.90	468,365.30	715,477.85	32.286353	-103.769814
19,400.00	90.00	179.68	10,330.00	-8,932.55	601.46	468,265.30	715,478.40	32.286078	-103.769814
19,500.00	90.00	179.68	10,330.00	-9,032.54	602.01	468,165.30	715,478.96	32.285803	-103.769814
19,600.00	90.00	179.68	10,330.00	-9,132.54	602.57	468,065.31	715,479.51	32.285528	-103.769814
19,700.00	90.00	179.68	10,330.00	-9,232.54	603.12	467,965.31	715,480.07	32.285253	-103.769814
19,800.00	90.00	179.68	10,330.00	-9,332.54	603.67	467,865.31	715,480.62	32.284978	-103.769814
19,900.00	90.00	179.68	10,330.00	-9,432.54	604.23	467,765.31	715,481.17	32.284704	-103.769814
20,000.00	90.00	179.68	10,330.00	-9,532.54	604.78	467,665.31	715,481.73	32.284429	-103.769814
20,100.00	90.00	179.68	10,330.00	-9,632.53	605.34	467,565.32	715,482.28	32.284154	-103.769814
20,200.00	90.00	179.68	10,330.00	-9,732.53	605.89	467,465.32	715,482.84	32.283879	-103.769814
20,300.00	90.00	179.68	10,330.00	-9,832.53	606.45	467,365.32	715,483.39	32.283604	-103.769813
20,400.00	90.00	179.68	10,330.00	-9,932.53	607.00	467,265.32	715,483.95	32.283329	-103.769813
20,500.00	90.00	179.68	10,330.00	-10,032.53	607.56	467,165.32	715,484.50	32.283054	-103.769813

# Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference:	Well Maldives 15-27 Fed Com 232H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3412.50ft
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3412.50ft
Site:	Sec 15-T23S-R31E	North Reference:	Grid
Well:	Maldives 15-27 Fed Com 232H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permit Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
20,600.00	90.00	179.68	10,330.00	-10,132.53	608.11	467,065.32	715,485.05	32.282779	-103.769813
20,700.00	90.00	179.68	10,330.00	-10,232.53	608.66	466,965.33	715,485.61	32.282505	-103.769813
20,800.00	90.00	179.68	10,330.00	-10,332.52	609.22	466,865.33	715,486.16	32.282230	-103.769813
20,900.00	90.00	179.68	10,330.00	-10,432.52	609.77	466,765.33	715,486.72	32.281955	-103.769813
21,000.00	90.00	179.68	10,330.00	-10,532.52	610.33	466,665.33	715,487.27	32.281680	-103.769813
21,100.00	90.00	179.68	10,330.00	-10,632.52	610.88	466,565.33	715,487.83	32.281405	-103.769813
21,200.00	90.00	179.68	10,330.00	-10,732.52	611.44	466,465.33	715,488.38	32.281130	-103.769813
21,300.00	90.00	179.68	10,330.00	-10,832.52	611.99	466,365.34	715,488.93	32.280855	-103.769813
21,400.00	90.00	179.68	10,330.00	-10,932.51	612.54	466,265.34	715,489.49	32.280580	-103.769812
21,500.00	90.00	179.68	10,330.00	-11,032.51	613.10	466,165.34	715,490.04	32.280305	-103.769812
21,600.00	90.00	179.68	10,330.00	-11,132.51	613.65	466,065.34	715,490.60	32.280031	-103.769812
21,700.00	90.00	179.68	10,330.00	-11,232.51	614.21	465,965.34	715,491.15	32.279756	-103.769812
21,800.00	90.00	179.68	10,330.00	-11,332.51	614.76	465,865.34	715,491.71	32.279481	-103.769812
21,900.00	90.00	179.68	10,330.00	-11,432.51	615.32	465,765.35	715,492.26	32.279206	-103.769812
22,000.00	90.00	179.68	10,330.00	-11,532.51	615.87	465,665.35	715,492.81	32.278931	-103.769812
22,100.00	90.00	179.68	10,330.00	-11,632.50	616.42	465,565.35	715,493.37	32.278656	-103.769812
22,200.00	90.00	179.68	10,330.00	-11,732.50	616.98	465,465.35	715,493.92	32.278381	-103.769812
22,300.00	90.00	179.68	10,330.00	-11,832.50	617.53	465,365.35	715,494.48	32.278106	-103.769812
22,400.00	90.00	179.68	10,330.00	-11,932.50	618.09	465,265.36	715,495.03	32.277832	-103.769812
22,500.00	90.00	179.68	10,330.00	-12,032.50	618.64	465,165.36	715,495.59	32.277557	-103.769811
22,600.00	90.00	179.68	10,330.00	-12,132.50	619.20	465,065.36	715,496.14	32.277282	-103.769811
22,700.00	90.00	179.68	10,330.00	-12,232.49	619.75	464,965.36	715,496.70	32.277007	-103.769811
22,800.00	90.00	179.68	10,330.00	-12,332.49	620.30	464,865.36	715,497.25	32.276732	-103.769811
22,900.00	90.00	179.68	10,330.00	-12,432.49	620.86	464,765.36	715,497.80	32.276457	-103.769811
23,000.00	90.00	179.68	10,330.00	-12,532.49	621.41	464,665.37	715,498.36	32.276182	-103.769811
23,100.00	90.00	179.68	10,330.00	-12,632.49	621.97	464,565.37	715,498.91	32.275907	-103.769811
23,200.00	90.00	179.68	10,330.00	-12,732.49	622.52	464,465.37	715,499.47	32.275633	-103.769811
23,300.00	90.00	179.68	10,330.00	-12,832.49	623.08	464,365.37	715,500.02	32.275358	-103.769811
23,400.00	90.00	179.68	10,330.00	-12,932.48	623.63	464,265.37	715,500.58	32.275083	-103.769811
23,500.00	90.00	179.68	10,330.00	-13,032.48	624.19	464,165.37	715,501.13	32.274808	-103.769810
23,600.00	90.00	179.68	10,330.00	-13,132.48	624.74	464,065.38	715,501.68	32.274533	-103.769810
23,700.00	90.00	179.68	10,330.00	-13,232.48	625.29	463,965.38	715,502.24	32.274258	-103.769810
23,800.00	90.00	179.68	10,330.00	-13,332.48	625.85	463,865.38	715,502.79	32.273983	-103.769810
23,900.00	90.00	179.68	10,330.00	-13,432.48	626.40	463,765.38	715,503.35	32.273708	-103.769810
24,000.00	90.00	179.68	10,330.00	-13,532.47	626.96	463,665.38	715,503.90	32.273434	-103.769810
24,100.00	90.00	179.68	10,330.00	-13,632.47	627.51	463,565.38	715,504.46	32.273159	-103.769810
24,200.00	90.00	179.68	10,330.00	-13,732.47	628.07	463,465.39	715,505.01	32.272884	-103.769810
24,300.00	90.00	179.68	10,330.00	-13,832.47	628.62	463,365.39	715,505.56	32.272609	-103.769810
24,400.00	90.00	179.68	10,330.00	-13,932.47	629.17	463,265.39	715,506.12	32.272334	-103.769810
24,500.00	90.00	179.68	10,330.00	-14,032.47	629.73	463,165.39	715,506.67	32.272059	-103.769810
24,600.00	90.00	179.68	10,330.00	-14,132.47	630.28	463,065.39	715,507.23	32.271784	-103.769809
24,700.00	90.00	179.68	10,330.00	-14,232.46	630.84	462,965.40	715,507.78	32.271509	-103.769809
24,800.00	90.00	179.68	10,330.00	-14,332.46	631.39	462,865.40	715,508.34	32.271235	-103.769809
24,900.00	90.00	179.68	10,330.00	-14,432.46	631.95	462,765.40	715,508.89	32.270960	-103.769809
25,000.00	90.00	179.68	10,330.00	-14,532.46	632.50	462,665.40	715,509.44	32.270685	-103.769809
25,100.00	90.00	179.68	10,330.00	-14,632.46	633.05	462,565.40	715,510.00	32.270410	-103.769809
25,200.00	90.00	179.68	10,330.00	-14,732.46	633.61	462,465.40	715,510.55	32.270135	-103.769809
25,300.00	90.00	179.68	10,330.00	-14,832.45	634.16	462,365.41	715,511.11	32.269860	-103.769809
25,400.00	90.00	179.68	10,330.00	-14,932.45	634.72	462,265.41	715,511.66	32.269585	-103.769809
25,500.00	90.00	179.68	10,330.00	-15,032.45	635.27	462,165.41	715,512.22	32.269310	-103.769809
25,600.00	90.00	179.68	10,330.00	-15,132.45	635.83	462,065.41	715,512.77	32.269035	-103.769808
25,700.00	90.00	179.68	10,330.00	-15,232.45	636.38	461,965.41	715,513.33	32.268761	-103.769808
25,800.00	90.00	179.68	10,330.00	-15,332.45	636.93	461,865.41	715,513.88	32.268486	-103.769808

# Planning Report - Geographic

<b>Database:</b>	EDM r5000.141_Prod US	<b>Local Co-ordinate Reference:</b>	Well Maldives 15-27 Fed Com 232H
<b>Company:</b>	WCDSC Permian NM	<b>TVD Reference:</b>	RKB @ 3412.50ft
<b>Project:</b>	Eddy County (NAD 83 NM Eastern)	<b>MD Reference:</b>	RKB @ 3412.50ft
<b>Site:</b>	Sec 15-T23S-R31E	<b>North Reference:</b>	Grid
<b>Well:</b>	Maldives 15-27 Fed Com 232H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permit Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
25,809.53	90.00	179.68	10,330.00	-15,341.98	636.99	461,855.88	715,513.93	32.268460	-103.769808
LTP @ 25810' MD, 100' FSL, 1360' FWL									
25,889.53	90.00	179.68	10,330.00	-15,421.98	637.43	461,775.89	715,514.38	32.268240	-103.769808
PBHL; 20' FSL, 1360' FWL									
25,889.54	90.00	179.68	10,330.00	-15,421.98	637.43	461,775.88	715,514.38	32.268240	-103.769808

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL - Maldives 511H	0.00	0.01	0.00	-7,231.22	-119.05	469,966.62	714,757.90	32.290765	-103.772117
- plan misses target center by 7232.20ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
PBHL - Maldives 15-27 F	0.00	0.00	0.00	-15,421.98	637.43	461,775.88	715,514.38	32.268240	-103.769808
- plan misses target center by 10330.00ft at 25889.54ft MD (10330.00 TVD, -15421.98 N, 637.43 E)									
- Point									
Vertical Point - Maldives	0.00	0.00	7,730.00	348.97	-161.91	477,546.79	714,715.04	32.311601	-103.772127
- plan misses target center by 584.98ft at 7708.88ft MD (7683.66 TVD, 264.10 N, 415.02 E)									
- Point									

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
9,790.27	9,757.04	350.00	550.00	KOP @ 9790' MD, 50' FNL, 1360' FWL	
10,031.42	9,991.13	300.00	550.28	FTP @ 10031' MD, 100' FNL, 1360' FWL	
15,347.00	10,330.00	-4,879.61	578.99	Cross Section @ 15347' MD, 0' FNL, 1360' FWL	
25,809.53	10,330.00	-15,341.98	636.99	LTP @ 25810' MD, 100' FSL, 1360' FWL	
25,889.53	10,330.00	-15,421.98	637.43	PBHL; 20' FSL, 1360' FWL	