

Well Name: FULLY LOADED 12-13
FED COM

Well Location: T24S / R29E / SEC 12 /
SWNW / 32.2332278 / -103.9432584

County or Parish/State: EDDY /
NM

Well Number: 245H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM105213

Unit or CA Name:

Unit or CA Number:
NMNM143417

US Well Number: 3001557739

Operator: DEVON ENERGY
PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2896119

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 02/16/2026

Time Sundry Submitted: 02:37

Date proposed operation will begin: 02/23/2026

Procedure Description: DEVON ENERGY Production Co, L.P. respectfully requests to change SHL, BHL, CASING AND DRILLING PLAN. DEVON IS ALSO REQUESTING THE DRILLING VARIANCE FOR OFFLINE CEMENTING PRODUCTION AND PRODUCTION BREAK TEST VARIANCE. PLEASE SEE THE ATTACHED C-102 AND DRILLING PLAN. OLD SHL 2256' FNL 1038' FWL SWNW SEC 12-24S-29E NEW SHL 2398' FNL 1032' FWL SWNW SEC 12-24S-29E OLD BHL 20' FSL 1320' FWL SWSW SEC 13-24S-29E NEW BHL 2632' FSL 2310' FWL NESW SEC 12-24S-29E

NOI Attachments

Procedure Description

Offline_Production_Cement___WFMP___Shallower___BLM_v5_20260216141056.pdf

Production_Break_Testing_Variance___WFMP___Shallower___BLM_v5_20260216141056.pdf

5.5_20lb_P110_ICY_Wedge_461_20260216141045.pdf

8.625_32lb_P110_ICY_20260216141021.pdf

13.375_54.5lb_J55_20260216141001.pdf

AA000245616_FULLY_LOADED_12_WP_1_R7_20260216140759.pdf

FULLY_LOADED_12_13_FED_COM_245H_Permit_Plan_1_20260216140758.pdf

WA022552555_FULLY_LOADED_12_13_FED_COM_245H_WL_R2_SIGNED_20260216140759.pdf

Well Name: FULLY LOADED 12-13
FED COM

Well Location: T24S / R29E / SEC 12 /
SWNW / 32.2332278 / -103.9432584

County or Parish/State: EDDY /
NM

Well Number: 245H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM105213

Unit or CA Name:

Unit or CA Number:
NMNM143417

US Well Number: 3001557739

Operator: DEVON ENERGY
PRODUCTION COMPANY LP

FULLY_LOADED_12_13_FED_COM_245H_02_09_2026_20260216140758.pdf

Conditions of Approval

Additional

12_24_29_E_Sundry_ID_2896119_Fully_Loaded_12_13_Fed_Com_245H_20260302082219.pdf
COA_20260302082219.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: BRAD ROBERTS

Signed on: FEB 16, 2026 02:11 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Compliance Professional

Street Address: 333 W SHERIDAN AVE

City: OKLAHOMA CITY State: OK

Phone: (405) 552-4530

Email address: BRAD.ROBERTS@DVN.COM

Field

Representative Name:

Street Address:

City: State: Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CODY LAYTON

BLM POC Title: Assistant Field Manager Lands & Minerals

BLM POC Phone: 5752345959

BLM POC Email Address: CLAYTON@BLM.GOV

Disposition: Approved

Disposition Date: 03/31/2026

Signature: Cody R. Layton

Form 3160-5
(October 2024)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

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.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

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

1. Type of Well

Oil Well Gas Well Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. (include area code)

10. Field and Pool or Exploratory Area

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

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input 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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<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.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

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)

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

Additional Information

Location of Well

0. SHL: SWNW / 2256 FNL / 1038 FWL / TWSP: 24S / RANGE: 29E / SECTION: 12 / LAT: 32.2332278 / LONG: -103.9432584 (TVD: 0 feet, MD: 0 feet)
PPP: NWSW / 2253 FNL / 1320 FWL / TWSP: 24S / RANGE: 29E / SECTION: 12 / LAT: 32.231852 / LONG: -103.942346 (TVD: 8718 feet, MD: 8774 feet)
PPP: NWNW / 102 FNL / 1316 FWL / TWSP: 24S / RANGE: 29E / SECTION: 13 / LAT: 32.224555 / LONG: -103.942358 (TVD: 9005 feet, MD: 11600 feet)
BHL: SWSW / 20 FNL / 1320 FWL / TWSP: 24S / RANGE: 29E / SECTION: 13 / LAT: 32.2103094 / LONG: -103.9423764 (TVD: 8803 feet, MD: 16786 feet)

CONFIDENTIAL

Fully Loaded 12-13 Fed Com 245H

13 3/8		surface csg in a		16		inch hole.		Design Factors			Surface		
Segment	#ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	54.50		j 55	btc	34.41	5.31	0.59	455	14	0.99	10.03	24,798	
"B"				btc				0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500								Totals:				24,798	
Tail Cmt does not circ to sfc.													
Comparison of Proposed to Minimum Required Cement Volumes													
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg	
16	0.4206	195	281	191	47	9.00	2758	3M				0.81	
Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.													

8 5/8		casing inside the		13 3/8		Design Factors			Int 1			
Segment	#ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	32.00		p 110	wedge 441	3.43	0.87	1.84	8,475	2	3.09	1.45	271,200
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,865								Totals:				271,200
The cement volume(s) are intended to achieve a top of 0 ft from surface or a								455				overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
9 7/8	0.1261	357	514	1222	-58	10.50	2973	3M				0.49
D V Tool(s):								sum of sx	Σ CuFt			Σ% excess
t by stage %:								788	1505			23
Class 'C' tail cmt yld > 1.35												

5 1/2		casing inside the		8 5/8		Design Factors			Prod 1			
Segment	#ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00		p 110	wedge 461	3.51	2.38	2.54	8,575	3	4.25	3.98	171,500
"B"	20.00		p 110	wedge 461	2.41	2.00	2.54	7,575	3	4.25	3.74	151,500
"C"	20.00		p 110	wedge 461	2.84	2.03	2.54	1,035	3	4.25	3.74	20,700
"D"	20.00		p 110	wedge 461	10.67	2.03	2.54	8,264	3	4.25	3.74	165,280
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,887								Totals:				508,980
The cement volume(s) are intended to achieve a top of 8275 ft from surface or a								200				overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
7 7/8	0.1733	2344	3589	2968	21	10.50						0.91
Class 'C' tail cmt yld > 1.35												

#N/A				5 1/2		Design Factors			<Choose Casing>			
Segment	#ft	Grade		Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"				0.00				0				0
"B"				0.00				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:								Totals:				0
Cmt vol calc below includes this csg, TOC intended								#N/A				overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
0		#N/A	#N/A	0	#N/A							
#N/A Capitan Reef est top XXXX.												

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company LP
LOCATION:	Section 12, T.24 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Fully Loaded 12-13 Fed Com 244H
ATS/API ID:	3001557439
APD ID:	10400105259
Sundry ID:	2896116

WELL NAME & NO.:	Fully Loaded 12-13 Fed Com 245H
ATS/API ID:	3001557739
APD ID:	10400105261
Sundry ID:	2896119

WELL NAME & NO.:	Fully Loaded 12-13 Fed Com 304H
ATS/API ID:	3001557481
APD ID:	10400105267
Sundry ID:	2896122

WELL NAME & NO.:	Fully Loaded 12-13 Fed Com 305H
ATS/API ID:	3001557483
APD ID:	10400105270
Sundry ID:	2896124

COA

H2S	No		
Potash	None	None	
Cave/Karst Potential	Medium		
Cave/Karst Potential	<input type="checkbox"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	Conventional and Multibowl		
Other	<input type="checkbox"/> 4 String <input type="checkbox"/> 5 String	Capitan Reef None	<input type="checkbox"/> WIPP
Other	Pilot Hole None	<input type="checkbox"/> Open Annulus	
Cementing	Contingency Squeeze None	Echo-Meter Int 1	Primary Cement Squeeze None
Special Requirements	<input type="checkbox"/> Water Disposal/Injection	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry	Waste Prevention Waste MP	
Special Requirements Variance	<input checked="" type="checkbox"/> BOPE Break Testing <input checked="" type="checkbox"/> Offline BOPE Testing	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Casing Clearance

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 **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **455 feet** (a minimum of 70 feet into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **16** inch in diameter.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The minimum required fill of cement behind the **8-5/8** inch intermediate casing 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 to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 5768'**.
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. **(Squeeze 433 sxs Class C)**
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 8-5/8"** annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus Or operator shall run a CBL from TD of the 8-5/8" casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must run one CBL per Well Pad. Operator may conduct a negative and positive pressure test during completion to remediate sustained casing pressure.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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.

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 **8-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch 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 43 CFR 3172.6(b)(9) 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.

- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in **43 CFR part 3170 Subpart 3171**
- 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.

(Note: For a minimum 5M MASP or less (Utilizing a 10M BOPE system)

BOPE Break Testing Variance (Approved)

- BOPE Break Testing is ONLY permitted for 5M psi MASP or less. **(Annular preventer must tested to 100% working pressure and BOPE shall be tested to full Rated Pressure)**
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- The BLM is to be contacted **(575-361-2822 Eddy County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21-day** intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR part 3170 Subpart 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.
- The BOPE testing shall be conducted while the rig is stationary.

Intermediate Break Testing Section:

- Variance only pertains to the intermediate hole-sections shallower than the deepest drilled intermediate on the well pad above 12,000 feet.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).

Production Break Testing Section: permitted

- Variance only pertains to the production hole-section shallower than the deepest drilled production on the well pad above 12,000 feet.
- A full BOPE test is required prior to drilling the first deep production hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between production lateral is allowable).

Offline BOPE Testing

Operator has been **(Approved)** to test the BOPE offline.

The BOPE offline testing shall be stationary during pressure testing.

Online BOPE testing should commence within 72 hours of offline BOPE testing completion. Notify the BLM if interval exceeds 72 hours.

Notify the BLM 4hrs prior to offline BOPE testing at **Eddy County: 575-361-2822**.

Offline Cementing

Operator has been **(Approved)** to pump the proposed cement program offline in the **Intermediate(s) interval and Production intervals**.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at **Eddy County: 575-361-2822**.

GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

BLM_NM_CFO_DrillingNotifications@BLM.GOV

(575) 361-2822

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 **43 CFR part 3170 Subpart 3172** 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.

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 of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity 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 integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Acceptable Method of Cement Verifications:
 - a. Observing cement circulated to surface.
 - b. Cement bond log (CBL).
 - c. Temperature log within 8-10 hours after completing the cement job.
 - d. Echometer (if a second-stage bradenhead squeeze is being used).
5. 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.
6. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
7. 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.
8. 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.
9. 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 **43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3**.
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 43 CFR 3172.6(b)(9) 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 cement), 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** 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 8 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 **43 CFR part 3170 Subpart 3172**.

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.

Long Vo (LVO) 3/2/2026

Devon Energy Offline Production Cementing

10/2025

REV5



NYSE: DVN
devonenergy.com



Offline Production Cementing Variance

Devon is respectfully pursuing a variance to the minimum standards to allow for the cementing of the Production Casing offline in the Wolfcamp and shallower producing horizons.

To ensure personnel safety and well integrity, strict eligibility requirements will be enforced, and a detailed procedure will be followed.

The following slides outline the eligibility requirements, offline procedure, schematics and pressure ratings.

Offline Production Eligibility

Offline Punch List:

The well must meet all criteria to qualify for offline cementing.

- A) Well is in the Wolfcamp or shallower bench.
- B) No unusual events were observed during drilling, tripping or casing operations.
- C) Casing successfully landed out on casing hanger (fluted or solid).
- D) Devon Company Men with Well Control certifications will monitor returns (bbl in / bbl out) to ensure well control is maintained.
- E) Rig Manager will oversee the walking of the rig to the next well.
- F) All barriers MUST test and at no point will there be less than 2 barriers in place.
- G) No offset frac operations occurring within 1.0 mile in the same bench.
- H) Once all criteria are met and BLM is notified, Devon may proceed with ND BOP and continue offline operations.

Note: Devon will NOT drill out the next deep intermediate until cementing on the offline well is complete.

Offline Procedure

- **Devon's Proposed Production Offline Procedure:**
- Run casing and perform negative pressure test during casing run to verify integrity of float equipment's 10M backpressure valves.
- Review Devon's "Punch List" to determine if well is a viable candidate.
- Continue running casing and land casing out on Cactus mandrel hanger.
- Fill casing with KWM and perform flow check ensuring well is static.
 - If well is not static, build pressure or acting abnormal in any way - abort offline operations.
- Install 10M packoff and test same. After successful test, engage locking ring and L/D running tool.
- Install 10M backpressure valve in WH from rig floor.
 - Note: 3 Casing barriers and 2 Annular barriers currently in place.
- Once well is secured and BLM notified, ND BOP and walk rig to next well on pad.
 - If ANY barrier fails to test – the well will be cemented online.
 - Devon Company Man and Devon Cementer will oversee Cementing Operations
 - Rig Manager will walk the rig to the next well.
 - Drill out operations on next deep intermediate will not begin until cementing operations have concluded on the offline well.
- Install 10M Gate Valve and Cactus WH adapter.
- Test connection between WH adapter seals, hanger neck, and ring gasket to 10,000psi.
- Open Frac Valve and remove BPV.
- RU cement head, cement iron, return lines and test same.
- Once all equipment is rigged up, barriers tested and ready to cement, notify BLM of intent to Cement Offline.

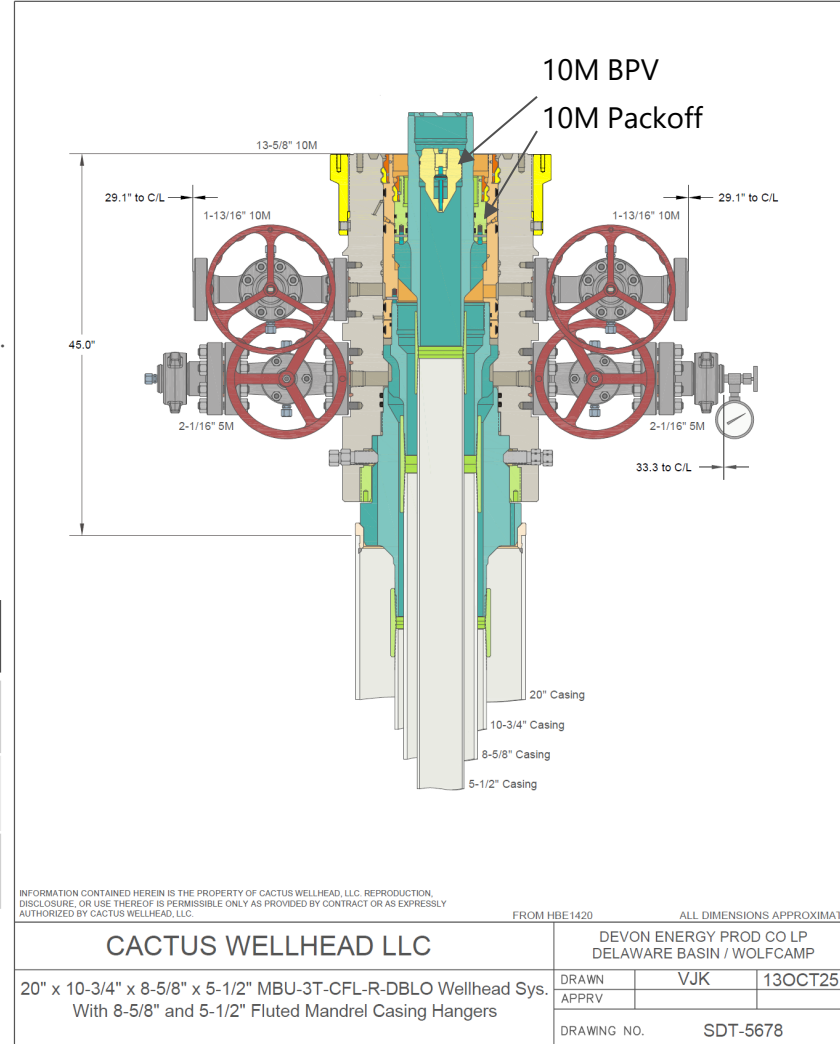
Offline Procedure

- **Devon's Proposed Production Offline Procedure (continued):**
- Perform offline cement job.
- If an influx is observed during the cement job:
 - The Day and Night Company Men will redirect returns from Cementing Manifold to the Rig's choke manifold and hold appropriate backpressure to circulate out influx.
 - If annular surface pressure approaches 25% of the tested pressure of the surface return equipment, or if circulating the influx out with the cementing pumps is not feasible, the well can be secured by closing the 10M casing valves.*
- Bump plug and ensure floats are holding.
 - If plug does not bump or floats do not hold, either the Gate Valve or Cement Head may be closed while we WOC.
- RD cement head and install BPV.
- Remove Gate Valve and WH adapter.
- Install TA Cap with pressure gauge and test same.
- ***Note*** - If the well is within the KPLA, and an uncemented annulus between the Production and Intermediate casing has been utilized; then cement shall be squeezed down both casing valves within 180 days of the well's completion and displaced with a treated fresh water to a TOC below the potash interval and marker bed number 126, with a minimum of 500' tie-back inside the Intermediate Casing as per R111Q.

*Note – This hasn't been observed

Offline Procedure – Detailed

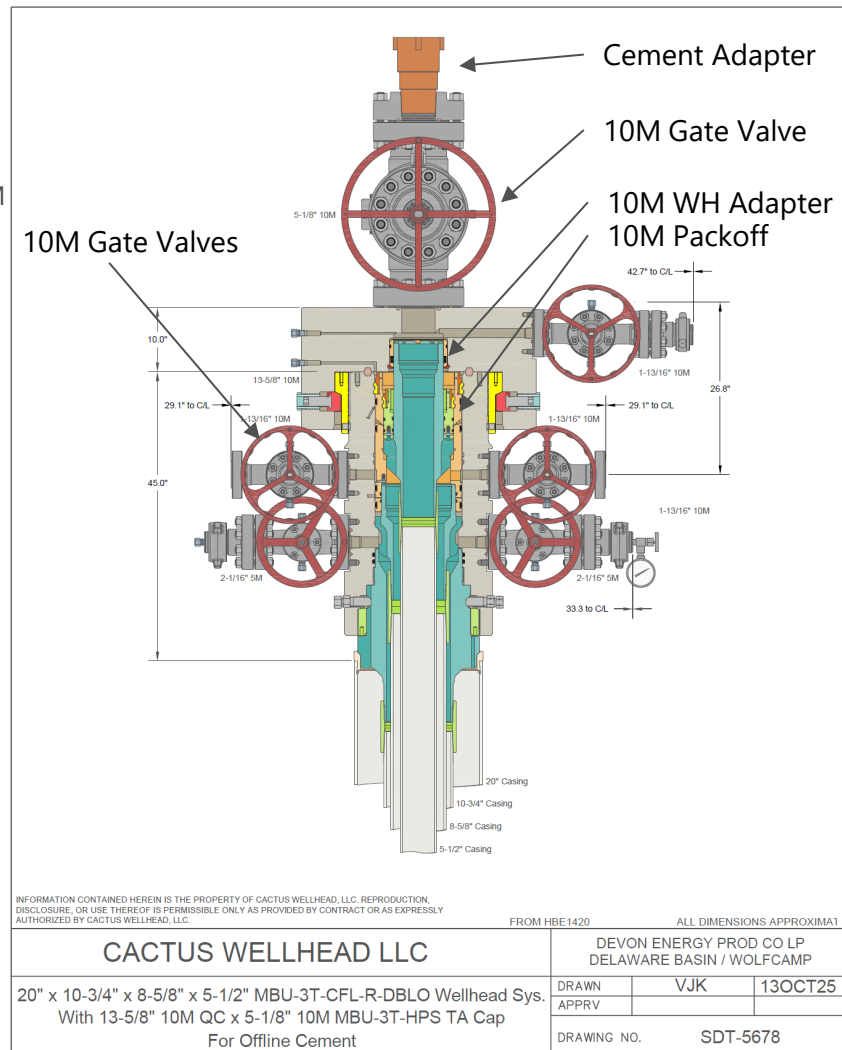
- Run casing and perform negative pressure test during casing run to verify integrity of float equipment’s 10,000psi backpressure valves.
 - Review Devon’s “Punch List” to determine if well is a viable candidate.
- Continue running casing and land casing out on Cactus mandrel hanger.
- Fill casing with KWM and perform flow check ensuring well is static.
- Install packoff rated to 10,000psi and test same. After successful test, engage locking ring and L/D running tool.
- Install backpressure valve in WH from rig floor.
 - Note: 3 Casing barriers and 2 Annular barriers currently in place.
- Once well is secured and BLM notified, ND BOP and walk rig to next well on pad.
 - If ANY barrier fails to test – the well will be cemented online.
 - Devon PIC and Devon Cementer will oversee Cementing Operations
 - Rig Manager will walk the rig to the next well.
 - Drill out operations on next deep intermediate will not begin until cementing operations have concluded on the offline well.



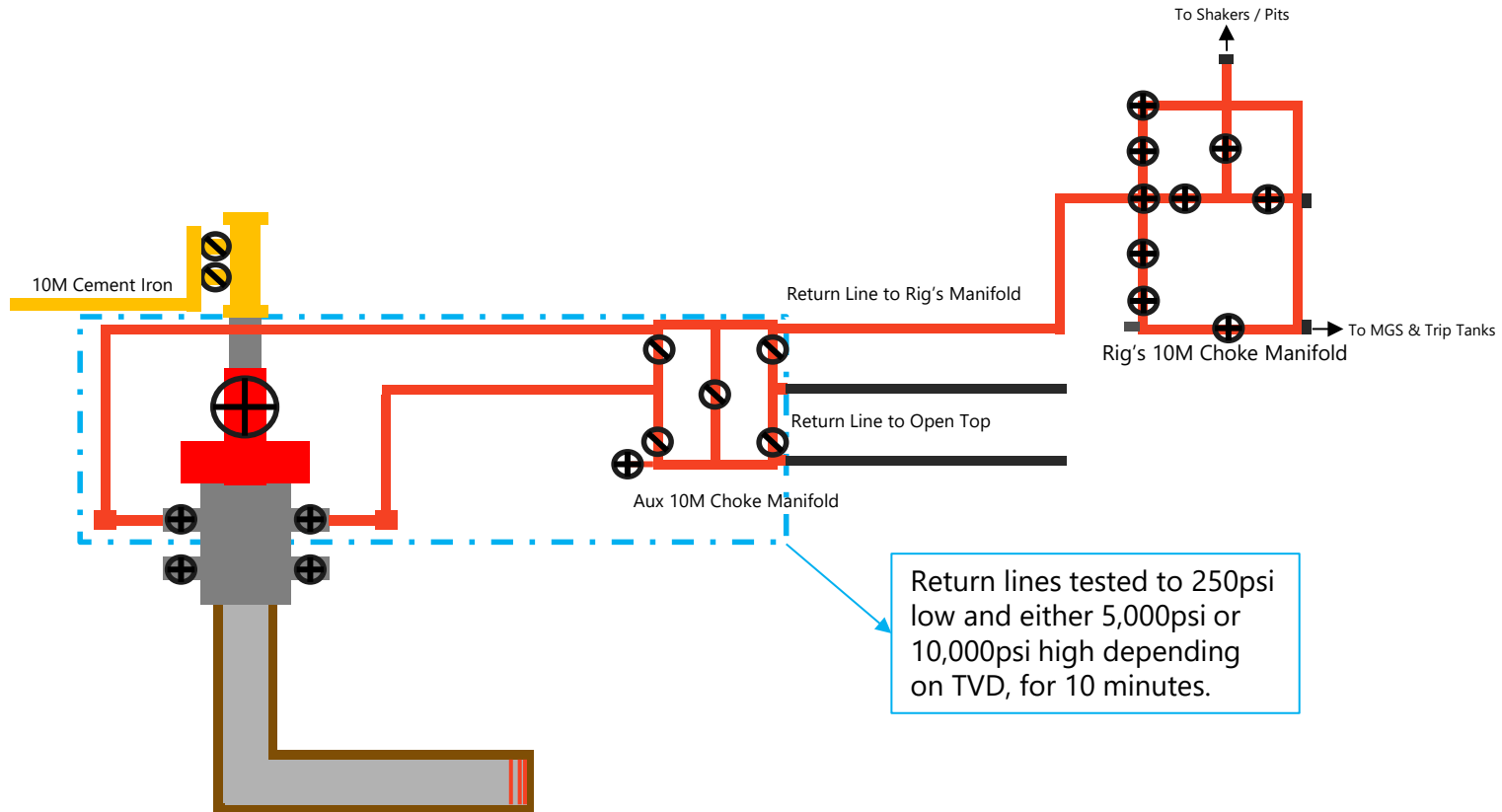
Casing Barrier	Rating	Backside Barrier	Rating
BPV	10,000psi	KWM	> BHP
KWM	> BHP	Packoff	10,000psi
Float Valves (x3)	10,000psi		

Offline Procedure – Detailed

- Install 10M Frac Valve and Cactus WH adapter.
- Test connection between WH adapter seals, hanger neck, and ring gasket to 10,000psi.
- Open Frac Valve and remove BPV.
- RU cement head, cement iron, return lines and test same.
- Once all equipment is rigged up, barriers tested and ready to cement, notify BLM of intent to Cement Offline.
- Perform offline cement job.
- If an influx is observed during the cement job:
 - The Day and Night Company Men will redirect returns from Cementing Manifold to the Rig's choke manifold and hold appropriate backpressure to circulate out influx.
 - If annular surface pressure approaches 25% of the tested pressure of the surface return equipment, or if circulating the influx out with the cementing pumps is not feasible, the well can be secured by closing the 10M casing valves.
- Bump plug and ensure floats are holding.
 - If plug does not bump or floats do not hold, either the Gate Valve or Cement Head may be closed while we WOC.
- RD cement head and install BPV.
- Remove Gate Valve and WH adapter.
- Install TA Cap with pressure gauge and test same.



Offline Flow Path



Return lines tested to 250psi low and either 5,000psi or 10,000psi high depending on TVD, for 10 minutes.

- ⊕ 10M Valve / Choke
- ⊘ 10M Low Torq

Note:

- All lines are 10M rated and tested to **5,000psi for wells less than 12,000' TVD**
- All lines are 10M rated and tested to **10,000psi for wells greater than 12,000' TVD**
- Minimum of 2 barriers in place at ALL times
- Never had to circulate out an influx during an Offline job

Thank you.



BOPE Break Test Variance

2/2026
REV5



NYSE: DVN
devonenergy.com



BOPE Break Test Variance (Less than 12,000' TVD)

Devon is respectfully pursuing a variance to the minimum standards to allow a testing schedule of the blow out prevention equipment (BOPE) along with Stump Testing, Batch Drilling & Offline Cementing operations to include the following:

- Conduct a full 10k BOPE and 5k Annular test upon initial installation on the pad.
- If the rig has the ability to do a Stump Test, this is permitted for initial installation.
- Perform full BOPE tests every 21 days thereafter.
- Intermediate & Production Break-testing is permitted to the base of the Wolfcamp or shallower (limited to 12,000' TVD).
- Once the well is secured and BLM has been notified, disconnect the BOP and walk the rig to the next well on the pad.
 - If any unusual events occur during drilling, tripping, or casing operations, break-testing will not be performed
 - If offset fracturing is observed within 1.0 mile in the same producing horizon, break-testing in the production section will not be performed.
- Each rig requesting a break-test variance must be capable of picking up the BOP without damaging components, using winches and following API Standard 53 (Fifth Edition, December 2018, Annex C, Table C.4), which recognizes break-testing as an acceptable practice.
- Function tests will be performed on the following BOP elements:
 - Annular: During each full BOPE test and at least weekly.
 - Pipe Rams: On every trip and on trip-ins where a FIT is required.
 - Blind Rams: On every trip.
- Break-testing the BOP allows for offline cementing and/or remediation (if needed) of any surface, intermediate, or production sections, in accordance with the attached offline cementing support documentation.
- After securing the well section, disconnect the BOP from the wellhead and walk it with the rig to another well on the pad.
- Install a TA cap per Cactus Wellhead procedures and monitor casing pressure via the valve on the TA cap.

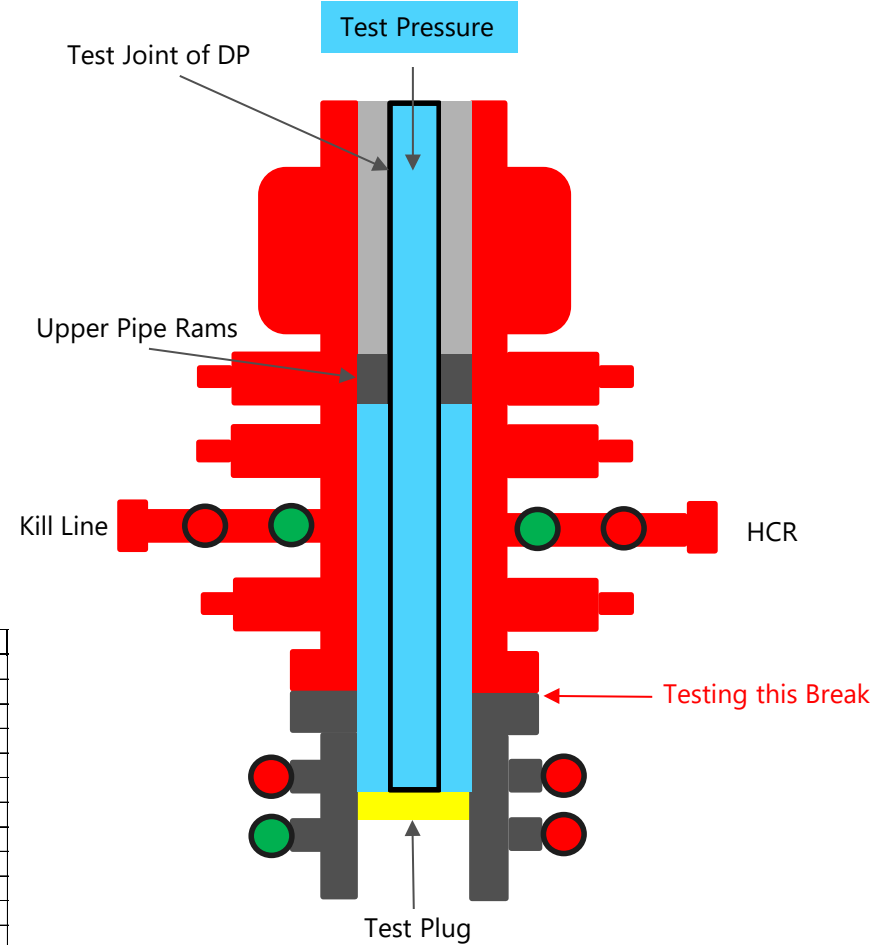
BOPE Break Test Variance (Less than 12,000' TVD)

Test Procedure:

1. Makeup test plug on DP and set in Wellhead.
2. Close Upper Pipe Rams around DP.
3. Close Outside Kill Line & HCR.
4. Open wellhead valve to ensure if pressure leaks past plug, it won't pressure up wellbore.
5. Tie into top of DP at Rig Floor. Fill with water and test Break + Pipe Rams to 250psi low and 10,000psi high.
6. Bleed off pressure.
7. Open Upper Pipe Rams, close wellhead valve and lay down test plug and DP.

Component Table:

Components	Offline	Offline, BOPE	Break	Online
Upper Rams		X	X	X
Blind Rams		X		X
Lower Rams				X
Outside Kill Valve		X	X	X
Inside Kill Valve		X		X
Kill Line Check Valve		X		X
Inside Choke Valve		X		X
HCR		X	X	X
Kill Line	X			X
Annular		X		X
Choke Manifold Valves and Hose	X			X
Mudline (Mud Pumps, Rig Floor Valves, Kelly Hose, Mud Line)	X			X
Standpipe Valve	X			X
IBOP (Upper and Lower)	X			X



Devon requests offline BOPE testing of components: Upper Rams, Blind Rams, Kill Valves, Choke Valves, and Annular
 Remaining well control equipment components will either be tested offline or online, per BLM approval
 Remaining BOPE will be tested online within 72-hours rom completing the offline BOPE component testing
 Notify the BLM if the online BOPE testing exceeds 72-hours

All well tests not completed Offline or Online, BOPE are required to be completed Online
 If a flex line is removed/broken, HCR will be left open and test against choke manifold valve to ensure break is tested.

Thank you.





TenarisHydril Wedge 461[®]



Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-ICY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	Wall Thickness	0.361 in.	Body Yield Strength	729 x1000 lb
Nominal Weight	20.00 lb/ft	Plain End Weight	19.83 lb/ft	Min. Internal Yield Pressure	14,360 psi
Drift	4.653 in.	OD Tolerance	API	SMYS	125,000 psi
Nominal ID	4.778 in.			Collapse Pressure	12,300 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	6.300 in.	Tension Efficiency	100 %	Minimum	17,000 ft-lb
Coupling Length	7.714 in.	Joint Yield Strength	729 x1000 lb	Optimum	18,000 ft-lb
Connection ID	4.778 in.	Internal Pressure Capacity	14,360 psi	Maximum	21,600 ft-lb
Make-up Loss	3.775 in.	Compression Efficiency	100 %		
Threads per inch	3.40	Compression Strength	729 x1000 lb	Operation Limit Torques	
Connection OD Option	Regular	Max. Allowable Bending	104 °/100 ft	Operating Torque	43,000 ft-lb
		External Pressure Capacity	12,300 psi	Yield Torque	51,000 ft-lb
		Coupling Face Load	329,000 lb	Buck-On	
				Minimum	21,600 ft-lb
				Maximum	23,100 ft-lb

Notes

This connection is fully interchangeable with:
 Wedge 441[®] - 5.5 in. - 0.304 (17.00) / 0.361 (20.00) in. (lb/ft)
 Wedge 461[®] - 5.5 in. - 0.304 (17.00) / 0.415 (23.00) / 0.476 (26.00) in. (lb/ft)
 Connections with Dopeless[®] Technology are fully compatible with the same connection in its doped version
 In October 2019, TenarisHydril Wedge XP[®] 2.0 was renamed TenarisHydril Wedge 461[™]. Product dimensions and properties remain identical and both connections are fully interchangeable

For the latest performance data, always visit our website: www.tenaris.com
 For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information—if any—provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com. ©Tenaris 2024. All rights reserved.



TenarisHydril Wedge 441[®] - AD



Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	8.625 in.	Wall Thickness	0.352 in.	Grade	P110-ICY
Min. Wall Thickness	90.00 %	Pipe Body Drift	Alternative Drift	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry		Performance	
Nominal OD	8.625 in.	Wall Thickness	0.352 in.
Nominal Weight	32.00 lb/ft	Plain End Weight	31.13 lb/ft
Drift	7.875 in.	OD Tolerance	API
Nominal ID	7.921 in.		
		Body Yield Strength	1144 x1000 lb
		Min. Internal Yield Pressure	9180 psi
		SMYS	125,000 psi
		Collapse Pressure	4000 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	8.889 in.	Tension Efficiency	81.20 %	Minimum	23,000 ft-lb
Coupling Length	8.862 in.	Joint Yield Strength	929 x1000 lb	Optimum	24,000 ft-lb
Connection ID	7.921 in.	Internal Pressure Capacity	9180 psi	Maximum	27,000 ft-lb
Make-up Loss	3.744 in.	Compression Efficiency	81.20 %		
Threads per inch	3.43	Compression Strength	929 x1000 lb	Operation Limit Torques	
Connection OD Option	Regular	Max. Allowable Bending	53.59 °/100 ft	Operating Torque	59,000 ft-lb
		External Pressure Capacity	4000 psi	Yield Torque	70,000 ft-lb
				Buck-On	
				Minimum	27,000 ft-lb
				Maximum	29,000 ft-lb

Notes

For the latest performance data, always visit our website: www.tenaris.com
 For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information—if any—provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com. ©Tenaris 2024. All rights reserved.



13-3/8" 54.50# .380 J-55

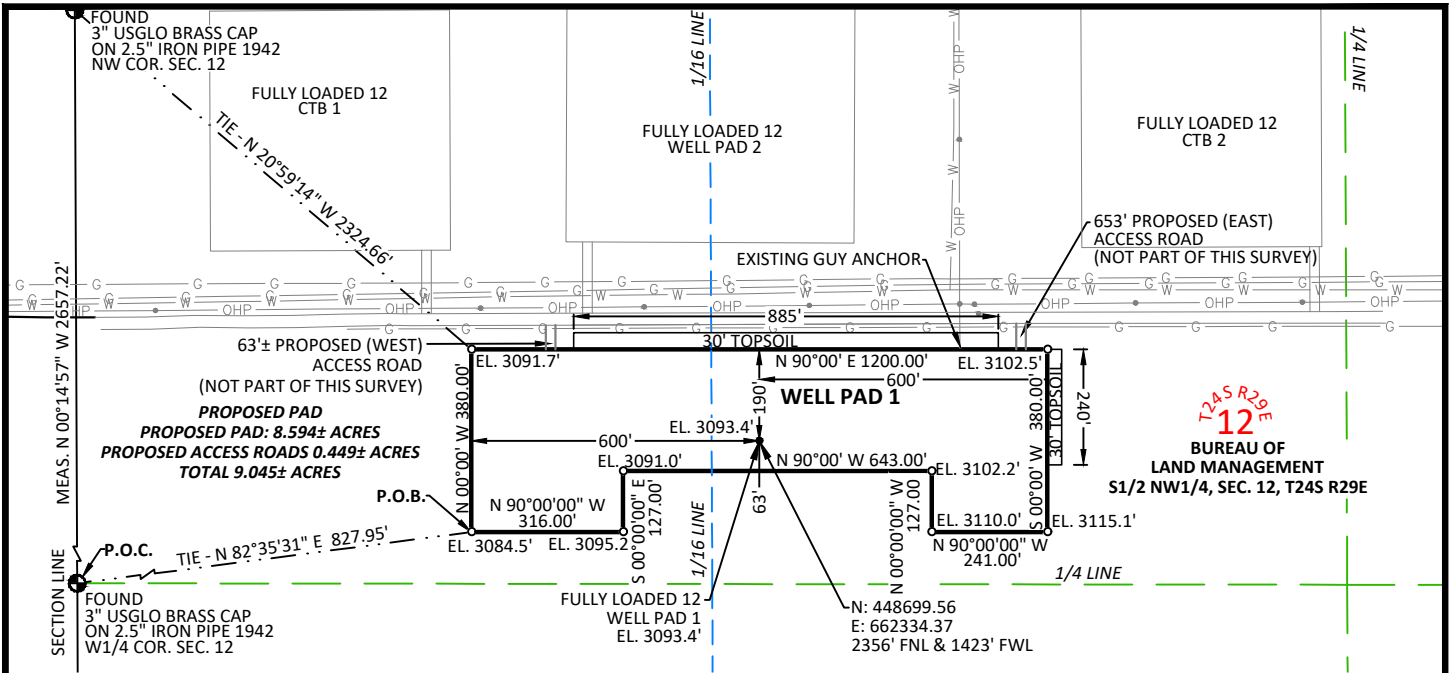
Dimensions (Nominal)

Outside Diameter	13.375	in.
Wall	0.380	in.
Inside Diameter	12.615	in.
Drift	12.459	in.
Weight, T&C	54.500	lbs/ft
Weight, PE	52.790	lbs/ft

Performance Ratings, Minimum

Collapse, PE	1130	psi
Internal Yields Pressure		
PE	2730	psi
STC	2730	PSI
BTC	2730	psi
Yield Strength, Pipe Body	853	1000 lbs
Joint Strength, STC	514	1000 lbs
Joint Strength, BTC	909	1000 lbs

Note: SeAH Steel has produced this specification sheet for general information only. SeAH does not assume liability or responsibility for any loss or injury resulting from the use of information or data contained herein. All applications for the material described are at the customer's own risk and responsibility.



LEGAL DESCRIPTION:

A Surface Site Easement located in the South Half (S1/2) of the Northwest Quarter (NW1/4) of Section 12, Township 24 South, Range 29 East, of the New Mexico Principal Meridian, Eddy County, State of New Mexico.

Commencing at the West Quarter corner of said Section 12 (P.O.C.) (Found 3" USGLO Brass Cap on 2.5" Iron Pipe); thence, North 82°35'31" East a distance of 827.95 feet to the (P.O.B.) Point of Beginning;

thence, North 00°00'00" West a distance of 380.00 feet to a point, said point being located South 20°59'14" East a distance of 2324.66 feet from the Northwest corner of said Section 12 (Found 3" USGLO Bras Cap on 2.5" Iron Pipe);
 thence, North 90°00'00" East a distance of 1200.00 feet;
 thence, South 00°00'00" West a distance of 380.00 feet;
 thence, North 90°00'00" West a distance of 241.00 feet;
 thence, North 00°00'00" West a distance of 127.00 feet;
 thence, North 90°00'00" West a distance of 643.00 feet;
 thence, South 00°00'00" East a distance of 127.00 feet;
 thence, North 90°00'00" West a distance of 316.00 feet to the (P.O.B.) Point of Beginning.

Said Easement containing 8.594 (Grid) 8.597 (Ground) Acres more or less.

DIRECTIONS:

FROM THE INTERSECTION OF MCDONALDS ROAD AND GAVILAN ROAD PROCEED IN A NORTHEASTERLY DIRECTION ALONG GAVILAN ROAD A DISTANCE OF 3.6± MILES TO THE INTERSECTION OF GAVILAN ROAD AND A LEASE ROAD TO THE WEST. MAKING A LEFT HAND TURN PROCEED IN A WESTERLY DIRECTION ALONG LEASE ROAD A DISTANCE OF 1.5± MILES TO THE INTERSECTION OF LEASE ROAD AND THE PRIMARY ACCESS ROAD TO THE SOUTH. MAKING A LEFT HAND TURN PROCEED SOUTHERLY FOR 653± FEET TO FULLY LOADED 12 WELL PAD 1.

NOTES:

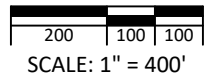
1. BEARINGS SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM (3001), NAD 83 (2011), BASED FROM GPS OBSERVATIONS, OCCUPYING A WHS CONTROL POINT (5/8" REBAR), LOCATED AT NORTH: 457834.965, EAST: 670241.029, ELEVATION: 3198.33, DETERMINED BY AN OPUS SOLUTION ON DECEMBER 3RD, 2018.
2. DISTANCES DEPICTED HEREON ARE REPORTED AS GRID DISTANCES IN US SURVEY FEET. USE A COMBINED SCALE FACTOR OF 1.000221019 FOR GROUND DISTANCES.
3. ELEVATIONS SHOWN ARE EXISTING GROUND UNLESS OTHERWISE NOTED.

SURVEYOR STATEMENT:

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS EASEMENT PLAT WAS DERIVED FROM FIELD NOTES OR ELECTRONIC DATA OF AN ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY SUPERVISION. NO WARRANTY IS MADE OR INTENDED FOR THE LOCATION OF ANY OR ALL EASEMENTS THAT MAY EXIST WITHIN THE BOUNDS OF THIS SURVEY. THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO. IF ANY ALTERATIONS ARE MADE (HAND DRAWN, HANDWRITTEN OR DIGITAL ADDITIONS), THIS SURVEYOR IS NO LONGER RESPONSIBLE FOR THE VALIDITY OF THIS PLAT.

John E. Allen
 JOHN E. ALLEN NEW MEXICO PS No. 20250

10/30/24
 DATE

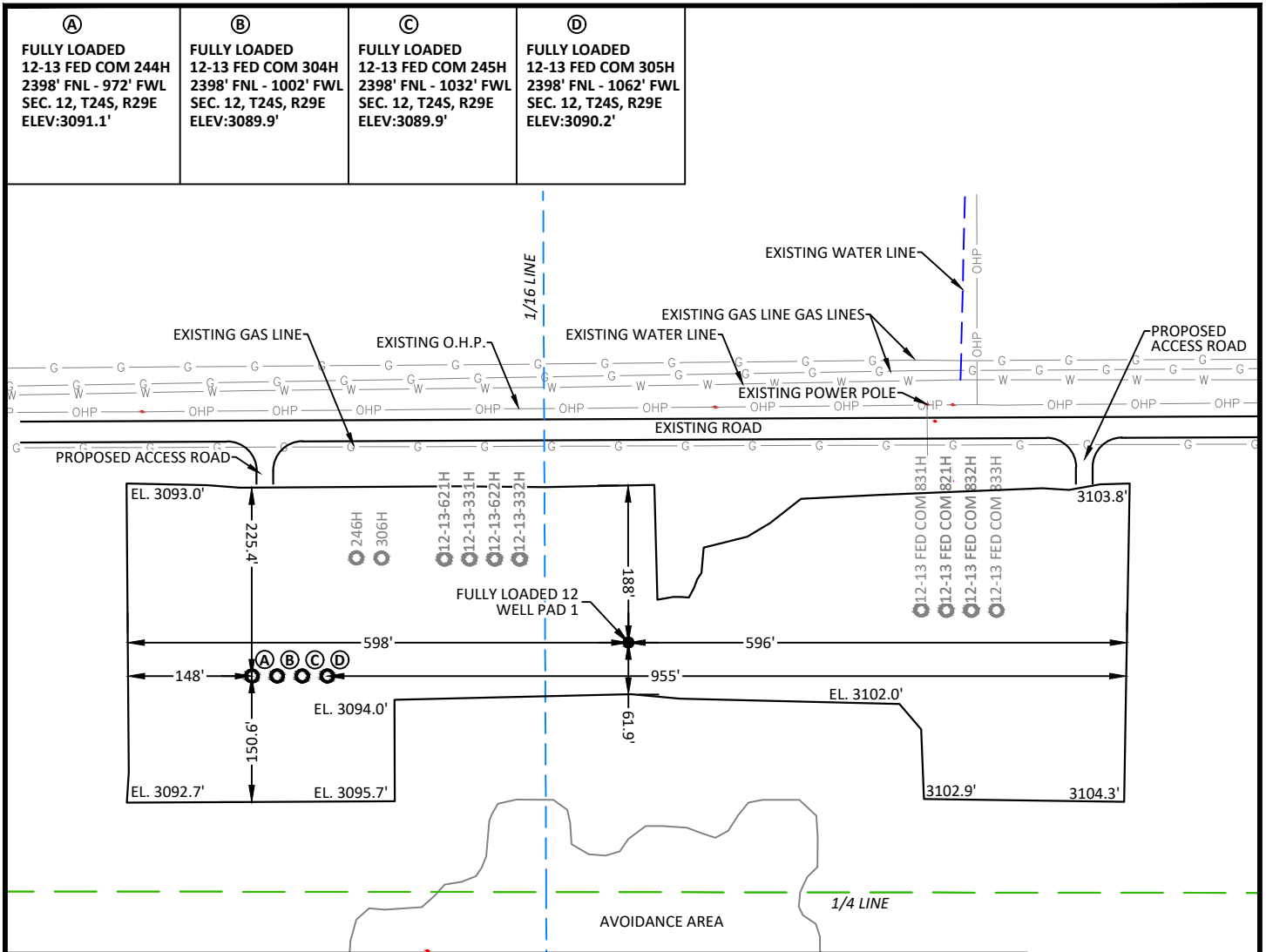


WHS
 ENGINEERING > SURVEYING > PLANNING
 1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
 307.362.6065 | 866.938.3088 | www.wsmithpc.com

DRAWN BY: JEB	CHECKED BY: JEA
DATE: 10/30/24	JOB NO: 18080
REVISIONS: (R7)	

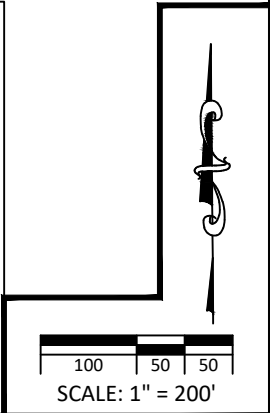
DEVON ENERGY PRODUCTION CO., L.P.
FULLY LOADED 12 WELL PAD 1
 SURFACE SITE EASEMENT
 ON THE PROPERTY OF
BUREAU OF LAND MANAGEMENT
 S1/2 NW1/4, SECTION 12,
 TOWNSHIP 24 SOUTH, RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

devon
 AA000245616



I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS EASEMENT PLAT WAS DERIVED FROM FIELD NOTES OR ELECTRONIC DATA OF AN ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION. NO WARRANTY IS MADE OR INTENDED FOR THE LOCATION OF ANY OR ALL EASEMENTS THAT MAY EXIST WITHIN THE BOUNDS OF THIS SURVEY. THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO. IF ANY ALTERATIONS ARE MADE (HAND DRAWN, HANDWRITTEN OR DIGITAL ADDITIONS), THIS SURVEYOR IS NO LONGER RESPONSIBLE FOR THE VALIDITY OF THIS PLAT.

John E. Allen
 JOHN E. ALLEN, NEW MEXICO PS No. 20250
 01/23/26
 DATE



DIRECTIONS:
 FROM THE INTERSECTION OF MCDONALDS ROAD AND GAVILAN ROAD PROCEED IN A NORTHEASTERLY DIRECTION ALONG GAVILAN ROAD A DISTANCE OF 3.6± MILES TO THE INTERSECTION OF GAVILAN ROAD AND A LEASE ROAD TO THE WEST. MAKING A LEFT HAND TURN PROCEED IN A WESTERLY DIRECTION ALONG LEASE ROAD A DISTANCE OF 1.5± MILES TO THE INTERSECTION OF LEASE ROAD AND THE PRIMARY ACCESS ROAD TO THE SOUTH. MAKING A LEFT HAND TURN PROCEED SOUTHERLY FOR 68± FEET TO FULLY LOADED 12 WELL PAD 1.

NOTES:
 1. BEARINGS AND COORDINATES SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM (3001), NAD 83 (2011), BASED FROM GPS OBSERVATIONS, OCCUPYING A WHS CONTROL POINT (5/8" REBAR), LOCATED AT NORTH: 456034.443 EAST: 653560.641, ELEVATION: 3101.373, DETERMINED BY AN OPUS SOLUTION AND HAVING A CONVERGENCE ANGLE OF 0°11'37.44".
 2. DISTANCES DEPICTED HEREON ARE REPORTED AS GROUND DISTANCE IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000220979.
 3. ELEVATIONS SHOWN ARE EXISTING GROUND UNLESS OTHERWISE NOTED.

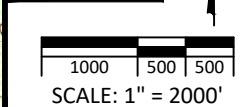
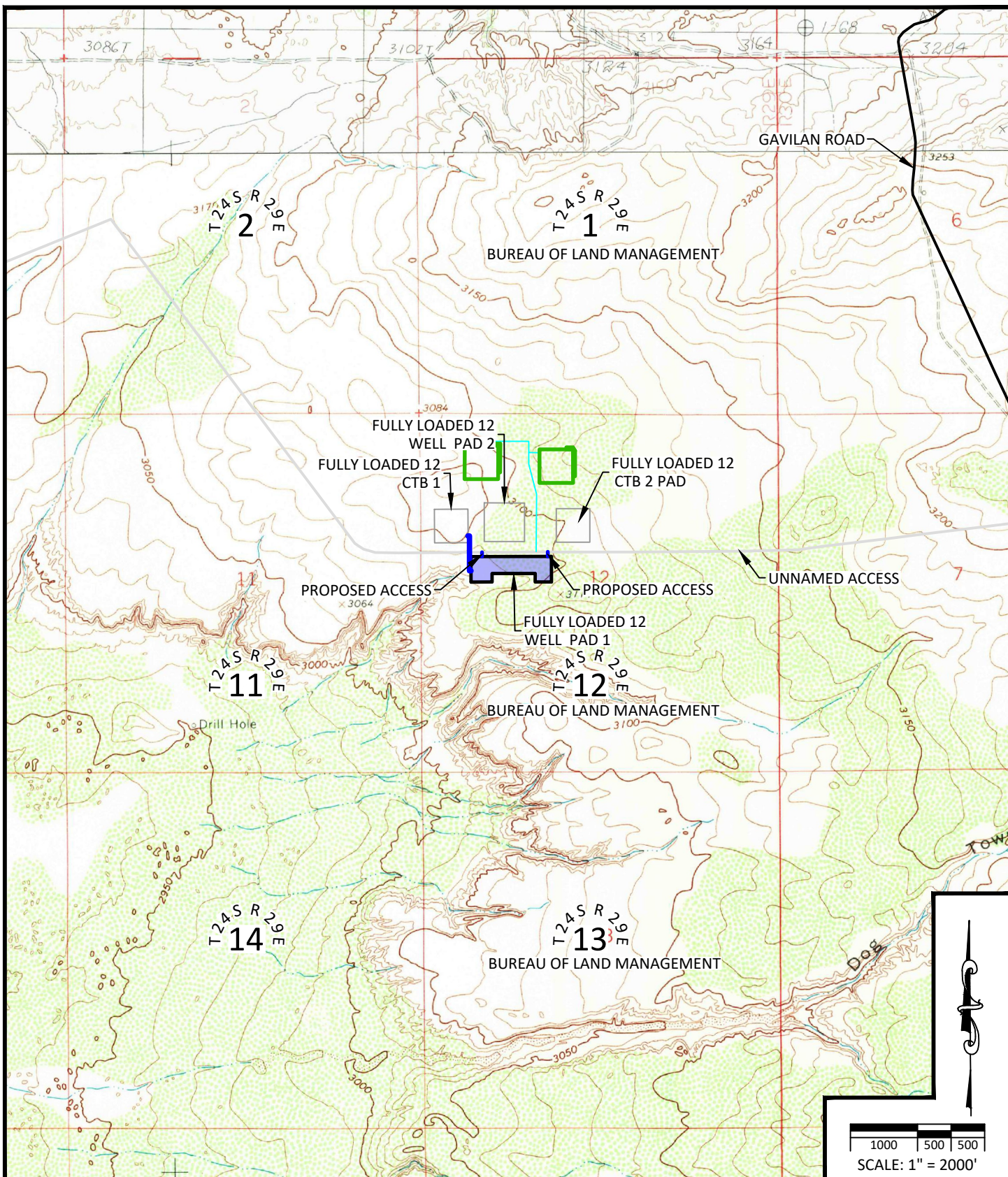
WHS
 ENGINEERING > SURVEYING > PLANNING
 1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
 307.362.6065 | 866.938.3088 | www.whsmithpc.com

DRAWN BY: JEB	CHECKED BY: RAW
DATE: 07/19/2022	JOB NO: 18080
REVISIONS: (09/12/19 JB) MOVED SHL (05/18/20 CED) CHANGE PAD LAYOUT & SHL'S (07/20/2020 JEB) SUB-PAD (R6)(04/07/25 JEB) WELLS (R7) (1/14/26 DTS) WELLS	

SITE MAP
DEVON ENERGY PRODUCTION CO., L.P.
FULLY LOADED 12 - WELL PAD 1

SECTION 12, TOWNSHIP 24 SOUTH
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

AA000245616



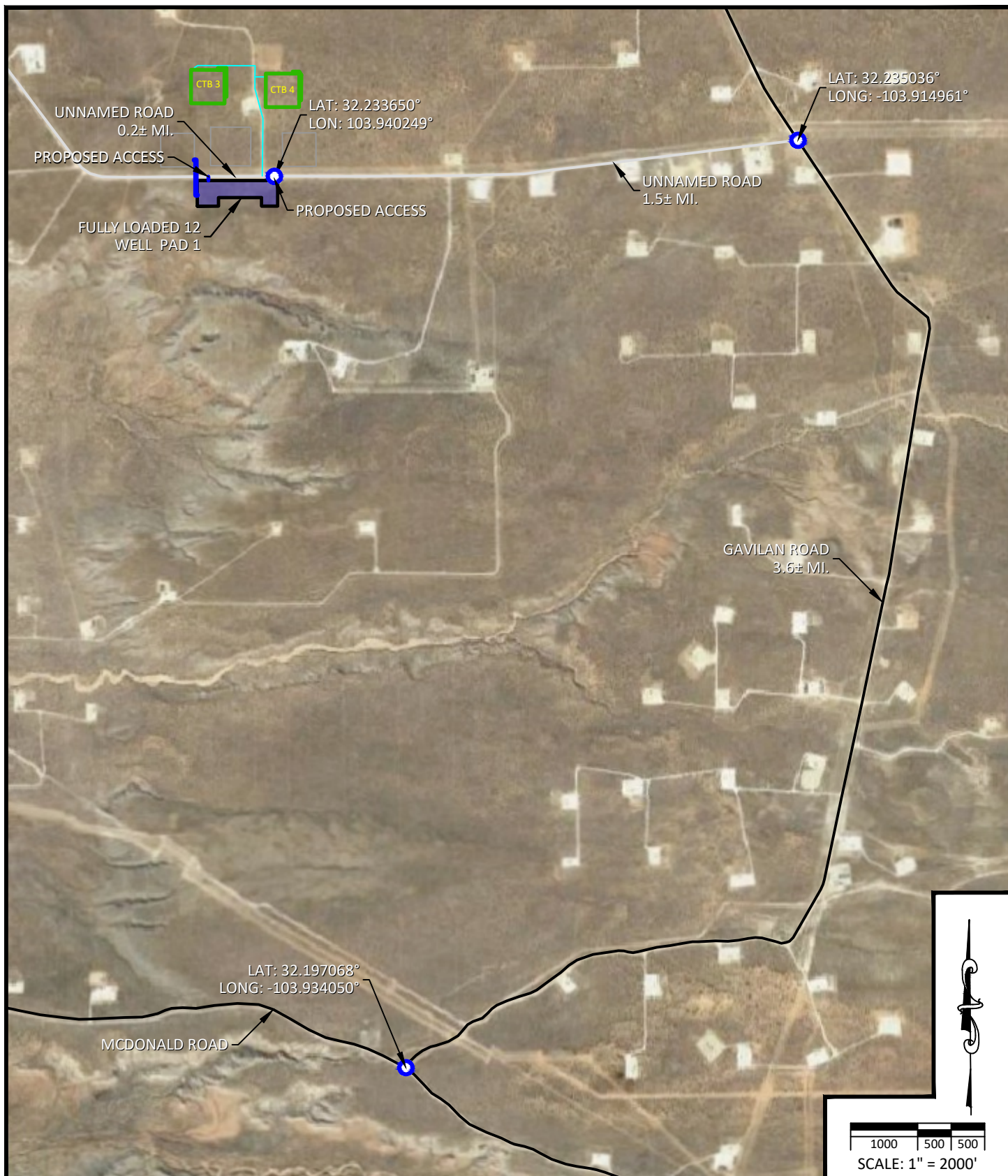
WHS
ENGINEERING > SURVEYING > PLANNING
1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
307.362.6065 | 866.938.3088 | www.whsmithpc.com

DRAWN BY: JMA	CHECKED BY: RAW
DATE: 07/20/2022	JOB NO: 18080
REVISIONS:	

LOCATION VERIFICATION MAP
DEVON ENERGY PRODUCTION CO., L.P.
FULLY LOADED 12 WELL PAD 1
SECTION 12, TOWNSHIP 24 SOUTH
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

devon

AA000245616



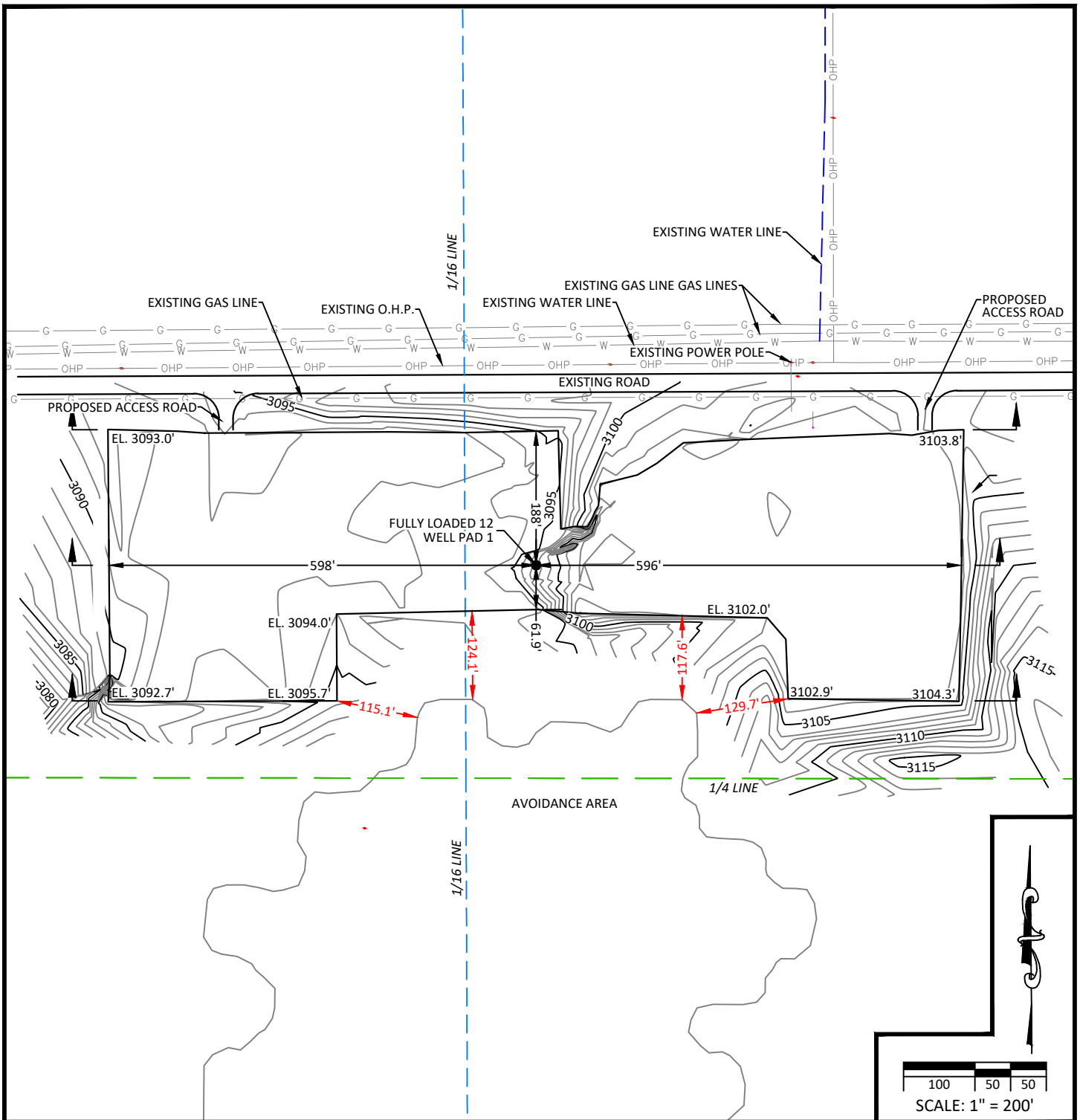
WHS
 ENGINEERING > SURVEYING > PLANNING
 1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
 307.362.6065 | 866.938.3088 | www.whsmithpc.com

DRAWN BY: JEB	CHECKED BY: ARD
DATE: 03/21/2019	JOB NO: 18080
REVISIONS:	

AERIAL ACCESS ROUTE MAP
DEVON ENERGY PRODUCTION CO., L.P.
FULLY LOADED 12 WELL PAD 1
 SECTION 12, TOWNSHIP 24 SOUTH
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO



AA000245616



EARTHWORK QUANTITIES FOR FULLY LOADED 12 WELL PAD 1 ASBUILT PAD SHOWN HEREON

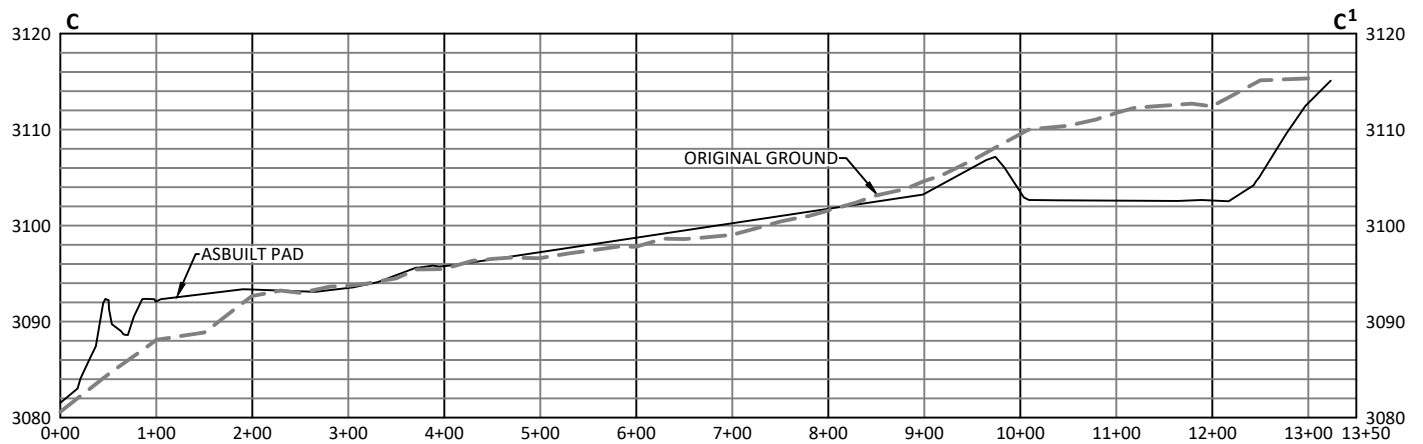
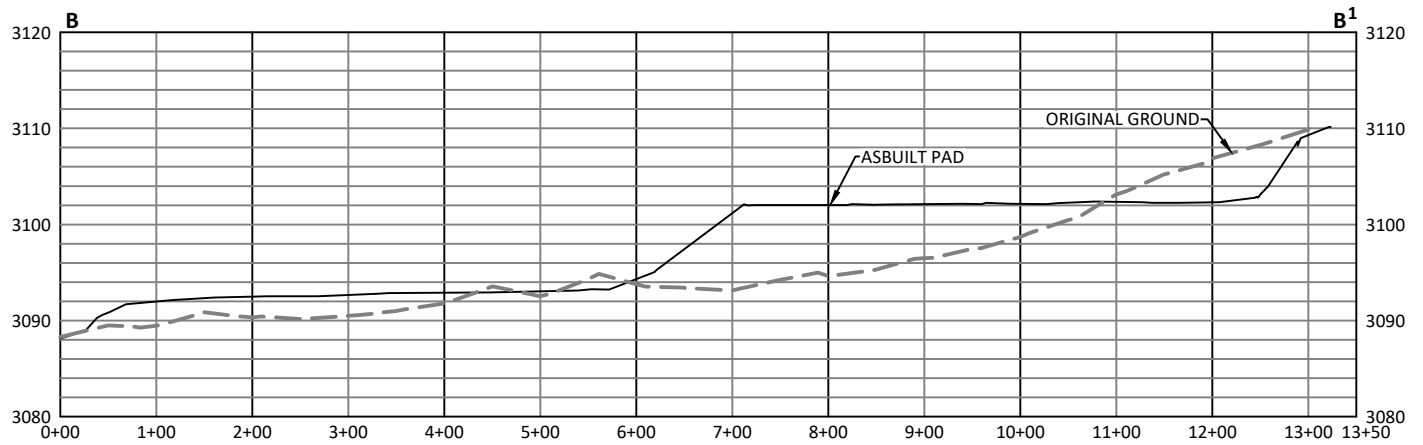
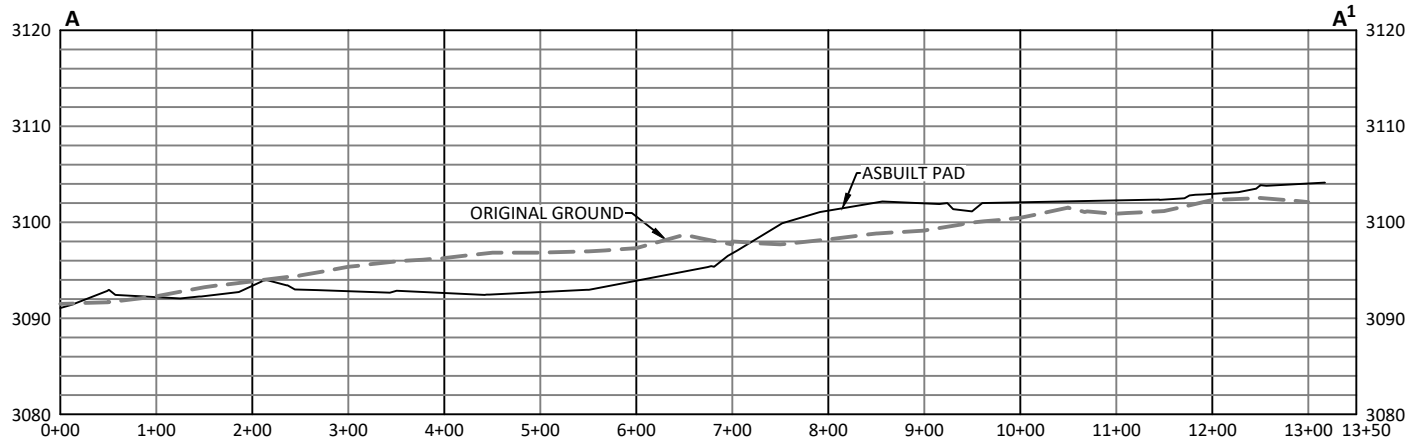
NOTES:
 1. BEARINGS AND COORDINATES SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM (3001), NAD 83 (2011), BASED FROM GPS OBSERVATIONS, OCCUPYING A WHS CONTROL POINT (5/8" REBAR), LOCATED AT NORTH: 456034.443 EAST: 653560.641, ELEVATION: 3101.373, DETERMINED BY AN OPUS SOLUTION AND HAVING A CONVERGENCE ANGLE OF 0°11'37.44".
 2. DISTANCES DEPICTED HEREON ARE REPORTED AS GROUND DISTANCE IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000220979.
 3. ELEVATIONS SHOWN ARE EXISTING GROUND UNLESS OTHERWISE NOTED.

WHS
 ENGINEERING > SURVEYING > PLANNING
 1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
 307.362.6065 | 866.938.3088 | www.whsmithpc.com

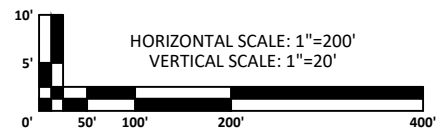
DRAWN BY: CED	CHECKED BY: ARD
DATE: 03/21/2019	JOB NO: 18080
REVISIONS: (09/12/19 JB) MOVED SHL (05/18/20 CED) CHANGE PAD LAYOUT & SHL'S (07/20/2020 JEB) SUB-PAD (R6)(04/07/25 JEB) WELLS, (04/07/25 JEB) WELLS (R7) (1/14/26 DTS) WELLS	

PLAN VIEW
DEVON ENERGY PRODUCTION CO., L.P.
FULLY LOADED 12 - WELL PAD 1
 SECTION 12, TOWNSHIP 24 SOUTH
 RANGE 29 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

AA000245616



EARTHWORK QUANTITIES FOR
FULLY LOADED 12 WELL PAD 1
ASBUILT PAD SHOWN HEREON



WHS
ENGINEERING > SURVEYING > PLANNING
1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
307.362.6065 | 866.938.3088 | www.whsmithpc.com

DRAWN BY: CED	CHECKED BY: ARD
DATE: 03/21/2019	JOB NO: 18080
REVISIONS: (09/12/19 JB) MOVED SHL (05/18/20 CED) CHANGE PAD LAYOUT & SHL'S (07/20/2020 JEB) SUB-PAD (R6)(04/07/25 JEB) WELLS, (04/07/25 JEB) WELLS (R7) (1/14/26 DTS) WELLS	

CROSS SECTIONS
DEVON ENERGY PRODUCTION CO., L.P.
FULLY LOADED 12 - WELL PAD 1

SECTION 12, TOWNSHIP 24 SOUTH
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



AA000245616

GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Ground Level 3089.90

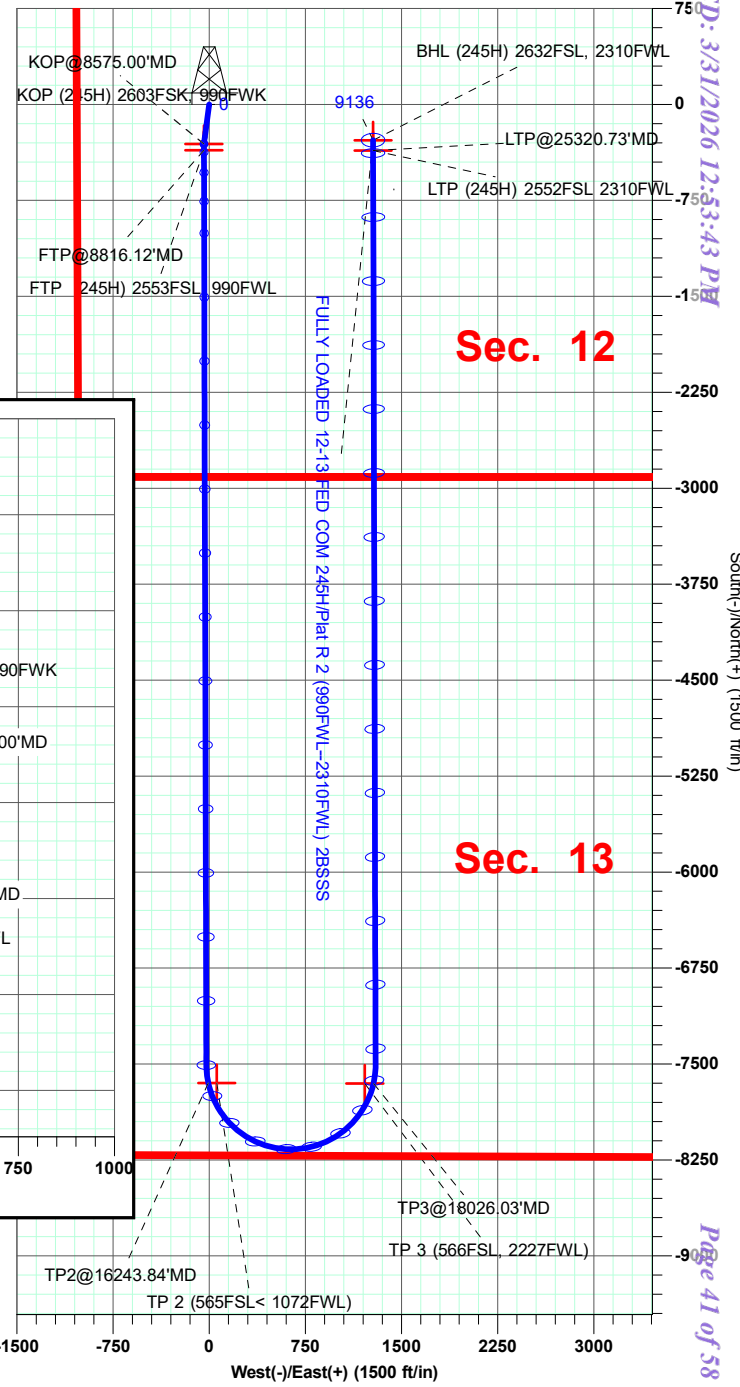
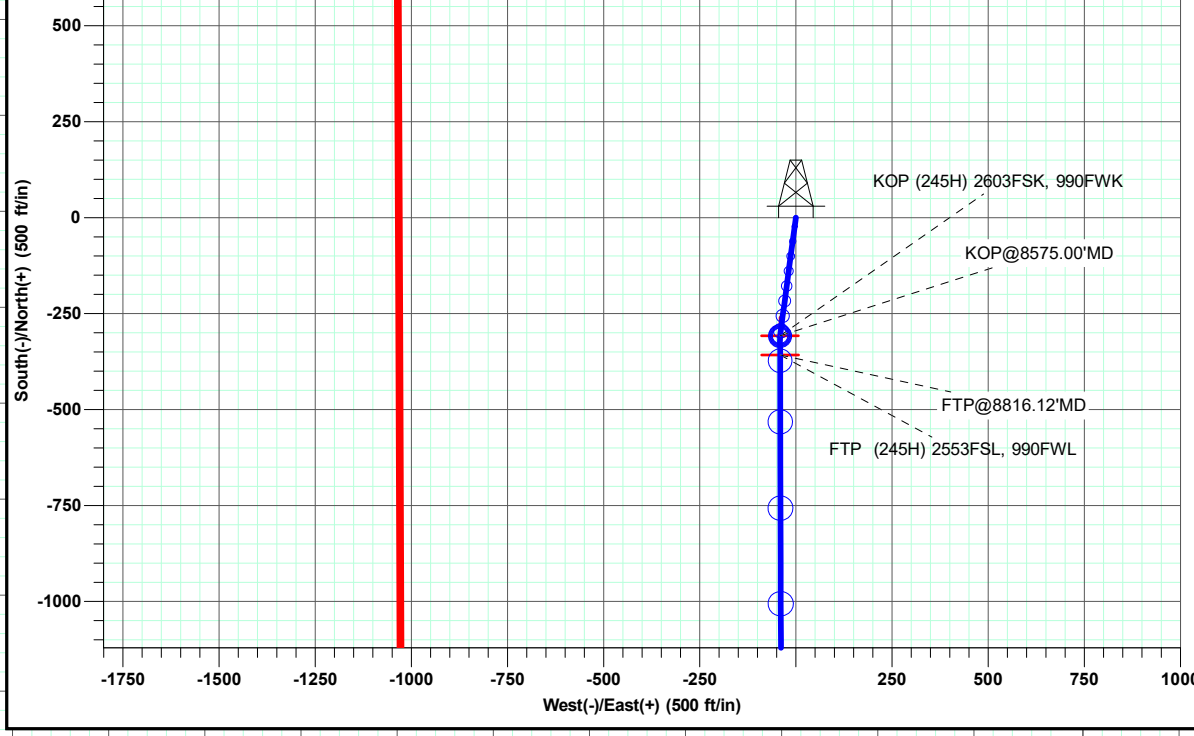
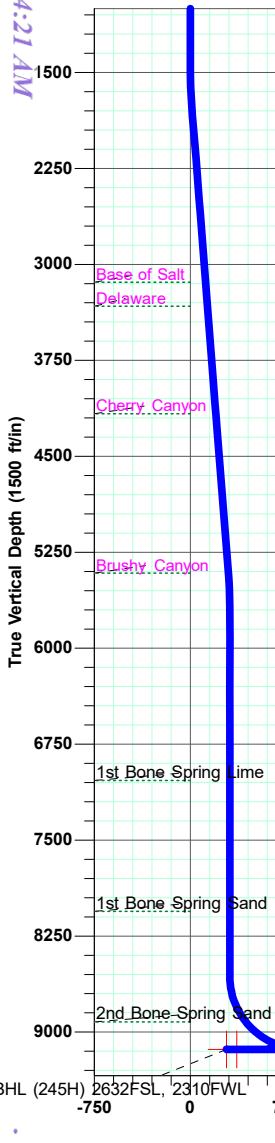
FULLY LOADED 12-13 FED COM 245H
Eddy County (NAD 83 NM Eastern)
Northing: 448659.36
Easting: 661944.36
Lat: 32.2328388
Long: -103.9432763
Plat R 2 (990FWL--2310FWL) 2BSSS

SECTION DETAILS
FULLY LOADED 12-13 FED COM 245H

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00
1724.95	4.50	187.60	1724.72	-8.75	-1.17	2.00	8.75
5457.01	4.50	187.60	5445.28	-298.93	-39.89	0.00	298.83
5681.96	0.00	0.00	5670.00	-307.68	-41.06	2.00	307.57
8575.00	0.00	0.00	8563.04	-307.68	-41.06	0.00	307.57
9475.00	90.00	179.85	9136.00	-880.64	-39.56	10.00	880.53
16102.00	90.00	179.85	9136.00	-7507.61	-22.21	0.00	7507.53
17137.14	90.00	90.00	9136.00	-8165.98	637.88	8.68	8167.62
18175.74	90.00	359.85	9136.00	-7504.16	1297.97	8.68	7507.53
25320.73	90.00	359.84	9136.00	-359.19	1278.76	0.00	362.54
25400.73	90.00	359.87	9136.00	-279.20	1278.56	0.04	282.55

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (245H) 2553FSL, 990FWL	0.00	-357.67	-40.93	448301.69	661903.43
KOP (245H) 2603FSK, 990FWK	0.00	-307.68	-41.06	448351.68	661903.30
TP 2 (566FSL < 1072FWL)	0.00	-7648.32	59.10	441011.06	662003.46
TP 3 (566FSL, 2227FWL)	0.00	-7652.63	1213.62	441006.75	663157.98
BHL (245H) 2632FSL, 2310FWL	9136.00	-279.20	1278.56	448380.16	663222.92
LTP (245H) 2552FSL 2310FWL	9136.00	-359.19	1278.76	448300.17	663223.12



FULLY LOADED 12-13 FED COM 245H/Plat R 2 (990FWL--2310FWL) 2BSSS

Vertical Section at 179.85° (1500 ft/in)

West(-)/East(+) (1500 ft/in)

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDSC Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

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

Site	Sec 12-T24S-R29E				
Site Position:		Northing:	451,060.01 usft	Latitude:	32.2394481
From:	Map	Easting:	660,901.78 usft	Longitude:	-103.9466201
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in		

Well	FULLY LOADED 12-13 FED COM 245H					
Well Position	+N/-S	0.00 ft	Northing:	448,659.36 usft	Latitude:	32.2328388
	+E/-W	0.00 ft	Easting:	661,944.36 usft	Longitude:	-103.9432763
Position Uncertainty		0.50 ft	Wellhead Elevation:	ft	Ground Level:	3,089.90 ft
Grid Convergence:		0.21 °				

Wellbore	YouTurn				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2015	12/31/2019	6.85	59.98	47,646.30163774

Design	Plat R 2 (990FWL--2310FWL) 2BSSS			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	179.85

Plan Survey Tool Program	Date	2/10/2026		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(ft)	(ft)			
1	0.00	25,400.73 Plat R 2 (990FWL--2310FWL) 2B	MWD+IFR1+FDIR OWSG MWD + IFR1 + FDIR C	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDSC Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,724.95	4.50	187.60	1,724.72	-8.75	-1.17	2.00	2.00	0.00	187.60	
5,457.01	4.50	187.60	5,445.28	-298.93	-39.89	0.00	0.00	0.00	0.00	
5,681.96	0.00	0.00	5,670.00	-307.68	-41.06	2.00	-2.00	0.00	180.00	
8,575.00	0.00	0.00	8,563.04	-307.68	-41.06	0.00	0.00	0.00	0.00	
9,475.00	90.00	179.85	9,136.00	-880.64	-39.56	10.00	10.00	0.00	179.85	
16,102.00	90.00	179.85	9,136.00	-7,507.62	-22.21	0.00	0.00	0.00	0.00	
17,137.14	90.00	90.00	9,136.00	-8,165.98	637.88	8.68	0.00	-8.68	-90.00	
18,175.74	90.00	359.85	9,136.00	-7,504.16	1,297.97	8.68	0.00	-8.68	-90.00	
25,320.74	90.00	359.84	9,136.00	-359.19	1,278.76	0.00	0.00	0.00	-90.12	LTP (245H) 2552FSL
25,400.73	90.00	359.87	9,136.00	-279.20	1,278.56	0.04	0.00	0.04	89.93	BHL (245H) 2632FSL

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDCS Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

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	448,659.36	661,944.36	32.2328388	-103.9432763	
100.00	0.00	0.00	100.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
200.00	0.00	0.00	200.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
289.00	0.00	0.00	289.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
Rustler										
300.00	0.00	0.00	300.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
400.00	0.00	0.00	400.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
500.00	0.00	0.00	500.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
600.00	0.00	0.00	600.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
643.00	0.00	0.00	643.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
Top of Salt										
700.00	0.00	0.00	700.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
800.00	0.00	0.00	800.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
900.00	0.00	0.00	900.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	448,659.36	661,944.36	32.2328388	-103.9432763	
1,600.00	2.00	187.60	1,599.98	-1.73	-0.23	448,657.63	661,944.13	32.2328340	-103.9432771	
1,700.00	4.00	187.60	1,699.84	-6.92	-0.92	448,652.44	661,943.44	32.2328198	-103.9432794	
1,724.95	4.50	187.60	1,724.72	-8.75	-1.17	448,650.61	661,943.20	32.2328147	-103.9432802	
1,800.00	4.50	187.60	1,799.54	-14.59	-1.95	448,644.77	661,942.42	32.2327987	-103.9432828	
1,900.00	4.50	187.60	1,899.23	-22.36	-2.98	448,637.00	661,941.38	32.2327773	-103.9432862	
2,000.00	4.50	187.60	1,998.92	-30.14	-4.02	448,629.22	661,940.34	32.2327560	-103.9432897	
2,100.00	4.50	187.60	2,098.61	-37.91	-5.06	448,621.45	661,939.31	32.2327346	-103.9432931	
2,200.00	4.50	187.60	2,198.31	-45.69	-6.10	448,613.67	661,938.27	32.2327133	-103.9432966	
2,300.00	4.50	187.60	2,298.00	-53.46	-7.13	448,605.90	661,937.23	32.2326919	-103.9433000	
2,400.00	4.50	187.60	2,397.69	-61.24	-8.17	448,598.12	661,936.19	32.2326705	-103.9433035	
2,500.00	4.50	187.60	2,497.38	-69.01	-9.21	448,590.35	661,935.16	32.2326492	-103.9433069	
2,600.00	4.50	187.60	2,597.07	-76.79	-10.25	448,582.57	661,934.12	32.2326278	-103.9433104	
2,700.00	4.50	187.60	2,696.76	-84.56	-11.29	448,574.80	661,933.08	32.2326064	-103.9433138	
2,800.00	4.50	187.60	2,796.46	-92.34	-12.32	448,567.02	661,932.04	32.2325851	-103.9433173	
2,900.00	4.50	187.60	2,896.15	-100.11	-13.36	448,559.25	661,931.00	32.2325637	-103.9433207	
3,000.00	4.50	187.60	2,995.84	-107.89	-14.40	448,551.47	661,929.97	32.2325424	-103.9433242	
3,100.00	4.50	187.60	3,095.53	-115.66	-15.44	448,543.70	661,928.93	32.2325210	-103.9433276	
3,144.61	4.50	187.60	3,140.00	-119.13	-15.90	448,540.23	661,928.47	32.2325115	-103.9433291	
Base of Salt										
3,200.00	4.50	187.60	3,195.22	-123.44	-16.47	448,535.92	661,927.89	32.2324996	-103.9433311	
3,300.00	4.50	187.60	3,294.92	-131.22	-17.51	448,528.14	661,926.85	32.2324783	-103.9433345	
3,332.18	4.50	187.60	3,327.00	-133.72	-17.84	448,525.64	661,926.52	32.2324714	-103.9433356	
Delaware										
3,400.00	4.50	187.60	3,394.61	-138.99	-18.55	448,520.37	661,925.82	32.2324569	-103.9433379	
3,500.00	4.50	187.60	3,494.30	-146.77	-19.59	448,512.59	661,924.78	32.2324355	-103.9433414	
3,600.00	4.50	187.60	3,593.99	-154.54	-20.62	448,504.82	661,923.74	32.2324142	-103.9433448	
3,700.00	4.50	187.60	3,693.68	-162.32	-21.66	448,497.04	661,922.70	32.2323928	-103.9433483	
3,800.00	4.50	187.60	3,793.37	-170.09	-22.70	448,489.27	661,921.67	32.2323715	-103.9433517	
3,900.00	4.50	187.60	3,893.07	-177.87	-23.74	448,481.49	661,920.63	32.2323501	-103.9433552	
4,000.00	4.50	187.60	3,992.76	-185.64	-24.77	448,473.72	661,919.59	32.2323287	-103.9433586	
4,100.00	4.50	187.60	4,092.45	-193.42	-25.81	448,465.94	661,918.55	32.2323074	-103.9433621	
4,174.78	4.50	187.60	4,167.00	-199.23	-26.59	448,460.13	661,917.78	32.2322914	-103.9433647	
Cherry Canyon										
4,200.00	4.50	187.60	4,192.14	-201.19	-26.85	448,458.17	661,917.52	32.2322860	-103.9433655	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDCS Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,300.00	4.50	187.60	4,291.83	-208.97	-27.89	448,450.39	661,916.48	32.2322646	-103.9433690	
4,400.00	4.50	187.60	4,391.53	-216.74	-28.92	448,442.62	661,915.44	32.2322433	-103.9433724	
4,500.00	4.50	187.60	4,491.22	-224.52	-29.96	448,434.84	661,914.40	32.2322219	-103.9433759	
4,600.00	4.50	187.60	4,590.91	-232.30	-31.00	448,427.07	661,913.36	32.2322006	-103.9433793	
4,700.00	4.50	187.60	4,690.60	-240.07	-32.04	448,419.29	661,912.33	32.2321792	-103.9433828	
4,800.00	4.50	187.60	4,790.29	-247.85	-33.08	448,411.51	661,911.29	32.2321578	-103.9433862	
4,900.00	4.50	187.60	4,889.99	-255.62	-34.11	448,403.74	661,910.25	32.2321365	-103.9433897	
5,000.00	4.50	187.60	4,989.68	-263.40	-35.15	448,395.96	661,909.21	32.2321151	-103.9433931	
5,100.00	4.50	187.60	5,089.37	-271.17	-36.19	448,388.19	661,908.18	32.2320937	-103.9433965	
5,200.00	4.50	187.60	5,189.06	-278.95	-37.23	448,380.41	661,907.14	32.2320724	-103.9434000	
5,300.00	4.50	187.60	5,288.75	-286.72	-38.26	448,372.64	661,906.10	32.2320510	-103.9434034	
5,400.00	4.50	187.60	5,388.44	-294.50	-39.30	448,364.86	661,905.06	32.2320297	-103.9434069	
5,425.63	4.50	187.60	5,414.00	-296.49	-39.57	448,362.87	661,904.80	32.2320242	-103.9434078	
Brushy Canyon										
5,457.01	4.50	187.60	5,445.28	-298.93	-39.89	448,360.43	661,904.47	32.2320175	-103.9434088	
5,500.00	3.64	187.60	5,488.16	-301.95	-40.30	448,357.41	661,904.07	32.2320092	-103.9434102	
5,600.00	1.64	187.60	5,588.05	-306.52	-40.91	448,352.84	661,903.46	32.2319966	-103.9434122	
5,681.96	0.00	0.00	5,670.00	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
5,700.00	0.00	0.00	5,688.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
5,800.00	0.00	0.00	5,788.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
5,900.00	0.00	0.00	5,888.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,000.00	0.00	0.00	5,988.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,100.00	0.00	0.00	6,088.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,200.00	0.00	0.00	6,188.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,300.00	0.00	0.00	6,288.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,400.00	0.00	0.00	6,388.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,500.00	0.00	0.00	6,488.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,600.00	0.00	0.00	6,588.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,700.00	0.00	0.00	6,688.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,800.00	0.00	0.00	6,788.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
6,900.00	0.00	0.00	6,888.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,000.00	0.00	0.00	6,988.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,044.96	0.00	0.00	7,033.00	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
1st Bone Spring Lime										
7,100.00	0.00	0.00	7,088.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,200.00	0.00	0.00	7,188.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,300.00	0.00	0.00	7,288.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,400.00	0.00	0.00	7,388.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,500.00	0.00	0.00	7,488.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,600.00	0.00	0.00	7,588.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,700.00	0.00	0.00	7,688.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,800.00	0.00	0.00	7,788.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
7,900.00	0.00	0.00	7,888.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
8,000.00	0.00	0.00	7,988.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
8,068.96	0.00	0.00	8,057.00	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
1st Bone Spring Sand										
8,100.00	0.00	0.00	8,088.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
8,200.00	0.00	0.00	8,188.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
8,300.00	0.00	0.00	8,288.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
8,400.00	0.00	0.00	8,388.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
8,500.00	0.00	0.00	8,488.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
8,575.00	0.00	0.00	8,563.04	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
KOP@8575.00'MD										
8,600.00	2.50	179.85	8,588.03	-308.23	-41.06	448,351.13	661,903.31	32.2319919	-103.9434127	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDCS Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,650.00	7.50	179.85	8,637.82	-312.58	-41.05	448,346.78	661,903.32	32.2319800	-103.9434127	
8,700.00	12.50	179.85	8,687.05	-321.26	-41.02	448,338.10	661,903.34	32.2319561	-103.9434128	
8,750.00	17.50	179.85	8,735.33	-334.20	-40.99	448,325.16	661,903.37	32.2319205	-103.9434128	
8,800.00	22.50	179.85	8,782.30	-351.29	-40.95	448,308.07	661,903.42	32.2318735	-103.9434129	
8,816.12	24.11	179.85	8,797.10	-357.67	-40.93	448,301.69	661,903.44	32.2318560	-103.9434129	
FTP@8816.12'MD										
8,850.00	27.50	179.85	8,827.60	-372.42	-40.89	448,286.94	661,903.47	32.2318155	-103.9434129	
8,900.00	32.50	179.85	8,870.89	-397.41	-40.83	448,261.95	661,903.54	32.2317468	-103.9434130	
8,950.00	37.50	179.85	8,911.83	-426.08	-40.75	448,233.28	661,903.61	32.2316680	-103.9434131	
8,961.65	38.66	179.85	8,921.00	-433.26	-40.73	448,226.10	661,903.63	32.2316482	-103.9434131	
2nd Bone Spring Sand										
9,000.00	42.50	179.85	8,950.12	-458.21	-40.67	448,201.15	661,903.70	32.2315797	-103.9434132	
9,050.00	47.50	179.85	8,985.47	-493.55	-40.57	448,165.81	661,903.79	32.2314825	-103.9434133	
9,100.00	52.50	179.85	9,017.60	-531.84	-40.47	448,127.52	661,903.89	32.2313772	-103.9434135	
9,150.00	57.50	179.85	9,046.27	-572.79	-40.37	448,086.58	661,904.00	32.2312647	-103.9434136	
9,200.00	62.50	179.85	9,071.26	-616.07	-40.25	448,043.29	661,904.11	32.2311457	-103.9434137	
9,250.00	67.50	179.85	9,092.38	-661.37	-40.13	447,997.99	661,904.23	32.2310212	-103.9434139	
9,300.00	72.50	179.85	9,109.48	-708.34	-40.01	447,951.02	661,904.35	32.2308921	-103.9434140	
9,350.00	77.50	179.85	9,122.42	-756.62	-39.88	447,902.74	661,904.48	32.2307594	-103.9434142	
9,400.00	82.50	179.85	9,131.10	-805.85	-39.76	447,853.51	661,904.61	32.2306240	-103.9434144	
9,450.00	87.50	179.85	9,135.45	-855.64	-39.63	447,803.72	661,904.74	32.2304872	-103.9434145	
9,475.00	90.00	179.85	9,136.00	-880.64	-39.56	447,778.72	661,904.80	32.2304185	-103.9434146	
9,500.00	90.00	179.85	9,136.00	-905.63	-39.49	447,753.73	661,904.87	32.2303497	-103.9434147	
9,600.00	90.00	179.85	9,136.00	-1,005.63	-39.23	447,653.73	661,905.13	32.2300749	-103.9434150	
9,700.00	90.00	179.85	9,136.00	-1,105.63	-38.97	447,553.73	661,905.39	32.2298000	-103.9434153	
9,800.00	90.00	179.85	9,136.00	-1,205.63	-38.71	447,453.73	661,905.66	32.2295251	-103.9434157	
9,900.00	90.00	179.85	9,136.00	-1,305.63	-38.45	447,353.73	661,905.92	32.2292502	-103.9434160	
10,000.00	90.00	179.85	9,136.00	-1,405.63	-38.19	447,253.73	661,906.18	32.2289753	-103.9434163	
10,100.00	90.00	179.85	9,136.00	-1,505.63	-37.92	447,153.73	661,906.44	32.2287004	-103.9434166	
10,200.00	90.00	179.85	9,136.00	-1,605.63	-37.66	447,053.73	661,906.70	32.2284255	-103.9434170	
10,300.00	90.00	179.85	9,136.00	-1,705.63	-37.40	446,953.73	661,906.96	32.2281507	-103.9434173	
10,400.00	90.00	179.85	9,136.00	-1,805.63	-37.14	446,853.73	661,907.23	32.2278758	-103.9434176	
10,500.00	90.00	179.85	9,136.00	-1,905.63	-36.88	446,753.73	661,907.49	32.2276009	-103.9434180	
10,600.00	90.00	179.85	9,136.00	-2,005.63	-36.61	446,653.73	661,907.75	32.2273260	-103.9434183	
10,700.00	90.00	179.85	9,136.00	-2,105.63	-36.35	446,553.73	661,908.01	32.2270511	-103.9434186	
10,800.00	90.00	179.85	9,136.00	-2,205.63	-36.09	446,453.74	661,908.27	32.2267762	-103.9434189	
10,900.00	90.00	179.85	9,136.00	-2,305.63	-35.83	446,353.74	661,908.54	32.2265013	-103.9434193	
11,000.00	90.00	179.85	9,136.00	-2,405.63	-35.57	446,253.74	661,908.80	32.2262265	-103.9434196	
11,100.00	90.00	179.85	9,136.00	-2,505.63	-35.31	446,153.74	661,909.06	32.2259516	-103.9434199	
11,200.00	90.00	179.85	9,136.00	-2,605.63	-35.04	446,053.74	661,909.32	32.2256767	-103.9434202	
11,300.00	90.00	179.85	9,136.00	-2,705.63	-34.78	445,953.74	661,909.58	32.2254018	-103.9434206	
11,400.00	90.00	179.85	9,136.00	-2,805.63	-34.52	445,853.74	661,909.84	32.2251269	-103.9434209	
11,500.00	90.00	179.85	9,136.00	-2,905.63	-34.26	445,753.74	661,910.11	32.2248520	-103.9434212	
11,600.00	90.00	179.85	9,136.00	-3,005.63	-34.00	445,653.74	661,910.37	32.2245772	-103.9434216	
11,700.00	90.00	179.85	9,136.00	-3,105.63	-33.74	445,553.74	661,910.63	32.2243023	-103.9434219	
11,800.00	90.00	179.85	9,136.00	-3,205.63	-33.47	445,453.74	661,910.89	32.2240274	-103.9434222	
11,900.00	90.00	179.85	9,136.00	-3,305.63	-33.21	445,353.74	661,911.15	32.2237525	-103.9434225	
12,000.00	90.00	179.85	9,136.00	-3,405.63	-32.95	445,253.74	661,911.42	32.2234776	-103.9434229	
12,100.00	90.00	179.85	9,136.00	-3,505.62	-32.69	445,153.74	661,911.68	32.2232027	-103.9434232	
12,200.00	90.00	179.85	9,136.00	-3,605.62	-32.43	445,053.74	661,911.94	32.2229278	-103.9434235	
12,300.00	90.00	179.85	9,136.00	-3,705.62	-32.16	444,953.74	661,912.20	32.2226530	-103.9434238	
12,400.00	90.00	179.85	9,136.00	-3,805.62	-31.90	444,853.74	661,912.46	32.2223781	-103.9434242	
12,500.00	90.00	179.85	9,136.00	-3,905.62	-31.64	444,753.74	661,912.72	32.2221032	-103.9434245	
12,600.00	90.00	179.85	9,136.00	-4,005.62	-31.38	444,653.75	661,912.99	32.2218283	-103.9434248	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDSO Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
12,700.00	90.00	179.85	9,136.00	-4,105.62	-31.12	444,553.75	661,913.25	32.2215534	-103.9434251	
12,800.00	90.00	179.85	9,136.00	-4,205.62	-30.86	444,453.75	661,913.51	32.2212785	-103.9434255	
12,900.00	90.00	179.85	9,136.00	-4,305.62	-30.59	444,353.75	661,913.77	32.2210036	-103.9434258	
13,000.00	90.00	179.85	9,136.00	-4,405.62	-30.33	444,253.75	661,914.03	32.2207288	-103.9434261	
13,100.00	90.00	179.85	9,136.00	-4,505.62	-30.07	444,153.75	661,914.29	32.2204539	-103.9434265	
13,200.00	90.00	179.85	9,136.00	-4,605.62	-29.81	444,053.75	661,914.56	32.2201790	-103.9434268	
13,300.00	90.00	179.85	9,136.00	-4,705.62	-29.55	443,953.75	661,914.82	32.2199041	-103.9434271	
13,400.00	90.00	179.85	9,136.00	-4,805.62	-29.28	443,853.75	661,915.08	32.2196292	-103.9434274	
13,500.00	90.00	179.85	9,136.00	-4,905.62	-29.02	443,753.75	661,915.34	32.2193543	-103.9434278	
13,600.00	90.00	179.85	9,136.00	-5,005.62	-28.76	443,653.75	661,915.60	32.2190794	-103.9434281	
13,700.00	90.00	179.85	9,136.00	-5,105.62	-28.50	443,553.75	661,915.87	32.2188046	-103.9434284	
13,800.00	90.00	179.85	9,136.00	-5,205.62	-28.24	443,453.75	661,916.13	32.2185297	-103.9434287	
13,900.00	90.00	179.85	9,136.00	-5,305.62	-27.98	443,353.75	661,916.39	32.2182548	-103.9434291	
14,000.00	90.00	179.85	9,136.00	-5,405.62	-27.71	443,253.75	661,916.65	32.2179799	-103.9434294	
14,100.00	90.00	179.85	9,136.00	-5,505.62	-27.45	443,153.75	661,916.91	32.2177050	-103.9434297	
14,200.00	90.00	179.85	9,136.00	-5,605.62	-27.19	443,053.75	661,917.17	32.2174301	-103.9434300	
14,300.00	90.00	179.85	9,136.00	-5,705.62	-26.93	442,953.75	661,917.44	32.2171552	-103.9434304	
14,400.00	90.00	179.85	9,136.00	-5,805.62	-26.67	442,853.75	661,917.70	32.2168804	-103.9434307	
14,500.00	90.00	179.85	9,136.00	-5,905.62	-26.40	442,753.76	661,917.96	32.2166055	-103.9434310	
14,600.00	90.00	179.85	9,136.00	-6,005.62	-26.14	442,653.76	661,918.22	32.2163306	-103.9434314	
14,700.00	90.00	179.85	9,136.00	-6,105.62	-25.88	442,553.76	661,918.48	32.2160557	-103.9434317	
14,800.00	90.00	179.85	9,136.00	-6,205.62	-25.62	442,453.76	661,918.75	32.2157808	-103.9434320	
14,900.00	90.00	179.85	9,136.00	-6,305.62	-25.36	442,353.76	661,919.01	32.2155059	-103.9434323	
15,000.00	90.00	179.85	9,136.00	-6,405.61	-25.10	442,253.76	661,919.27	32.2152310	-103.9434327	
15,100.00	90.00	179.85	9,136.00	-6,505.61	-24.83	442,153.76	661,919.53	32.2149562	-103.9434330	
15,200.00	90.00	179.85	9,136.00	-6,605.61	-24.57	442,053.76	661,919.79	32.2146813	-103.9434333	
15,300.00	90.00	179.85	9,136.00	-6,705.61	-24.31	441,953.76	661,920.05	32.2144064	-103.9434336	
15,400.00	90.00	179.85	9,136.00	-6,805.61	-24.05	441,853.76	661,920.32	32.2141315	-103.9434340	
15,500.00	90.00	179.85	9,136.00	-6,905.61	-23.79	441,753.76	661,920.58	32.2138566	-103.9434343	
15,600.00	90.00	179.85	9,136.00	-7,005.61	-23.52	441,653.76	661,920.84	32.2135817	-103.9434346	
15,700.00	90.00	179.85	9,136.00	-7,105.61	-23.26	441,553.76	661,921.10	32.2133068	-103.9434349	
15,800.00	90.00	179.85	9,136.00	-7,205.61	-23.00	441,453.76	661,921.36	32.2130320	-103.9434353	
15,900.00	90.00	179.85	9,136.00	-7,305.61	-22.74	441,353.76	661,921.63	32.2127571	-103.9434356	
16,000.00	90.00	179.85	9,136.00	-7,405.61	-22.48	441,253.76	661,921.89	32.2124822	-103.9434359	
16,102.00	90.00	179.85	9,136.00	-7,507.62	-22.21	441,151.76	661,922.15	32.2122073	-103.9434363	
16,150.00	90.00	175.68	9,136.00	-7,555.56	-20.34	441,103.81	661,924.02	32.2120700	-103.9434308	
16,200.00	90.00	171.34	9,136.00	-7,605.23	-14.69	441,054.14	661,929.67	32.2119334	-103.9434131	
16,243.84	90.00	167.54	9,136.00	-7,648.32	-6.66	441,011.05	661,937.70	32.2118149	-103.9433876	
TP2@16243.84'MD										
16,250.00	90.00	167.00	9,136.00	-7,654.33	-5.31	441,005.04	661,939.06	32.2117983	-103.9433833	
16,300.00	90.00	162.66	9,136.00	-7,702.58	7.77	440,956.80	661,952.14	32.2116656	-103.9433416	
16,350.00	90.00	158.32	9,136.00	-7,749.70	24.46	440,909.68	661,968.83	32.2115359	-103.9432882	
16,400.00	90.00	153.98	9,136.00	-7,795.42	44.67	440,863.96	661,989.04	32.2114100	-103.9432234	
16,450.00	90.00	149.64	9,136.00	-7,839.48	68.28	440,819.90	662,012.65	32.2112886	-103.9431476	
16,500.00	90.00	145.30	9,136.00	-7,881.63	95.16	440,777.75	662,039.53	32.2111725	-103.9430611	
16,550.00	90.00	140.96	9,136.00	-7,921.62	125.15	440,737.76	662,069.52	32.2110623	-103.9429646	
16,600.00	90.00	136.62	9,136.00	-7,959.23	158.08	440,700.15	662,102.45	32.2109586	-103.9428586	
16,650.00	90.00	132.28	9,136.00	-7,994.23	193.76	440,665.14	662,138.13	32.2108620	-103.9427437	
16,700.00	90.00	127.94	9,136.00	-8,026.44	231.99	440,632.93	662,176.36	32.2107731	-103.9426204	
16,750.00	90.00	123.60	9,136.00	-8,056.66	272.55	440,603.71	662,216.91	32.2106923	-103.9424896	
16,800.00	90.00	119.26	9,136.00	-8,081.73	315.20	440,577.64	662,259.57	32.2106203	-103.9423520	
16,850.00	90.00	114.92	9,136.00	-8,104.50	359.70	440,554.87	662,304.07	32.2105572	-103.9422084	
16,900.00	90.00	110.58	9,136.00	-8,123.84	405.80	440,535.54	662,350.17	32.2105036	-103.9420596	
16,950.00	90.00	106.24	9,136.00	-8,139.63	453.23	440,519.75	662,397.59	32.2104597	-103.9419064	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDSO Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
17,000.00	90.00	101.90	9,136.00	-8,151.78	501.72	440,507.59	662,446.08	32.2104258	-103.9417498
17,050.00	90.00	97.56	9,136.00	-8,160.23	550.99	440,499.14	662,495.35	32.2104021	-103.9415906
17,100.00	90.00	93.22	9,136.00	-8,164.93	600.75	440,494.44	662,545.12	32.2103887	-103.9414298
17,137.14	90.00	90.00	9,136.00	-8,165.98	637.88	440,493.40	662,582.24	32.2103855	-103.9413097
17,150.00	90.00	88.88	9,136.00	-8,165.85	650.73	440,493.52	662,595.10	32.2103857	-103.9412682
17,200.00	90.00	84.54	9,136.00	-8,162.99	700.64	440,496.39	662,645.00	32.2103930	-103.9411068
17,250.00	90.00	80.20	9,136.00	-8,156.35	750.18	440,503.02	662,694.55	32.2104108	-103.9409465
17,300.00	90.00	75.86	9,136.00	-8,145.99	799.09	440,513.39	662,743.45	32.2104388	-103.9407883
17,350.00	90.00	71.52	9,136.00	-8,131.96	847.06	440,527.42	662,791.43	32.2104769	-103.9406330
17,400.00	90.00	67.18	9,136.00	-8,114.33	893.84	440,545.05	662,838.20	32.2105249	-103.9404815
17,450.00	90.00	62.84	9,136.00	-8,093.22	939.15	440,566.16	662,883.51	32.2105824	-103.9403348
17,500.00	90.00	58.50	9,136.00	-8,068.73	982.73	440,590.64	662,927.10	32.2106493	-103.9401936
17,550.00	90.00	54.16	9,136.00	-8,041.02	1,024.34	440,618.35	662,968.70	32.2107251	-103.9400587
17,600.00	90.00	49.82	9,136.00	-8,010.24	1,063.73	440,649.13	663,008.09	32.2108093	-103.9399310
17,650.00	90.00	45.48	9,136.00	-7,976.57	1,100.67	440,682.81	663,045.03	32.2109015	-103.9398112
17,700.00	90.00	41.14	9,136.00	-7,940.20	1,134.96	440,719.18	663,079.33	32.2110011	-103.9396999
17,750.00	90.00	36.80	9,136.00	-7,901.34	1,166.40	440,758.04	663,110.77	32.2111076	-103.9395978
17,800.00	90.00	32.46	9,136.00	-7,860.21	1,194.81	440,799.17	663,139.18	32.2112204	-103.9395054
17,850.00	90.00	28.12	9,136.00	-7,817.04	1,220.03	440,842.33	663,164.39	32.2113388	-103.9394234
17,900.00	90.00	23.78	9,136.00	-7,772.10	1,241.91	440,887.28	663,186.27	32.2114621	-103.9393521
17,950.00	90.00	19.44	9,136.00	-7,725.62	1,260.32	440,933.75	663,204.68	32.2115897	-103.9392920
18,000.00	90.00	15.10	9,136.00	-7,677.89	1,275.17	440,981.48	663,219.53	32.2117207	-103.9392434
18,026.03	90.00	12.84	9,136.00	-7,652.63	1,281.45	441,006.74	663,225.81	32.2117901	-103.9392228
TP3@18026.03'MD									
18,050.00	90.00	10.76	9,136.00	-7,629.17	1,286.35	441,030.20	663,230.72	32.2118545	-103.9392067
18,100.00	90.00	6.42	9,136.00	-7,579.74	1,293.82	441,079.63	663,238.19	32.2119903	-103.9391820
18,150.00	90.00	2.08	9,136.00	-7,529.89	1,297.53	441,129.48	663,241.89	32.2121273	-103.9391694
18,175.74	90.00	359.85	9,136.00	-7,504.16	1,297.97	441,155.22	663,242.33	32.2121981	-103.9391677
18,200.00	90.00	359.85	9,136.00	-7,479.90	1,297.90	441,179.48	663,242.27	32.2122647	-103.9391676
18,300.00	90.00	359.85	9,136.00	-7,379.90	1,297.64	441,279.47	663,242.00	32.2125396	-103.9391672
18,400.00	90.00	359.85	9,136.00	-7,279.90	1,297.38	441,379.47	663,241.74	32.2128145	-103.9391669
18,500.00	90.00	359.85	9,136.00	-7,179.90	1,297.12	441,479.47	663,241.48	32.2130894	-103.9391666
18,600.00	90.00	359.85	9,136.00	-7,079.90	1,296.85	441,579.47	663,241.22	32.2133643	-103.9391662
18,700.00	90.00	359.85	9,136.00	-6,979.90	1,296.59	441,679.47	663,240.95	32.2136392	-103.9391659
18,800.00	90.00	359.85	9,136.00	-6,879.90	1,296.33	441,779.47	663,240.69	32.2139141	-103.9391656
18,900.00	90.00	359.85	9,136.00	-6,779.90	1,296.07	441,879.47	663,240.43	32.2141889	-103.9391652
19,000.00	90.00	359.85	9,136.00	-6,679.90	1,295.80	441,979.47	663,240.16	32.2144638	-103.9391649
19,100.00	90.00	359.85	9,136.00	-6,579.90	1,295.54	442,079.47	663,239.90	32.2147387	-103.9391646
19,200.00	90.00	359.85	9,136.00	-6,479.90	1,295.28	442,179.47	663,239.64	32.2150136	-103.9391642
19,300.00	90.00	359.85	9,136.00	-6,379.90	1,295.01	442,279.47	663,239.37	32.2152885	-103.9391639
19,400.00	90.00	359.85	9,136.00	-6,279.90	1,294.75	442,379.47	663,239.11	32.2155634	-103.9391636
19,500.00	90.00	359.85	9,136.00	-6,179.90	1,294.48	442,479.47	663,238.84	32.2158383	-103.9391632
19,600.00	90.00	359.85	9,136.00	-6,079.90	1,294.22	442,579.47	663,238.58	32.2161131	-103.9391629
19,700.00	90.00	359.85	9,136.00	-5,979.90	1,293.95	442,679.47	663,238.32	32.2163880	-103.9391626
19,800.00	90.00	359.85	9,136.00	-5,879.91	1,293.69	442,779.47	663,238.05	32.2166629	-103.9391622
19,900.00	90.00	359.85	9,136.00	-5,779.91	1,293.42	442,879.47	663,237.79	32.2169378	-103.9391619
20,000.00	90.00	359.85	9,136.00	-5,679.91	1,293.16	442,979.47	663,237.52	32.2172127	-103.9391616
20,100.00	90.00	359.85	9,136.00	-5,579.91	1,292.89	443,079.46	663,237.26	32.2174876	-103.9391613
20,200.00	90.00	359.85	9,136.00	-5,479.91	1,292.63	443,179.46	663,236.99	32.2177625	-103.9391609
20,300.00	90.00	359.85	9,136.00	-5,379.91	1,292.36	443,279.46	663,236.72	32.2180373	-103.9391606
20,400.00	90.00	359.85	9,136.00	-5,279.91	1,292.10	443,379.46	663,236.46	32.2183122	-103.9391603
20,500.00	90.00	359.85	9,136.00	-5,179.91	1,291.83	443,479.46	663,236.19	32.2185871	-103.9391599
20,600.00	90.00	359.85	9,136.00	-5,079.91	1,291.56	443,579.46	663,235.92	32.2188620	-103.9391596
20,700.00	90.00	359.85	9,136.00	-4,979.91	1,291.30	443,679.46	663,235.66	32.2191369	-103.9391593

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDCS Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
20,800.00	90.00	359.85	9,136.00	-4,879.91	1,291.03	443,779.46	663,235.39	32.2194118	-103.9391590	
20,900.00	90.00	359.85	9,136.00	-4,779.91	1,290.76	443,879.46	663,235.12	32.2196866	-103.9391587	
21,000.00	90.00	359.85	9,136.00	-4,679.91	1,290.50	443,979.46	663,234.86	32.2199615	-103.9391583	
21,100.00	90.00	359.85	9,136.00	-4,579.91	1,290.23	444,079.46	663,234.59	32.2202364	-103.9391580	
21,200.00	90.00	359.85	9,136.00	-4,479.91	1,289.96	444,179.46	663,234.32	32.2205113	-103.9391577	
21,300.00	90.00	359.85	9,136.00	-4,379.91	1,289.69	444,279.46	663,234.05	32.2207862	-103.9391574	
21,400.00	90.00	359.85	9,136.00	-4,279.91	1,289.42	444,379.46	663,233.79	32.2210611	-103.9391570	
21,500.00	90.00	359.85	9,136.00	-4,179.91	1,289.16	444,479.46	663,233.52	32.2213360	-103.9391567	
21,600.00	90.00	359.85	9,136.00	-4,079.91	1,288.89	444,579.46	663,233.25	32.2216108	-103.9391564	
21,700.00	90.00	359.85	9,136.00	-3,979.91	1,288.62	444,679.46	663,232.98	32.2218857	-103.9391561	
21,800.00	90.00	359.85	9,136.00	-3,879.91	1,288.35	444,779.46	663,232.71	32.2221606	-103.9391558	
21,900.00	90.00	359.85	9,136.00	-3,779.91	1,288.08	444,879.45	663,232.44	32.2224355	-103.9391555	
22,000.00	90.00	359.85	9,136.00	-3,679.91	1,287.81	444,979.45	663,232.17	32.2227104	-103.9391551	
22,100.00	90.00	359.85	9,136.00	-3,579.91	1,287.54	445,079.45	663,231.90	32.2229853	-103.9391548	
22,200.00	90.00	359.85	9,136.00	-3,479.91	1,287.27	445,179.45	663,231.64	32.2232602	-103.9391545	
22,300.00	90.00	359.85	9,136.00	-3,379.91	1,287.00	445,279.45	663,231.37	32.2235350	-103.9391542	
22,400.00	90.00	359.85	9,136.00	-3,279.91	1,286.73	445,379.45	663,231.10	32.2238099	-103.9391539	
22,500.00	90.00	359.85	9,136.00	-3,179.91	1,286.46	445,479.45	663,230.83	32.2240848	-103.9391536	
22,600.00	90.00	359.85	9,136.00	-3,079.92	1,286.19	445,579.45	663,230.56	32.2243597	-103.9391533	
22,700.00	90.00	359.84	9,136.00	-2,979.92	1,285.92	445,679.45	663,230.28	32.2246346	-103.9391530	
22,800.00	90.00	359.84	9,136.00	-2,879.92	1,285.65	445,779.45	663,230.01	32.2249095	-103.9391526	
22,900.00	90.00	359.84	9,136.00	-2,779.92	1,285.38	445,879.45	663,229.74	32.2251844	-103.9391523	
23,000.00	90.00	359.84	9,136.00	-2,679.92	1,285.11	445,979.45	663,229.47	32.2254592	-103.9391520	
23,100.00	90.00	359.84	9,136.00	-2,579.92	1,284.84	446,079.45	663,229.20	32.2257341	-103.9391517	
23,200.00	90.00	359.84	9,136.00	-2,479.92	1,284.57	446,179.45	663,228.93	32.2260090	-103.9391514	
23,300.00	90.00	359.84	9,136.00	-2,379.92	1,284.30	446,279.45	663,228.66	32.2262839	-103.9391511	
23,400.00	90.00	359.84	9,136.00	-2,279.92	1,284.02	446,379.45	663,228.39	32.2265588	-103.9391508	
23,500.00	90.00	359.84	9,136.00	-2,179.92	1,283.75	446,479.45	663,228.11	32.2268337	-103.9391505	
23,600.00	90.00	359.84	9,136.00	-2,079.92	1,283.48	446,579.45	663,227.84	32.2271086	-103.9391502	
23,700.00	90.00	359.84	9,136.00	-1,979.92	1,283.21	446,679.44	663,227.57	32.2273834	-103.9391499	
23,800.00	90.00	359.84	9,136.00	-1,879.92	1,282.93	446,779.44	663,227.30	32.2276583	-103.9391496	
23,900.00	90.00	359.84	9,136.00	-1,779.92	1,282.66	446,879.44	663,227.02	32.2279332	-103.9391493	
24,000.00	90.00	359.84	9,136.00	-1,679.92	1,282.39	446,979.44	663,226.75	32.2282081	-103.9391490	
24,100.00	90.00	359.84	9,136.00	-1,579.92	1,282.11	447,079.44	663,226.48	32.2284830	-103.9391487	
24,200.00	90.00	359.84	9,136.00	-1,479.92	1,281.84	447,179.44	663,226.20	32.2287579	-103.9391484	
24,300.00	90.00	359.84	9,136.00	-1,379.92	1,281.57	447,279.44	663,225.93	32.2290328	-103.9391481	
24,400.00	90.00	359.84	9,136.00	-1,279.92	1,281.29	447,379.44	663,225.66	32.2293076	-103.9391478	
24,500.00	90.00	359.84	9,136.00	-1,179.92	1,281.02	447,479.44	663,225.38	32.2295825	-103.9391475	
24,600.00	90.00	359.84	9,136.00	-1,079.92	1,280.74	447,579.44	663,225.11	32.2298574	-103.9391472	
24,700.00	90.00	359.84	9,136.00	-979.92	1,280.47	447,679.44	663,224.83	32.2301323	-103.9391469	
24,800.00	90.00	359.84	9,136.00	-879.92	1,280.20	447,779.44	663,224.56	32.2304072	-103.9391466	
24,900.00	90.00	359.84	9,136.00	-779.92	1,279.92	447,879.44	663,224.28	32.2306821	-103.9391463	
25,000.00	90.00	359.84	9,136.00	-679.92	1,279.65	447,979.44	663,224.01	32.2309569	-103.9391460	
25,100.00	90.00	359.84	9,136.00	-579.92	1,279.37	448,079.44	663,223.73	32.2312318	-103.9391457	
25,200.00	90.00	359.84	9,136.00	-479.92	1,279.10	448,179.44	663,223.46	32.2315067	-103.9391454	
25,300.00	90.00	359.84	9,136.00	-379.93	1,278.82	448,279.44	663,223.18	32.2317816	-103.9391451	
25,320.73	90.00	359.84	9,136.00	-359.20	1,278.76	448,300.17	663,223.12	32.2318386	-103.9391450	
LTP@25320.73'MD										
25,400.73	90.00	359.87	9,136.00	-279.20	1,278.56	448,380.16	663,222.92	32.2320585	-103.9391447	


Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well FULLY LOADED 12-13 FED COM 245H
Company:	WCDCS Permian NM	TVD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	GL:3089.90+25.50ft @ 3115.40ft (H&P 646)
Site:	Sec 12-T24S-R29E	North Reference:	Grid
Well:	FULLY LOADED 12-13 FED COM 245H	Survey Calculation Method:	Minimum Curvature
Wellbore:	YouTurn		
Design:	Plat R 2 (990FWL--2310FWL) 2BSSS		

Design Targets										
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
- Shape										
KOP (245H) 2603FSK, 9	0.00	0.00	0.00	-307.68	-41.06	448,351.68	661,903.30	32.2319934	-103.9434127	
- plan misses target center by 310.41ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
FTP (245H) 2553FSL, 9	0.00	0.00	0.00	-357.67	-40.93	448,301.69	661,903.43	32.2318560	-103.9434129	
- plan misses target center by 360.01ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
TP 3 (566FSL, 2227FWI	0.00	0.00	0.00	-7,652.63	1,213.62	441,006.75	663,157.98	32.2117908	-103.9394421	
- plan misses target center by 7748.26ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
TP 2 (565FSL< 1072FW	0.00	0.00	0.00	-7,648.32	59.10	441,011.06	662,003.46	32.2118142	-103.9431750	
- plan misses target center by 7648.54ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)										
- Point										
LTP (245H) 2552FSL 23	0.00	0.00	9,136.00	-359.19	1,278.76	448,300.17	663,223.12	32.2318386	-103.9391450	
- plan hits target center										
- Point										
BHL (245H) 2632FSL, 2	0.00	0.00	9,136.00	-279.20	1,278.56	448,380.16	663,222.92	32.2320585	-103.9391447	
- plan hits target center										
- Point										

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
289.00	289.00	Rustler				
643.00	643.00	Top of Salt				
3,144.61	3,140.00	Base of Salt				
3,332.18	3,327.00	Delaware				
4,174.78	4,167.00	Cherry Canyon				
5,425.63	5,414.00	Brushy Canyon				
7,044.96	7,033.00	1st Bone Spring Lime				
8,068.96	8,057.00	1st Bone Spring Sand				
8,961.65	8,921.00	2nd Bone Spring Sand				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)		
8,575.00	8,563.04	-307.68	-41.06	KOP@8575.00'MD	
8,816.12	8,797.10	-357.67	-40.93	FTP@8816.12'MD	
16,243.84	9,136.00	-7,648.32	-6.66	TP2@16243.84'MD	
18,026.03	9,136.00	-7,652.63	1,281.45	TP3@18026.03'MD	
25,320.73	9,136.00	-359.20	1,278.76	LTP@25320.73'MD	

C-102 Submit Electronically Via OCD Permitting		State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION					Revised July 9, 2024		
		Submittal Type:		<input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled					
WELL LOCATION INFORMATION									
API Number 30-015-57739		Pool Code 96473		Pool Name PIERCE CROSSING;BONE SPRING, EAST					
Property Code		Property Name FULLY LOADED 12-13 FED COM					Well Number 245H		
OGRID No. 6137		Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.					Ground Level Elevation 3089.9		
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal					Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal				
Surface Location									
UL E	Section 12	Township 24-S	Range 29-E	Lot	Ft. from N/S 2398/N	Ft. from E/W 1032/W	Latitude 32.2328388°	Longitude -103.9432763°	County EDDY
Bottom Hole Location									
UL K	Section 12	Township 24-S	Range 29-E	Lot	Ft. from N/S 2632/S	Ft. from E/W 2310/W	Latitude 32.2320584°	Longitude -103.9391447°	County EDDY
Dedicated Acres 480		Infill or Defining Well INFILL		Defining Well API 30-015-47551		Overlapping Spacing Unit (Y/N) N		Consolidation Code C	
Order Numbers. N/A					Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Kick Off Point (KOP)									
UL L	Section 12	Township 24-S	Range 29-E	Lot	Ft. from N/S 2603/S	Ft. from E/W 990/W	Latitude 32.2319934°	Longitude -103.9434127°	County EDDY
First Take Point (FTP)									
UL L	Section 12	Township 24-S	Range 29-E	Lot	Ft. from N/S 2553/S	Ft. from E/W 990/W	Latitude 32.2318560°	Longitude -103.9434129°	County EDDY
Last Take Point (LTP)									
UL K	Section 12	Township 24-S	Range 29-E	Lot	Ft. from N/S 2552/S	Ft. from E/W 2310/W	Latitude 32.2318386°	Longitude -103.9391450°	County EDDY
Unitized Area: <input type="checkbox"/>			Area of Uniform Interest: <input type="checkbox"/>			Spacing Unit Type: <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical		Ground Floor Elevation: N/A	
OPERATOR CERTIFICATION:				SURVEYOR NOTES:				SURVEYOR CERTIFICATION:	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.				1. BEARINGS AND COORDINATES SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM (3001), NAD 83 (2011), BASED FROM GPS OBSERVATIONS, OCCUPYING A WHS CONTROL POINT (5/8" REBAR), LOCATED AT AT N:457834.965 E:670241.029 ORTHO:3198.327. DETERMINED BY AN OPUS SOLUTION ON MAY 23RD, 2024. UNITS REPRESENTED ON THIS PLAT ARE IN US SURVEY FEET.				I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision.	
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.				2. DISTANCES DEPICTED HEREON ARE REPORTED AS GROUND DISTANCES IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000221019					
Signature: <i>Brad Roberts</i> Date: 2/16/2026				3. ELEVATIONS SHOWN OR LISTED ARE EXISTING GROUND ELEVATIONS UNLESS NOTED.					
Printed Name: BRAD ROBERTS				4. KARST AREAS, POTASH BUFFERS, LEASE AREAS AND DRILL ISLANDS, IF SHOWN, WERE PROVIDED BY DEVON ENERGY AND NOT LOCATED ON THE GROUND AS A PART OF THIS SURVEY, LOCATIONS ARE APPROXIMATE.				Signature and Seal of Professional Surveyor:	
E-mail Address: BRAD.ROBERTS@DVN.COM				Certificate No. 20250 Name John E. Allen Date of Survey 11/03/25					
Page: 1 of 2			Drawn By: JMA		Checked By: JSP		Date Drawn: 1/14/2026		Revision: R2

Note: 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.

**FULLY LOADED 12-13 245H SHL
SURFACE HOLE LOCATION**
2398' FNL - 1032' FWL
 SEC. 12, T24S, R29E
 ELEV: 3089.9'
 N: 448659.36
 E: 661944.36
 LAT: 32.2328388°
 LON: -103.9432763°

KOP 2603' FSL - 990' FWL SEC. 12, T24S, R29E N: 448351.68 E: 661903.30 LAT: 32.2319934° LON: -103.9434127°	APEX 330' FSL - 1648' FWL SEC. 12, T24S, R29E N: 440773.24 E: 662579.84 LAT: 32.2111547° LON: -103.9413142°
---	--

FIRST TAKE POINT (PPP 1) 2553' FSL - 990' FWL SEC. 12, T24S, R29E N: 448301.69 E: 661903.43 LAT: 32.2318560° LON: -103.9434129°	TP 3 566' FSL - 2227' FWL SEC. 13, T24S, R29E N: 441006.75 E: 663157.98 LAT: 32.2117908° LON: -103.9394421°
--	--

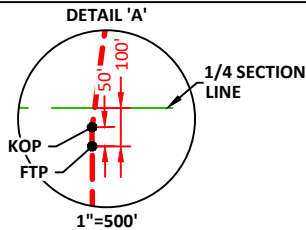
PPP 2 0' FSL - 990' FWL SEC. 12, T24S, R29E N: 445748.95 E: 661913.24 LAT: 32.2248388° LON: -103.9434111°	PPP 3 0' FSL - 2310' FWL SEC. 12, T24S, R29E N: 445748.24 E: 663233.02 LAT: 32.2248236° LON: -103.9391433°
--	---

TP 2 565' FSL - 1072' FWL SEC. 13, T24S, R29E N: 441011.06 E: 662003.46 LAT: 32.2118142° LON: -103.9431750°	LAST TAKE POINT 2552' FSL - 2310' FWL SEC. 12, T24S, R29E N: 448300.17 E: 663223.12 LAT: 32.2318386° LON: -103.9391450°
--	--

BOTTOM HOLE LOCATION
 2632' FSL - 2310' FWL
 SEC. 12, T24S, R29E
 N: 448380.16
 E: 663222.92
 LAT: 32.2320584°
 LON: -103.9391447°

LEGEND

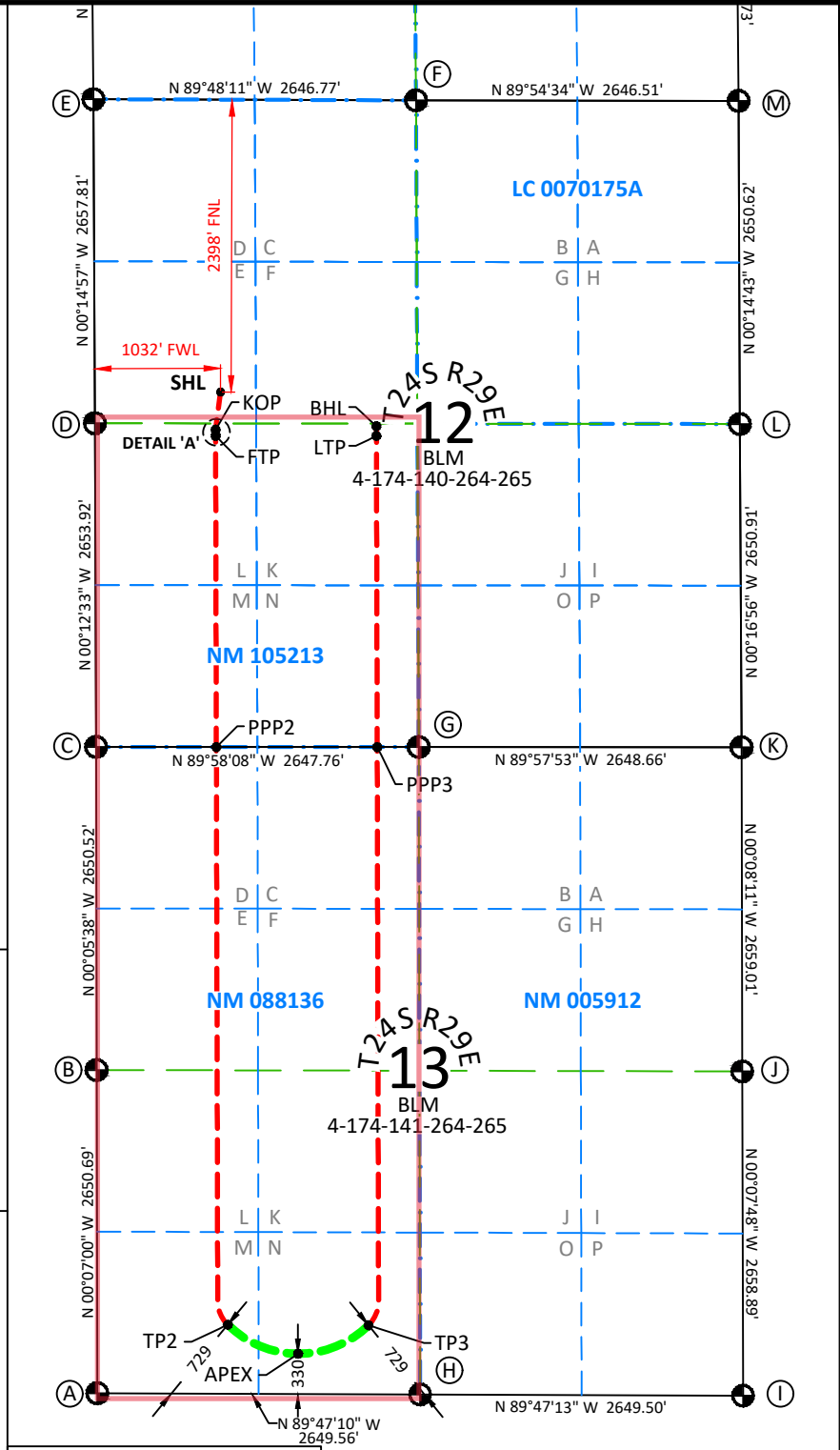
- SECTION LINE
- 1/4 SECTION LINE
- 1/16 SECTION LINE
- WELL PATH
- LEASE LINE
- NM 1234567** LEASE ID NUMBER
- FOUND USGLO B.C.



NOTE: ALL FTP'S ARE OFFSET 100' OF THE 1/4 SECTION LINE AND THE KOP'S ARE OFFSET 50' FROM THE FTP'S.

SURVEYOR NOTES:

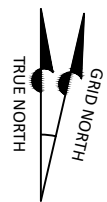
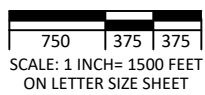
1. BEARINGS AND COORDINATES SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM 3001, WITH A CONVERGENCE ANGLE OF -0°11'38.09" AND BASED ON CONTROL POINT CP RAWHIDE AT N:457834.965 E:652371.713. ORTHO: 3198.327. DETERMINED BY AN OPUS SOLUTION ON DECEMBER 3, 2018
2. DISTANCES DEPICTED HEREON ARE REPORTED AS GROUND DISTANCES IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000221019.
3. ELEVATIONS SHOWN OR LISTED ARE EXISTING GROUND ELEVATIONS.



CURVE COMPLETED TP 2 TO TP 3

SECTION COORDINATE TABLE

A:	N: 440449.46	E: 660932.77
B:	N: 443099.56	E: 660927.37
C:	N: 445749.49	E: 660923.02
D:	N: 448402.81	E: 660913.33
E:	N: 451060.01	E: 660901.78
F:	N: 451050.92	E: 663547.94
G:	N: 445748.05	E: 663570.19
H:	N: 440439.57	E: 663581.73
I:	N: 440429.72	E: 666230.62
J:	N: 443088.01	E: 666224.59
K:	N: 445746.42	E: 666218.27
L:	N: 448396.72	E: 666205.21
M:	N: 451046.73	E: 666193.87



2. Casing Program

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
16	13 3/8	54 1/2	J-55	BTC	0	359	0	359
9 7/8	8 5/8	32	P110ICY	Wedge 441	0	8475	0	8475
7 7/8	5 1/2	20	P110ICY	Wedge 461	0	25401	0	9136

- All casing strings will be tested in accordance with 43 CFR 3172. Must have table for contingency casing.
- Devon respectfully requests a hole size change from 17-1/2” to 16”. Casing size will not change.
- If cement does not circulate to surface, remediation will be done with an appropriately sized tubing to meet radial clearance requirements

3. Cementing Program

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. The final cement top will be verified by Echo-meter. Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program. Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

Casing	# Skis	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	195	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	431	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
	357	5425	13.2	1.44	Tail: Class H / C + additives
Production	117	6575	9	3.27	Lead: Class H / C + additives
	2227	8575	13.2	1.44	Tail: Class H / C + additives

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections’ 5M BOPE requirements.

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Prod	10%

4. Pressure Control Equipment (Three String Design)

BOP installed and tested before drilling which hole?		Size?	Min. Required WP	Type	✓	Tested to:
Int 1	13-5/8"	5M	Annular	X	50% of rated working pressure	
			Blind Ram	X	5M	
			Pipe Ram			
			Double Ram	X		
			Other*			
Production	13-5/8"	5M	Annular (5M)	X	50% of rated working pressure	
			Blind Ram	X	5M	
			Pipe Ram			
			Double Ram	X		
			Other*			
			Annular (5M)			
			Blind Ram			
			Pipe Ram			
			Double Ram			
			Other*			
N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
Y	A variance is requested to run a 5 M annular on a 10M system					

5. Mud Program (Three String Design)

Section	Type	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Production	OBM	10-10.5

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	
X	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.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Additional logs planned	Interval
	Resistivity
	Density
X	CBL
	Mud log
	PEX

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	4988
Abnormal temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

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 43 CFR 3176. 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

Is this a walking operation? Potentially

- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
- 3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).
- 3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

- X Directional Plan
- Other, describe

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 569572

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 569572
	Action Type: [C-103A] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/16/2026
ward.rikala	Post Bradenhead cement squeeze, a CBL will be required. If zonal isolation is not achieved per OCD requirements, then remedial work will be required before operations can continue.	4/16/2026
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	4/16/2026