



Project: Eddy County, NM (NAD-27)
Site: Big Eddy Unit (John Wayne)
Well: True Grit #110H
Wellbore: Wellbore #1
Design: PERMIT

PROJECT DETAILS: Eddy County, NM (NAD-27)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BEU True Grit 110H: SHL (215' FNL & 350' FWL)	0.00	0.00	0.00	524817.90	598628.20	32.442432	-104.013628	Point
BEU True Grit 110H: FTP/LP	10091.00	-185.00	0.60	524632.90	598628.80	32.441923	-104.013628	Point
BEU True Grit 110H: LTP	10116.72	-4721.20	20.40	520096.70	598648.80	32.429453	-104.013608	Point
BEU True Grit 110H: PBHL (50' FSL & 350' FWL)	10117.00	-4771.20	20.70	520046.70	598648.90	32.429316	-104.013608	Point

WELL DETAILS: True Grit #110H

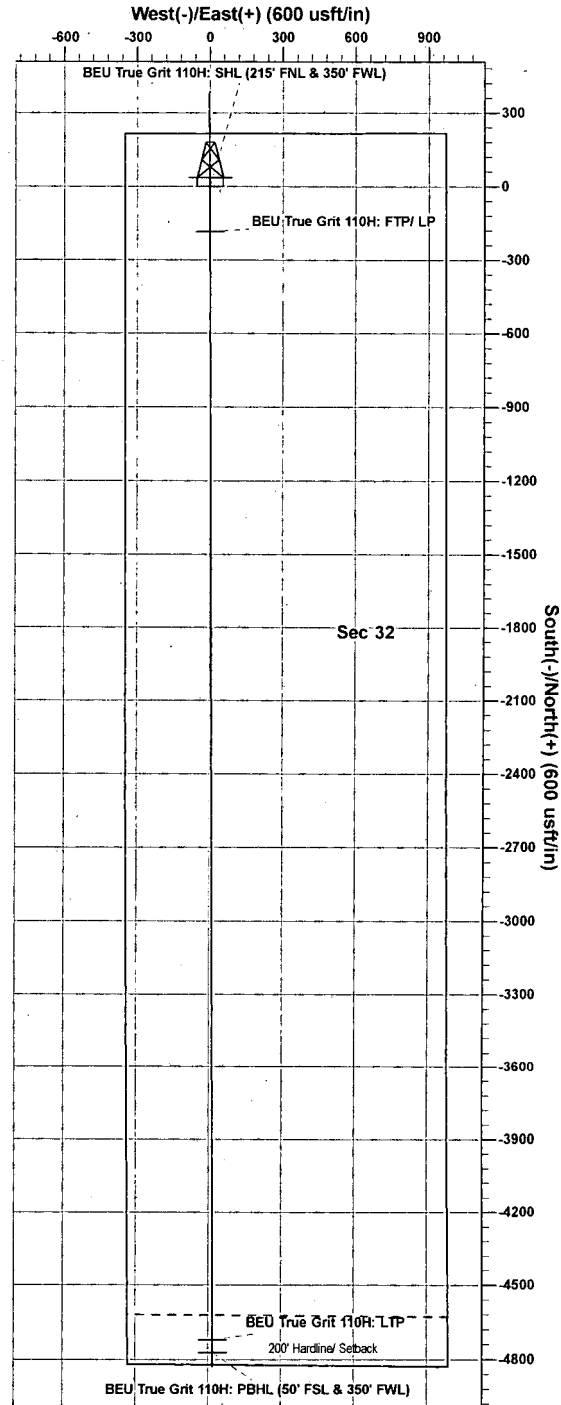
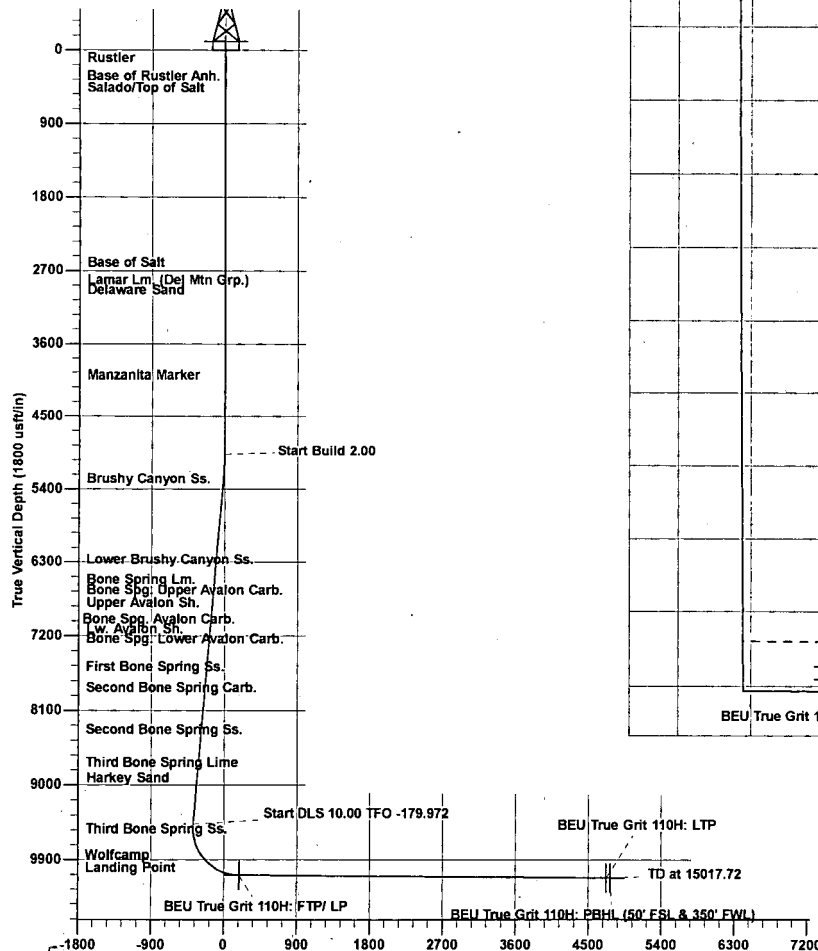
Rig Name:	RKB = 25' @ 3317.00usft
Ground Level:	3292.00
+N/-S	0.00
+E/-W	0.00
Northing	524817.90
Easting	598628.20
Latitude	32.442432
Longitude	-104.013628

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00
2	4970.00	0.00	0.00	4970.00	0.00	0.00	0.00	0.000	0.00
3	5219.96	5.00	359.72	5219.64	10.90	-0.05	2.00	359.721	-10.90
4	9484.66	5.00	359.72	9488.12	382.52	-1.86	0.00	0.000	-382.53
5	10431.41	89.68	179.75	10091.00	-185.00	0.60	10.00	-179.972	185.00
6	14967.72	89.68	179.75	10116.72	-4721.20	20.48	0.00	0.000	4721.24
7	15017.72	89.68	179.75	10117.00	-4771.20	20.70	0.00	0.000	4771.24

FORMATION TOP DETAILS

TVDPath	Formation
188.00	Rustler
482.00	Base of Rustler Anh.
553.00	Salado/Top of Salt
2690.00	Base of Salt
2907.00	Lamar Lm. (Del Mtn Grp.)
3027.00	Delaware Sand
4087.00	Manzanita Marker
5365.00	Brushy Canyon Ss.
6359.00	Lower Brushy Canyon Ss.
6650.00	Bone Spring Lm.
6742.00	Avalon Ss.
6777.00	Bone Spg. Upper Avalon Carb.
6842.00	Upper Avalon Sh.
7107.00	Bone Spg. Avalon Carb.
7245.00	Lw. Avalon Sh.
7327.00	Bone Spg. Lower Avalon Carb.
7666.00	First Bone Spring Ss.
7817.00	Second Bone Spring Carb.
8426.00	Second Bone Spring Ss.
8823.00	Third Bone Spring Lime
9122.00	Harkey Sand
9620.00	Third Bone Spring Ss.
9965.00	Wolfcamp
9982.00	Wolfcamp X Ss.
10061.00	Wolfcamp Y Ss.
10091.00	Landing Point



The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by Prototype are at the sole risk and responsibility of the customer.

Vertical Section at 179.75° (1800 usft/in)

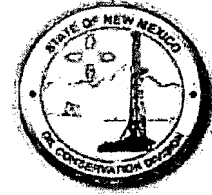
Plan: PERMIT (True Grit #110H/Wellbore #1)
Created By: Matthew May Date: 8/36, February 15 2019

NM STATE DRILLING PERMITTING																	
4-string contingency																	
0		Deepest TVD		10117		KOP		9468		End of Curve		10431		Measured depth		15018	
Casing Type	Fluid Type	Mud Weight	Hole Size	Casing Size	Casing Grade	Casing Weight	Top MD	Setting Depth	Lead Cement	Tail Cement	Total Sks Cement	TOC					
Surface	FW/Native	8.5 - 10.0	17.5	13.375	J-55 LTC	54.5	0	475	179	237	416	0					
1st Intermediate	Brine	9.0-10.3	12.25	9.625	J-55/L-80 LTC	40	0	8900	2485	120	2605	0					
2nd Intermediate (Contingency*)	FW/Native/OBM	9.0-10.3	8.75	7	P110 BTC	26	0	10431	1150	53	1203	0					
Production	FW/Cut Brine	9.0-10.5	6	4.5	P110 BTC	13.5	9468	15018	0	663	663	9931					
	OBM	9.3	6														
Max Expected Surface Pressure				BOP				Total Vertical Section				4587					
2667				Cameron 5M Double Ram BOP													
				Test Pressure				5000									

Contingencies

1. Requesting Exception to not get cmt to surface if 7" production string is set. Cement will be brought 500' in Intermediate Shoe if not circulated to surface
2. Should losses be seen from 9-5/8" shoe to landing point, 4-string contingency may be utilized
3. 7" csg may be set between 200' above KOP and Landing Point
4. DV Tool may be set in intermediate fr/ 500' - 5000'
5. 4.5" liner will be brought kick-off point or 300' above end of 7" (Whichever is higher)
6. OBM may be used 8-3/4" hole section
7. XTO requests variance to have the option to batch drill this well. XTO will set 9-5/8" csg, ensure cement is circulated to surface and well is dead. With floats holding, and no flow on annulus, a TA cap will be installed as per GE recommendations. XTO will contact the state before skidding to the other well. Once all surface and intermediate are completed on the pad, XTO will begin drilling the production hole of each well.

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division



Receipt of Fee Application Payment

PO Number: BLH79-190722-APD000

Payment Date: 7/22/2019 8:27:52 AM
Payment Amount: \$500.00
Payment Type: Credit Card

IMPORTANT: If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.