

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Cimarex Energy Co. 600 N. Marienfeld St. Suite 600 Midland, TX 79701		² OGRID Number 215099	
		³ Reason for Filing Code/ Effective Date NW - 10/06/2020	
⁴ API Number 30-015-46437	⁵ Pool Name Purple Sage; Wolfcamp (Gas)		⁶ Pool Code 98220
⁷ Property Code 40358	⁸ Property Name Klein 33 Federal Com		⁹ Well Number 11H

II. ¹⁰Surface Location

UL or lot no. 1	Section 33	Township 26S	Range 27E	Lot Idn	Feet from the 131	North/South Line South	Feet from the 750	East/West line East	County Eddy
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¹¹ Bottom Hole Location

UL or lot no. A	Section 28	Township 26S	Range 27E	Lot Idn	Feet from the 331	North/South line North	Feet from the 347	East/West line East	County Eddy
¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 10/06/2020	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
21778	Sunoco R&M PO Box 2039 Tulsa OK 74102	O
226737	Hunter Gas Gathering, Inc. 202 S. Cheyenne Ave., Suite 1000 Tulsa, OK 74103	G

IV. Well Completion Data

²¹ Spud Date 01/20/2020	²² Ready Date 10/06/2020	²³ TD 15,759'	²⁴ PBDT 15,749'	²⁵ Perforations 9037'-15,705'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
17-1/2"		13-3/8"	414'		439 sx - TOC 0
12-1/4"		9-5/8"	2072'		939 sx - TOC 0
8-3/4"/8-1/2		5-1/2"	15,749'		2950 sx - TOC 0
Tubing		2-7/8"	8537'		

V. Well Test Data

³¹ Date New Oil 10/06/2020	³² Gas Delivery Date 10/06/2020	³³ Test Date 10/20/2020	³⁴ Test Length 24	³⁵ Tbg. Pressure 713	³⁶ Csg. Pressure 516
³⁷ Choke Size 58	³⁸ Oil 794	³⁹ Water 4294	⁴⁰ Gas 1134		⁴¹ Test Method P
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Fatima Vasquez</i>			OIL CONSERVATION DIVISION Approved by: <i>[Signature]</i>		
Printed name: Fatima Vasquez			Title: Engineer		
Title: Regulatory Analyst			Approval Date: 04/06/22		
E-mail Address: fvasquez@cimarex.com					
Date: 10/30/2020		Phone: (432) 620-1933			

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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811 S. First St., Artesia, NM 88210
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District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46437	² Pool Code 98220	³ Pool Name Purple Sage; Wolfcamp (Gas)
⁴ Property Code 40358	⁵ Property Name KLEIN 33 FEDERAL COM	⁶ Well Number 11H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 3213.3'

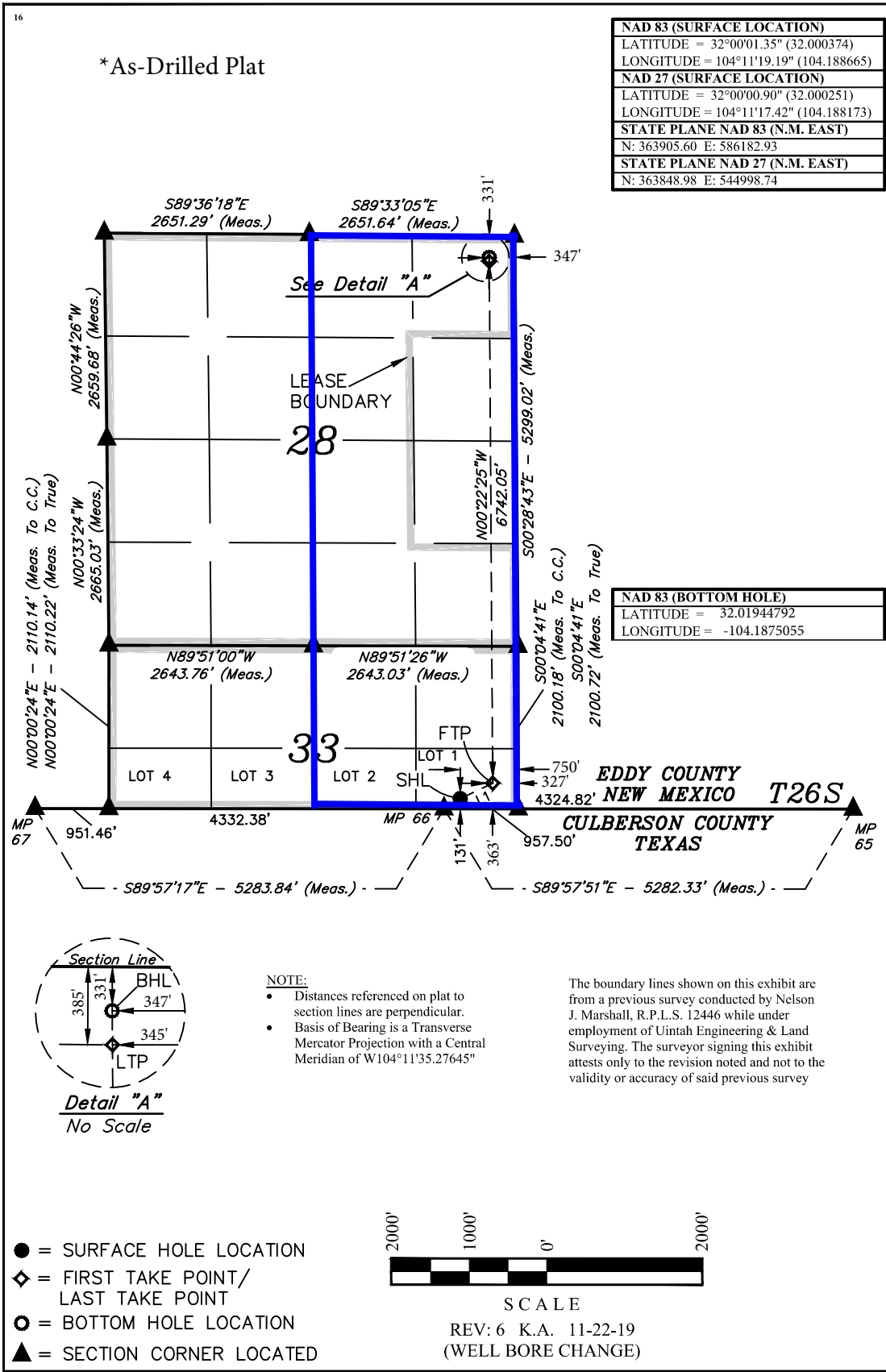
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	33	26S	27E		131	SOUTH	750	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	26S	27E		331	NORTH	347	EAST	EDDY
¹² Dedicated Acres 446.91	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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.



¹⁷ **OPERATOR CERTIFICATION**
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
Fatima Vasquez 10/16/2020
Signature Date
Fatima Vasquez
Printed Name
fvasquez@cimarex.com
E-mail Address

¹⁸ **SURVEYOR CERTIFICATION**
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, and that the same is true and correct to the best of my belief.
August 29, 2013
Date of Survey
Signature and Seal of Professional Surveyor:

Certificate Number:

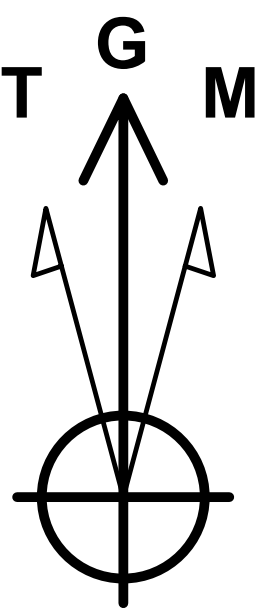


Cimarex

RKB (Cactus 137) 25' + GL(3213.3') @ 3238.30usft
3213.30

Project: Eddy County, New Mexico (NAD83)
Site: Klein 33 Federal Com Pad (Grid)
Well: Klein 33 Federal Com 11H
Wellbore: Wellbore #1
Design: Final Surveys

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone



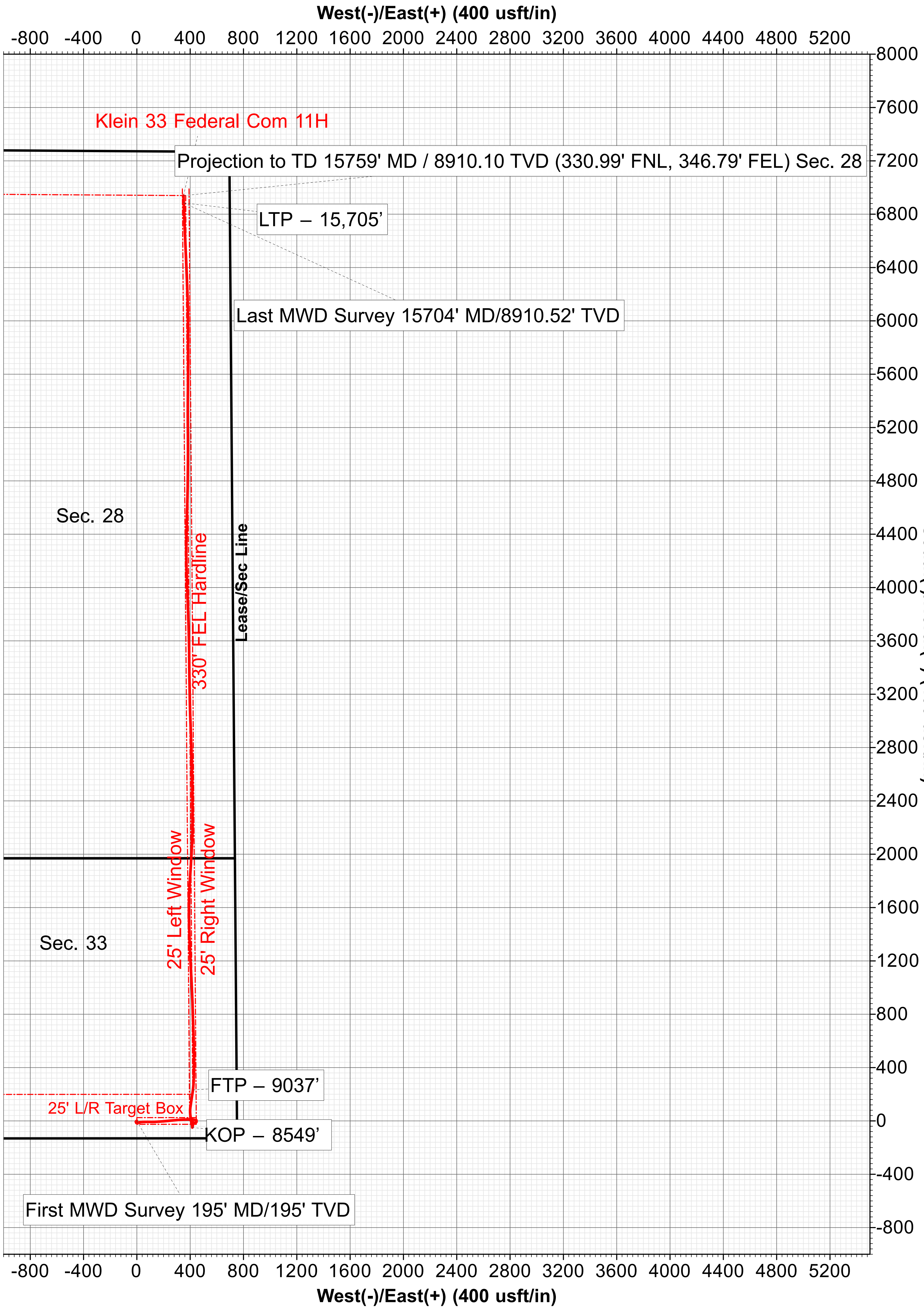
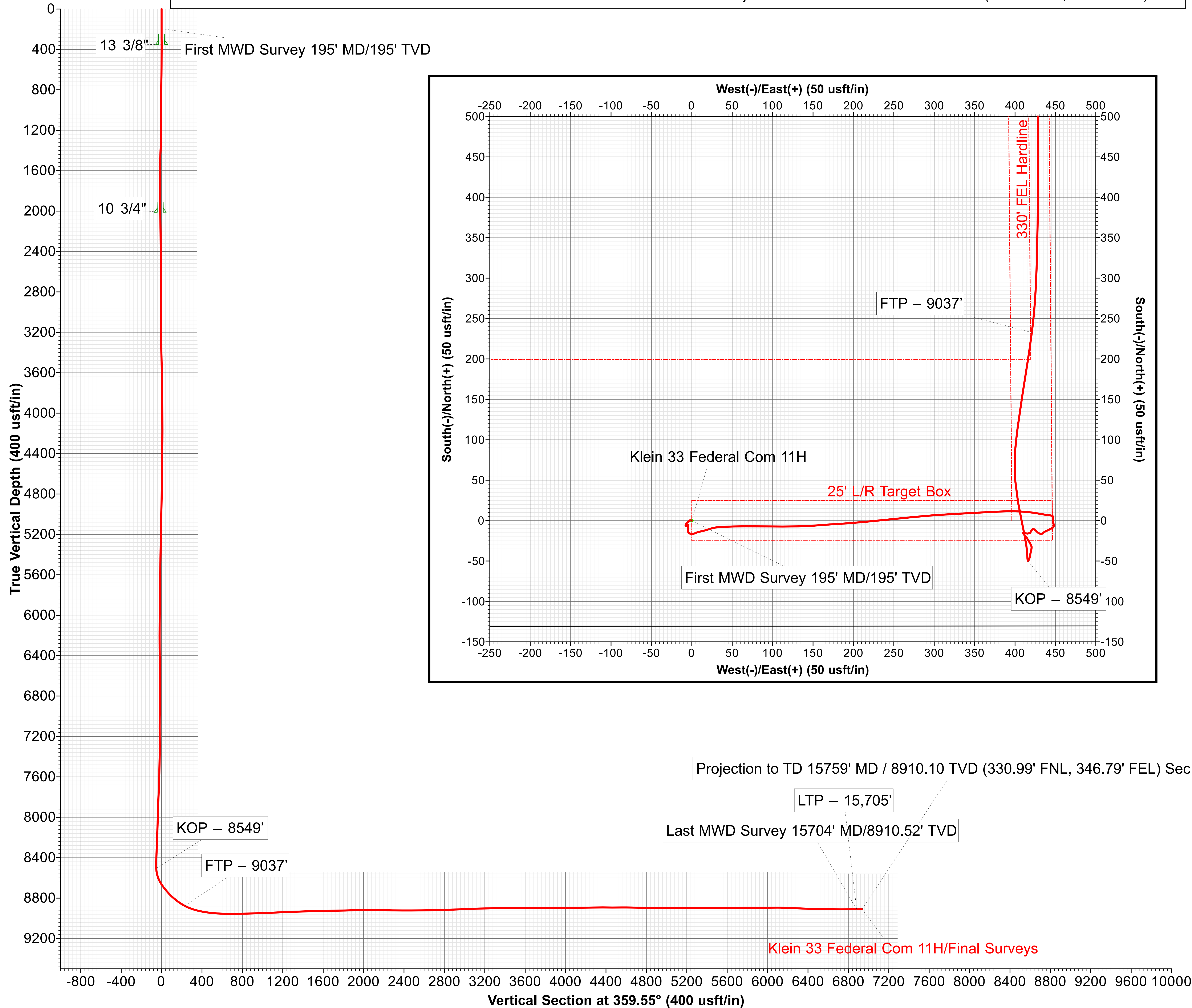
Azimuths to Grid North
True North: -0.08°
Magnetic North: 6.97°

Magnetic Field
Strength: 47517.8nT
Dip Angle: 59.63°
Date: 12/14/2019
Model: BGGM2018

WELL DETAILS 3213.30						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	363905.600	586182.930	32.0003740	-104.1886646	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
195.00	0.50	279.15	195.00	0.14	-0.84	0.14	0.85	First MWD Survey 195' MD/195' TVD
8549.00	2.61	350.77	8505.08	-49.59	415.72	-52.85	582.69	KOP – 8549'
9037.00	62.22	7.43	8876.91	232.80	420.82	229.48	867.97	FTP – 9037'
15704.00	90.44	357.76	8910.52	6884.01	352.08	6881.04	7522.36	Last MWD Survey 15704' MD/8910.52' TVD
15705.00	90.44	357.76	8910.51	6885.01	352.04	6882.04	7523.36	LTP – 15,705'
15759.00	90.44	357.76	8910.10	6938.97	349.93	6936.01	7577.36	Projection to TD 15759' MD / 8910.10 TVD (330.99' FNL, 346.79' FEL) Sec. 28



Cimarex

Eddy County, New Mexico (NAD83) Klein 33 Federal Com Pad (Grid)

API#

Klein 33 Federal Com 11H

SHL: (131' FSL - 750' FEL)

Wellbore #1

Design: Final Surveys

Sperry Drilling Services

Combo Report

13 October, 2020

Well Coordinates: 32.0003741
-104.1886645

North American Datum 1983
New Mexico Eastern Zone
363,905.60 N
586,182.93 E

Ground Level: 3,213.30 usft

Local Coordinate Origin:

Centered on Well Klein 33 Federal Com 11H

Viewing Datum:

RKB (Cactus 137) 25' + GL(3213.3') @ 3238.30usft

TVDs to System:

N

North Reference:

Grid

Unit System:

Midcon (2 decimal)

Version: 5000.15 Build: 91E

Report Version: Midcon Combo v1.15

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Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
0.00	0.00	0.00	0.00	0.00 N	0.00 E	363,905.600	586,182.930	0.00	0.00	0.00	
195.00	0.50	279.15	195.00	0.14 N	0.84 W	363,905.735	586,182.090	0.26	0.14	279.15	First MWD Survey 195' MD/195' TVD
292.00	0.44	292.12	291.99	0.34 N	1.60 W	363,905.943	586,181.327	0.13	0.36	125.80	
340.00	0.38	266.57	339.99	0.40 N	1.93 W	363,906.003	586,180.997	0.40	0.42	-120.66	
475.00	0.24	254.01	474.99	0.30 N	2.65 W	363,905.898	586,180.279	0.11	0.32	-160.30	
566.00	0.46	206.24	565.99	0.08 S	3.00 W	363,905.518	586,179.934	0.38	-0.06	-78.52	
657.00	0.87	221.73	656.98	0.93 S	3.62 W	363,904.675	586,179.313	0.49	-0.90	31.55	
747.00	1.81	239.53	746.96	2.16 S	5.30 W	363,903.444	586,177.633	1.13	-2.11	32.96	
838.00	1.72	203.27	837.92	4.14 S	7.08 W	363,901.461	586,175.855	1.21	-4.08	-112.58	
929.00	0.92	193.65	928.89	6.10 S	7.79 W	363,899.496	586,175.143	0.91	-6.04	-169.29	
1,023.00	0.51	72.98	1,022.89	6.71 S	7.57 W	363,898.885	586,175.365	1.34	-6.66	-159.61	
1,117.00	1.27	51.92	1,116.88	5.95 S	6.35 W	363,899.650	586,176.585	0.87	-5.90	-34.05	
1,212.00	0.76	63.28	1,211.86	5.02 S	4.95 W	363,900.583	586,177.976	0.57	-4.98	164.08	
1,305.00	1.61	179.43	1,304.85	6.05 S	4.39 W	363,899.553	586,178.540	2.22	-6.01	135.47	
1,399.00	2.84	191.05	1,398.78	9.65 S	4.82 W	363,895.947	586,178.107	1.39	-9.61	26.01	
1,494.00	1.83	168.24	1,493.70	13.45 S	4.97 W	363,892.152	586,177.965	1.42	-13.41	-148.40	
1,588.00	2.40	119.41	1,587.64	15.88 S	2.94 W	363,889.716	586,179.985	1.94	-15.86	-97.86	
1,683.00	2.22	84.30	1,682.57	16.68 S	0.62 E	363,888.922	586,183.549	1.48	-16.68	-114.56	
1,777.00	1.74	58.63	1,776.51	15.75 S	3.65 E	363,889.846	586,186.580	1.06	-15.78	-130.85	
1,871.00	2.96	74.16	1,870.43	14.35 S	7.20 E	363,891.251	586,190.133	1.45	-14.40	35.47	
1,966.00	3.20	78.22	1,965.30	13.14 S	12.16 E	363,892.462	586,195.088	0.34	-13.23	44.31	
2,013.00	3.05	76.99	2,012.23	12.59 S	14.66 E	363,893.011	586,197.591	0.35	-12.70	-156.53	
2,140.00	2.52	70.48	2,139.08	10.90 S	20.58 E	363,894.705	586,203.514	0.49	-11.06	-152.39	
2,235.00	2.62	71.69	2,233.98	9.52 S	24.61 E	363,896.085	586,207.544	0.12	-9.71	29.09	
2,329.00	3.90	82.53	2,327.83	8.42 S	29.82 E	363,897.176	586,212.754	1.51	-8.66	31.19	
2,424.00	5.27	86.77	2,422.52	7.76 S	37.38 E	363,897.841	586,220.313	1.48	-8.05	16.02	
2,518.00	7.09	88.47	2,515.97	7.36 S	47.49 E	363,898.240	586,230.423	1.95	-7.73	6.59	
2,612.00	8.72	89.48	2,609.08	7.14 S	60.42 E	363,898.459	586,243.348	1.74	-7.62	5.37	
2,706.00	9.79	89.75	2,701.85	7.04 S	75.54 E	363,898.559	586,258.466	1.14	-7.63	2.46	
2,801.00	11.47	91.14	2,795.22	7.19 S	93.06 E	363,898.406	586,275.987	1.79	-7.92	9.36	
2,896.00	12.07	89.77	2,888.22	7.34 S	112.43 E	363,898.258	586,295.364	0.70	-8.22	-25.65	
2,990.00	11.69	88.79	2,980.21	7.10 S	131.78 E	363,898.498	586,314.713	0.46	-8.14	-152.51	
3,084.00	12.24	85.78	3,072.16	6.17 S	151.24 E	363,899.433	586,334.171	0.88	-7.35	-50.09	
3,179.00	12.28	85.78	3,165.00	4.68 S	171.36 E	363,900.917	586,354.290	0.04	-6.03	0.00	
3,273.00	12.99	86.54	3,256.72	3.31 S	191.87 E	363,902.291	586,374.805	0.78	-4.82	13.55	
3,366.00	14.64	84.57	3,347.03	1.57 S	214.01 E	363,904.034	586,396.940	1.84	-3.25	-16.87	

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
3,461.00	15.60	84.23	3,438.74	0.85 N	238.67 E	363,906.454	586,421.601	1.01	-1.02	-5.44	
3,555.00	14.71	84.29	3,529.47	3.31 N	263.12 E	363,908.912	586,446.052	0.95	1.25	179.02	
3,649.00	13.98	84.76	3,620.54	5.54 N	286.30 E	363,911.137	586,469.234	0.79	3.29	171.16	
3,743.00	12.97	86.45	3,711.95	7.23 N	308.14 E	363,912.827	586,491.070	1.15	4.81	159.52	
3,837.00	11.68	86.71	3,803.78	8.43 N	328.17 E	363,914.026	586,511.099	1.37	5.85	177.66	
3,931.00	11.09	87.00	3,895.93	9.45 N	346.70 E	363,915.045	586,529.626	0.63	6.72	174.60	
4,025.00	11.25	87.08	3,988.15	10.39 N	364.88 E	363,915.985	586,547.812	0.17	7.52	5.57	
4,120.00	10.57	87.04	4,081.43	11.31 N	382.84 E	363,916.907	586,565.768	0.72	8.30	-179.38	
4,215.00	8.95	90.84	4,175.05	11.65 N	398.93 E	363,917.249	586,581.860	1.83	8.52	160.18	
4,309.00	7.44	95.23	4,268.09	10.99 N	412.30 E	363,916.587	586,595.233	1.74	7.75	159.65	
4,403.00	6.21	98.10	4,361.43	9.72 N	423.40 E	363,915.316	586,606.327	1.36	6.39	165.92	
4,497.00	5.11	101.89	4,454.97	8.14 N	432.53 E	363,913.737	586,615.457	1.24	4.74	163.11	
4,592.00	3.01	95.85	4,549.72	7.01 N	439.15 E	363,912.611	586,622.079	2.25	3.56	-171.49	
4,686.00	2.37	94.73	4,643.62	6.60 N	443.54 E	363,912.199	586,626.471	0.68	3.12	-175.86	
4,781.00	1.43	122.52	4,738.57	5.80 N	446.50 E	363,911.400	586,629.429	1.36	2.29	148.89	
4,875.00	1.11	190.01	4,832.55	4.27 N	447.33 E	363,909.873	586,630.259	1.53	0.76	134.42	
4,970.00	1.22	184.17	4,927.53	2.36 N	447.10 E	363,907.958	586,630.026	0.17	-1.15	-50.13	
5,065.00	1.13	182.74	5,022.51	0.41 N	446.98 E	363,906.013	586,629.908	0.10	-3.10	-162.67	
5,159.00	1.17	169.33	5,116.49	1.46 S	447.11 E	363,904.145	586,630.041	0.29	-4.97	-88.29	
5,253.00	1.37	163.20	5,210.47	3.47 S	447.61 E	363,902.126	586,630.544	0.26	-6.99	-37.28	
5,348.00	0.80	186.97	5,305.45	5.22 S	447.86 E	363,900.380	586,630.791	0.75	-8.74	153.18	
5,442.00	1.14	172.05	5,399.44	6.80 S	447.91 E	363,898.803	586,630.841	0.45	-10.31	-44.22	
5,537.00	1.18	230.08	5,494.42	8.36 S	447.29 E	363,897.239	586,630.221	1.19	-11.87	117.23	
5,631.00	1.72	246.32	5,588.39	9.55 S	445.26 E	363,896.051	586,628.187	0.72	-13.05	45.58	
5,725.00	1.80	238.20	5,682.35	10.89 S	442.71 E	363,894.707	586,625.641	0.28	-14.37	-76.30	
5,819.00	1.71	247.32	5,776.30	12.21 S	440.16 E	363,893.388	586,623.092	0.31	-15.67	112.38	
5,914.00	1.24	250.13	5,871.27	13.11 S	437.89 E	363,892.492	586,620.817	0.50	-16.55	172.65	
6,008.00	1.30	226.13	5,965.25	14.19 S	436.16 E	363,891.407	586,619.092	0.57	-17.62	-95.66	
6,103.00	0.96	232.72	6,060.23	15.42 S	434.75 E	363,890.179	586,617.682	0.38	-18.84	162.35	
6,197.00	1.07	248.76	6,154.22	16.22 S	433.31 E	363,889.384	586,616.237	0.32	-19.62	76.98	
6,292.00	1.41	282.07	6,249.19	16.29 S	431.34 E	363,889.307	586,614.267	0.82	-19.68	82.03	
6,386.00	1.19	302.70	6,343.17	15.52 S	429.39 E	363,890.076	586,612.315	0.55	-18.90	125.25	
6,481.00	1.21	310.85	6,438.15	14.34 S	427.80 E	363,891.265	586,610.726	0.18	-17.69	87.40	
6,575.00	1.85	316.66	6,532.12	12.58 S	426.00 E	363,893.018	586,608.934	0.70	-15.93	16.54	
6,670.00	1.53	303.25	6,627.07	10.77 S	423.89 E	363,894.828	586,606.821	0.53	-14.10	-135.55	
6,765.00	0.90	242.92	6,722.06	10.42 S	422.17 E	363,895.184	586,605.096	1.41	-13.73	-144.20	
6,859.00	1.39	222.06	6,816.04	11.60 S	420.74 E	363,894.001	586,603.675	0.68	-14.90	-51.13	

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
6,953.00	1.24	194.68	6,910.01	13.43 S	419.72 E	363,892.171	586,602.653	0.68	-16.73	-116.87	
7,047.00	1.27	222.64	7,003.99	15.18 S	418.76 E	363,890.421	586,601.690	0.65	-18.47	101.23	
7,141.00	2.79	268.13	7,097.94	16.02 S	415.77 E	363,889.580	586,598.697	2.24	-19.29	70.96	
7,235.00	2.11	287.07	7,191.85	15.59 S	411.83 E	363,890.013	586,594.757	1.12	-18.82	139.23	
7,329.00	0.52	292.36	7,285.82	14.92 S	409.78 E	363,890.683	586,592.708	1.69	-18.13	178.28	
7,422.00	0.92	153.56	7,378.82	15.42 S	409.72 E	363,890.175	586,592.650	1.46	-18.64	-153.44	
7,516.00	1.26	133.43	7,472.80	16.81 S	410.81 E	363,888.789	586,593.736	0.54	-20.04	-58.76	
7,609.00	1.80	140.03	7,565.77	18.63 S	412.49 E	363,886.967	586,595.417	0.61	-21.87	21.39	
7,703.00	2.55	144.09	7,659.70	21.46 S	414.66 E	363,884.142	586,597.592	0.81	-24.71	13.64	
7,798.00	2.85	152.00	7,754.59	25.26 S	417.01 E	363,880.345	586,599.940	0.50	-28.53	55.16	
7,893.00	2.73	148.77	7,849.48	29.28 S	419.29 E	363,876.325	586,602.222	0.21	-32.57	-128.96	
7,987.00	1.78	174.64	7,943.41	32.64 S	420.59 E	363,872.957	586,603.519	1.46	-35.95	145.46	
8,081.00	1.32	199.86	8,037.38	35.11 S	420.36 E	363,870.485	586,603.288	0.86	-38.42	136.17	
8,176.00	2.19	191.10	8,132.33	37.93 S	419.64 E	363,867.675	586,602.567	0.96	-41.22	-21.55	
8,270.00	2.46	189.72	8,226.25	41.68 S	418.95 E	363,863.924	586,601.880	0.29	-44.97	-12.40	
8,364.00	2.11	190.98	8,320.18	45.36 S	418.28 E	363,860.237	586,601.210	0.38	-48.65	172.46	
8,458.00	1.94	209.95	8,414.12	48.44 S	417.16 E	363,857.159	586,600.086	0.73	-51.72	113.59	
8,517.00	1.63	219.14	8,473.09	49.96 S	416.13 E	363,855.643	586,599.058	0.71	-53.22	141.81	
8,549.00	2.61	350.77	8,505.08	49.59 S	415.72 E	363,856.009	586,598.654	12.15	-52.85	149.87	KOP – 8549'
8,581.00	8.20	355.72	8,536.93	46.59 S	415.44 E	363,859.007	586,598.366	17.51	-49.85	7.24	
8,612.00	13.80	357.06	8,567.35	40.69 S	415.08 E	363,864.908	586,598.011	18.08	-43.95	3.27	
8,644.00	20.01	351.96	8,597.95	31.45 S	414.12 E	363,874.151	586,597.049	19.93	-34.70	-15.89	
8,675.00	26.57	348.92	8,626.41	19.38 S	412.04 E	363,886.220	586,594.972	21.51	-22.62	-11.79	
8,706.00	32.68	348.25	8,653.34	4.37 S	409.00 E	363,901.232	586,591.933	19.74	-7.58	-3.40	
8,753.00	38.12	349.80	8,691.64	22.35 N	403.85 E	363,927.953	586,586.776	11.73	19.18	10.01	
8,801.00	39.84	355.30	8,728.97	52.27 N	399.96 E	363,957.869	586,582.891	8.05	49.13	65.72	
8,848.00	44.26	4.43	8,763.89	83.67 N	399.99 E	363,989.271	586,582.924	16.04	80.53	57.60	
8,895.00	48.99	7.78	8,796.16	117.62 N	403.66 E	364,023.217	586,586.594	11.32	114.44	28.40	
8,942.00	53.26	8.69	8,825.66	153.82 N	408.91 E	364,059.420	586,591.842	9.21	150.60	9.71	
8,990.00	56.93	9.11	8,853.12	192.70 N	415.00 E	364,098.303	586,597.935	7.68	189.44	5.48	
9,037.00	62.22	7.43	8,876.91	232.80 N	420.82 E	364,138.396	586,603.746	11.67	229.48	-15.75	FTP – 9037'
9,084.00	68.46	3.73	8,896.52	275.28 N	424.93 E	364,180.879	586,607.862	15.08	271.93	-29.11	
9,131.00	72.45	1.57	8,912.24	319.51 N	426.97 E	364,225.112	586,609.899	9.53	316.15	-27.40	
9,178.00	76.21	1.02	8,924.93	364.75 N	427.99 E	364,270.345	586,610.919	8.08	361.37	-8.09	
9,225.00	79.90	0.41	8,934.66	410.72 N	428.56 E	364,316.316	586,611.491	7.95	407.34	-9.25	
9,320.00	84.37	359.45	8,947.65	504.80 N	428.44 E	364,410.397	586,611.372	4.81	501.42	-12.08	
9,415.00	87.56	358.37	8,954.34	599.53 N	426.64 E	364,505.131	586,609.568	3.54	596.16	-18.70	

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
9,509.00	90.37	357.88	8,956.04	693.46 N	423.56 E	364,599.055	586,606.493	3.03	690.11	-9.90	
9,603.00	90.90	358.22	8,955.00	787.39 N	420.36 E	364,692.995	586,603.295	0.67	784.07	32.68	
9,697.00	91.79	358.20	8,952.79	881.32 N	417.43 E	364,786.922	586,600.359	0.95	878.02	-1.29	
9,791.00	91.82	357.11	8,949.83	975.20 N	413.58 E	364,880.795	586,596.515	1.16	971.92	-88.41	
9,886.00	92.66	357.28	8,946.11	1,070.01 N	408.94 E	364,975.608	586,591.870	0.90	1,066.76	11.43	
9,980.00	93.31	356.74	8,941.22	1,163.75 N	404.04 E	365,069.352	586,586.973	0.90	1,160.54	-39.67	
10,074.00	91.72	357.49	8,937.09	1,257.54 N	399.32 E	365,163.139	586,582.247	1.87	1,254.36	154.75	
10,169.00	91.82	358.37	8,934.16	1,352.43 N	395.89 E	365,258.030	586,578.817	0.93	1,349.28	83.50	
10,262.00	92.19	358.01	8,930.91	1,445.33 N	392.95 E	365,350.927	586,575.882	0.55	1,442.20	-44.19	
10,356.00	91.72	359.21	8,927.70	1,539.24 N	390.67 E	365,444.842	586,573.603	1.37	1,536.13	111.38	
10,451.00	91.05	0.96	8,925.40	1,634.21 N	390.81 E	365,539.810	586,573.744	1.97	1,631.09	110.93	
10,545.00	89.91	2.54	8,924.62	1,728.16 N	393.68 E	365,633.759	586,576.615	2.07	1,725.01	125.80	
10,640.00	91.85	3.86	8,923.16	1,822.99 N	398.99 E	365,728.593	586,581.916	2.47	1,819.80	34.22	
10,734.00	92.35	3.65	8,919.71	1,916.73 N	405.14 E	365,822.328	586,588.068	0.58	1,913.49	-22.76	
10,828.00	90.77	3.16	8,917.15	2,010.52 N	410.72 E	365,916.124	586,593.649	1.76	2,007.24	-162.77	
10,922.00	89.10	2.29	8,917.26	2,104.41 N	415.19 E	366,010.013	586,598.118	2.00	2,101.09	-152.48	
11,015.00	88.15	0.39	8,919.49	2,197.36 N	417.36 E	366,102.956	586,600.292	2.28	2,194.01	-116.59	
11,109.00	89.04	359.72	8,921.80	2,291.33 N	417.45 E	366,196.926	586,600.382	1.18	2,287.98	-36.97	
11,203.00	89.88	359.50	8,922.68	2,385.32 N	416.81 E	366,290.918	586,599.742	0.92	2,381.97	-14.68	
11,297.00	90.15	359.37	8,922.66	2,479.31 N	415.89 E	366,384.914	586,598.815	0.32	2,475.97	-25.71	
11,392.00	90.68	358.93	8,921.97	2,574.30 N	414.48 E	366,479.900	586,597.406	0.73	2,570.97	-39.70	
11,487.00	91.11	358.81	8,920.49	2,669.27 N	412.60 E	366,574.870	586,595.533	0.47	2,665.95	-15.59	
11,582.00	91.58	358.05	8,918.26	2,764.21 N	410.00 E	366,669.807	586,592.931	0.94	2,760.90	-58.25	
11,678.00	92.29	358.15	8,915.01	2,860.10 N	406.82 E	366,765.699	586,589.750	0.75	2,856.82	8.01	
11,773.00	92.16	358.04	8,911.33	2,954.97 N	403.66 E	366,860.575	586,586.594	0.18	2,951.71	-139.78	
11,868.00	92.94	357.79	8,907.10	3,049.82 N	400.21 E	366,955.417	586,583.141	0.86	3,046.58	-17.75	
11,963.00	91.18	359.17	8,903.68	3,144.72 N	397.69 E	367,050.316	586,580.624	2.35	3,141.50	141.89	
12,057.00	91.15	358.78	8,901.77	3,238.68 N	396.01 E	367,144.282	586,578.943	0.42	3,235.47	-94.40	
12,152.00	91.98	359.00	8,899.18	3,333.63 N	394.17 E	367,239.228	586,577.103	0.90	3,330.43	14.84	
12,247.00	90.62	359.74	8,897.02	3,428.59 N	393.13 E	367,334.195	586,576.059	1.63	3,425.40	151.45	
12,341.00	90.19	359.46	8,896.36	3,522.59 N	392.47 E	367,428.190	586,575.403	0.55	3,519.40	-146.93	
12,435.00	89.48	358.46	8,896.63	3,616.57 N	390.77 E	367,522.172	586,573.697	1.30	3,613.39	-125.38	
12,529.00	89.97	358.26	8,897.08	3,710.53 N	388.08 E	367,616.132	586,571.006	0.56	3,707.37	-22.20	
12,623.00	90.40	358.17	8,896.78	3,804.49 N	385.15 E	367,710.086	586,568.078	0.47	3,801.34	-11.82	
12,718.00	90.96	357.85	8,895.65	3,899.42 N	381.85 E	367,805.021	586,564.780	0.68	3,896.30	-29.74	
12,812.00	89.54	357.88	8,895.24	3,993.35 N	378.35 E	367,898.953	586,561.278	1.51	3,990.26	178.79	

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
12,906.00	90.09	357.45	8,895.54	4,087.27 N	374.52 E	367,992.874	586,557.448	0.74	4,084.21	-38.02	
13,000.00	90.34	359.33	8,895.19	4,181.23 N	371.88 E	368,086.831	586,554.807	2.02	4,178.18	82.42	
13,095.00	91.76	359.77	8,893.45	4,276.21 N	371.13 E	368,181.810	586,554.061	1.56	4,273.16	17.21	
13,190.00	89.26	1.49	8,892.60	4,371.19 N	372.18 E	368,276.789	586,555.106	3.19	4,368.13	145.46	
13,284.00	89.91	1.41	8,893.29	4,465.16 N	374.55 E	368,370.756	586,557.485	0.70	4,462.08	-7.02	
13,378.00	90.56	1.15	8,892.90	4,559.13 N	376.65 E	368,464.731	586,559.584	0.74	4,556.03	-21.80	
13,473.00	88.80	1.80	8,893.43	4,654.09 N	379.10 E	368,559.694	586,562.030	1.97	4,650.97	159.73	
13,568.00	88.67	0.94	8,895.53	4,749.04 N	381.37 E	368,654.643	586,564.300	0.92	4,745.90	-98.61	
13,662.00	89.29	0.71	8,897.20	4,843.02 N	382.72 E	368,748.618	586,565.654	0.70	4,839.86	-20.35	
13,757.00	89.26	0.26	8,898.40	4,938.01 N	383.53 E	368,843.607	586,566.458	0.47	4,934.84	-93.82	
13,851.00	89.91	0.07	8,899.08	5,032.00 N	383.80 E	368,937.603	586,566.728	0.72	5,028.83	-16.29	
13,946.00	90.28	359.38	8,898.93	5,127.00 N	383.34 E	369,032.601	586,566.272	0.82	5,123.83	-61.80	
14,040.00	90.84	359.52	8,898.01	5,220.99 N	382.44 E	369,126.592	586,565.370	0.61	5,217.83	14.03	
14,135.00	88.95	0.31	8,898.18	5,315.99 N	382.30 E	369,221.587	586,565.229	2.16	5,312.82	157.32	
14,229.00	89.26	0.06	8,899.65	5,409.97 N	382.60 E	369,315.574	586,565.533	0.42	5,406.80	-38.88	
14,324.00	90.56	0.76	8,899.80	5,504.97 N	383.28 E	369,410.569	586,566.212	1.55	5,501.79	28.30	
14,418.00	91.02	0.58	8,898.50	5,598.95 N	384.38 E	369,504.554	586,567.311	0.53	5,595.76	-21.37	
14,512.00	91.42	359.98	8,896.50	5,692.93 N	384.84 E	369,598.531	586,567.771	0.77	5,689.73	-56.30	
14,606.00	90.03	359.91	8,895.31	5,786.92 N	384.75 E	369,692.521	586,567.681	1.48	5,783.72	-177.12	
14,701.00	89.91	359.73	8,895.36	5,881.92 N	384.45 E	369,787.520	586,567.382	0.23	5,878.72	-123.69	
14,795.00	90.25	359.62	8,895.23	5,975.92 N	383.92 E	369,881.518	586,566.849	0.38	5,972.72	-17.93	
14,889.00	90.65	359.37	8,894.49	6,069.91 N	383.09 E	369,975.512	586,566.020	0.50	6,066.72	-32.00	
14,983.00	87.90	358.21	8,895.68	6,163.87 N	381.11 E	370,069.473	586,564.036	3.18	6,160.69	-157.14	
15,077.00	87.56	357.85	8,899.41	6,257.74 N	377.88 E	370,163.343	586,560.807	0.53	6,254.58	-133.39	
15,172.00	87.56	357.68	8,903.45	6,352.58 N	374.18 E	370,258.185	586,557.106	0.18	6,349.45	-90.00	
15,266.00	88.30	357.44	8,906.85	6,446.44 N	370.18 E	370,352.037	586,553.107	0.83	6,443.33	-17.96	
15,360.00	88.86	357.42	8,909.17	6,540.31 N	365.96 E	370,445.914	586,548.893	0.60	6,537.24	-2.05	
15,454.00	89.35	357.51	8,910.64	6,634.21 N	361.81 E	370,539.810	586,544.736	0.53	6,631.16	10.41	
15,548.00	89.79	357.79	8,911.35	6,728.13 N	357.95 E	370,633.728	586,540.882	0.55	6,725.11	32.47	
15,642.00	90.56	357.91	8,911.06	6,822.06 N	354.43 E	370,727.660	586,537.355	0.83	6,819.07	8.86	
15,704.00	90.44	357.76	8,910.52	6,884.01 N	352.08 E	370,789.614	586,535.013	0.31	6,881.04	-128.66	Last MWD Survey 15704' MD/8910.52' TVD
15,705.00	90.44	357.76	8,910.51	6,885.01 N	352.04 E	370,790.613	586,534.974	0.00	6,882.04	0.00	LTP – 15,705'
15,759.00	90.44	357.76	8,910.10	6,938.97 N	349.93 E	370,844.570	586,532.863	0.00	6,936.01	0.00	Projection to TD 15759' MD / 8910.10 TVD (330.99' FNL, 346.79' FEL) Sec. 28

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys**Design Annotations**

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
195.00	195.00	0.14	-0.84	First MWD Survey 195' MD/195' TVD
8,549.00	8,505.08	-49.59	415.72	KOP – 8549'
9,037.00	8,876.91	232.80	420.82	FTP – 9037'
15,704.00	8,910.52	6,884.01	352.08	Last MWD Survey 15704' MD/8910.52' TVD
15,705.00	8,910.51	6,885.01	352.04	LTP – 15,705'
15,759.00	8,910.10	6,938.97	349.93	Projection to TD 15759' MD / 8910.10 TVD (330.99' FNL, 346.79' FEL) Sec. 28

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (usft)
				+N/-S (usft)	+E/-W (usft)	
User	No Target (Freehand)	359.55	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
195.00	15,704.00	MWD (IFR Corrected)	3_MWD+IFR1+MS
15,759.00	15,759.00	Projection to TD	3_Blind

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
350.00	349.99	13 3/8"	13-3/8	17-1/2
2,013.00	2,012.23	10 3/4"	10-3/4	13-1/2

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	()	()	()	()	()	()	()		
- Shape									
()									

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Directional Difficulty Index

Average Dogleg over Survey:	1.53 °/100usft	Maximum Dogleg over Survey:	21.51 °/100usft at 8,675.00 usft
Net Tortosity applicable to Plans:	0.39 °/100usft	Directional Difficulty Index:	6.507

Audit Info

HALLIBURTON

Eddy County, New Mexico (NAD83)

North Reference Sheet for Klein 33 Federal Com Pad (Grid) - Klein 33 Federal Com 11H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to RKB (Cactus 137) 25' + GL(3213.3') @ 3238.30usft. Northing and Easting are relative to Klein 33 Federal Com 11H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.3333333°, Longitude Origin:0.0000000°, Latitude Origin:0.0000000°

False Easting: 541,337.500usft, False Northing: 0.000usft, Scale Reduction: 0.99991139

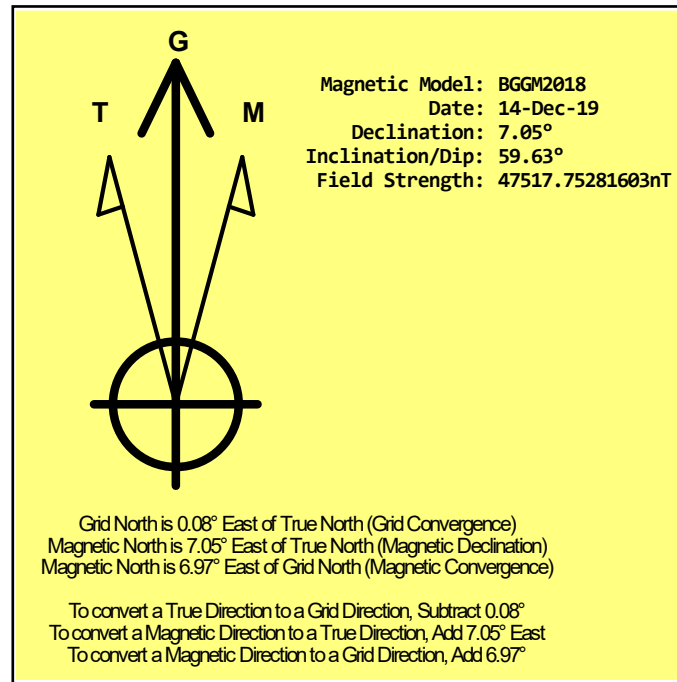
Grid Coordinates of Well: 363,905.600 usft N, 586,182.930 usft E

Geographical Coordinates of Well: 32.0003741, -104.1886645

Grid Convergence at Surface is: 0.08°

Based upon Minimum Curvature type calculations, at a Measured Depth of 15,759.00usft
the Bottom Hole Displacement is 6,947.79usft in the Direction of 2.89° (Grid).

Magnetic Convergence at surface is: -6.97° (14 December 2019, , BGGM2018)



Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM117116

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____						6. If Indian, Allottee or Tribe Name	
						7. Unit or CA Agreement Name and No.	
2. Name of Operator Contact: FATIMA VASQUEZ CIMAREX ENERGY COMPANY E-Mail: fvasquez@cimarex.com						8. Lease Name and Well No. KLEIN 33 FEDERAL COM 11H	
3. Address 600 N MARIENFELD ST SUITE 600 MIDLAND, TX 79701				3a. Phone No. (include area code) Ph: 432.620.1933		9. API Well No. 30-015-46437	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 33 T26S R27E Mer NMP At surface SENE 131FSL 750FEL 32.000374 N Lat, 104.188665 W Lon Sec 33 T26S R27E Mer NMP At top prod interval reported below SENE 131FSL 750FEL 32.000374 N Lat, 104.188665 W Lon Sec 28 T26S R27E Mer NMP At total depth NENE 331FNL 347FEL 32.019447 N Lat, 104.187505 W Lon						10. Field and Pool, or Exploratory PURPLE SAGE; WOLFCAMP(G)	
						11. Sec., T., R., M., or Block and Survey or Area Sec 33 T26S R27E Mer NMP	
						12. County or Parish EDDY	13. State NM
						17. Elevations (DF, KB, RT, GL)* 3213 GL	
14. Date Spudded 01/20/2020		15. Date T.D. Reached 02/04/2020		16. Date Completed ☐ D & A ☒ Ready to Prod. 10/06/2020			
18. Total Depth: MD TVD 15759 8910		19. Plug Back T.D.: MD TVD 15749 8910		20. Depth Bridge Plug Set: MD TVD			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) GAMMA				22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)			

23. Casing and Liner Record (Report all strings set in well)

[illegible]

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8537	8537						

25. Producing Intervals

Perforating Interval			Perforation Status			
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	8800		9037 TO 15705	0.420	961	PRODUCING
B)						
C)						
D)						

26. Perforation Record

Perforating Interval			Perforation Status			
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	8800		9037 TO 15705	0.420	961	PRODUCING
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
9037 TO 15705	310,002 BBLS TOTAL FLUID & 16,198,745# SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
10/06/2020	10/20/2020	24		794.0	1134.0	4294.0	45.6		GAS LIFT
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
58	713	516.0		794	1134	4294	1428	PGW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production 	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate 	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #536052 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(*Sold, used for fuel, vented, etc.*)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
RUSTLER	1001	1349	DOLOMITE/ANHYDRITE: WATER	RUSTLER	1001
TOP OF SALT	1349	2129	SALT: BARREN	TOP OF SALT	1349
LAMAR	2129	2135	SHALE: WATER	BELL CANYON	2135
BELL CANYON	2135	3125	SANDSTAONE: WATER	CHERRY CANYON	3125
CHERRY CANYON	3125	4288	SANDSTAONE: WATER	BRUSHY CANYON	4288
BRUSHY CANYON	4288	5797	SANDSTAONE: WATER	BONE SPRING	5797
BONE SPRING	5797	8800	LS/SHALE/SS: OIL, WATER, GAS	WOLFCAMP	8800
WOLFCAMP	8800		SHALE: OIL, WATER, GAS		

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7 Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #536052 Verified by the BLM Well Information System.
For CIMAREX ENERGY COMPANY, sent to the Carlsbad**

Name (*please print*) FATIMA VASQUEZ

Title REGULATORY ANALYST

Signature _____ (Electronic Submission)

Date 10/30/2020

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

Form 3160-5
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other		5. Lease Serial No. NMNM117116
2. Name of Operator CIMAREX ENERGY COMPANY		6. If Indian, Allottee or Tribe Name
Contact: FATIMA VASQUEZ E-Mail: fvasquez@cimarex.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 600 N MARIENFELD STREET STE 600 MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 432-620-1933	8. Well Name and No. KLEIN 33 FEDERAL COM 11H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 33 T26S R27E 131FSL 750FEL 32.000374 N Lat, 104.188667 W Lon		9. API Well No. 30-015-46437-00-X1
		10. Field and Pool or Exploratory Area PURPLE SAGE-WOLFCAMP (GAS)
		11. County or Parish, State EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Production Start-up
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplate 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.

Cimarex Energy Co. completed this well as follows:

08/05/2020 Test csg to 10,200 psi for 30 min. Good test.
 09/18/2020 to
 09/23/2020 Perf Wolfcamp @ 9037'-15,705', 961 holes, .42". Frac w/ 310,002 bbls total fluid & 16,198,745# sand.
 09/25/2020 DO plugs.
 09/26/2020 Finish DO plugs & CO to PBTD @15,749'. SI well.
 10/01/2020 RIH w/ 2-7/8" 6.5# L-80 8rd EUE tbg, pkr & GLVs, set @ 8537'. SI well & secure.
 10/06/2020 Turn to production.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #534659 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY, sent to the Carlsbad Committed to AFMSS for processing by PRISCILLA PEREZ on 10/20/2020 (21PP0294SE)	
Name (Printed/Typed) FATIMA VASQUEZ	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 10/20/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED	DEBORAH HAM Title LAND LAW EXAMINER	Date 11/06/2020
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Carlsbad

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

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude			NAD	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude			NAD	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude			NAD	

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address		² OGRID Number	
		³ Reason for Filing Code/ Effective Date	
⁴ API Number	⁵ Pool Name		⁶ Pool Code
⁷ Property Code	⁸ Property Name		⁹ Well Number

II. ¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Lse Code	¹³ Producing Method Code		¹⁴ Gas Connection Date		¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W

IV. Well Completion Data

²¹ Spud Date	²² Ready Date	²³ TD	²⁴ PBDT	²⁵ Perforations	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Fatima Vasquez</i>			OIL CONSERVATION DIVISION		
Printed name:			Approved by:		
Title:			Title:		
E-mail Address:			Approval Date:		
Date:		Phone:			

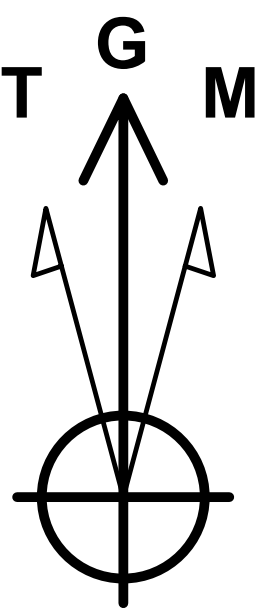


Cimarex

RKB (Cactus 137) 25' + GL(3213.3') @ 3238.30usft
3213.30

Project: Eddy County, New Mexico (NAD83)
Site: Klein 33 Federal Com Pad (Grid)
Well: Klein 33 Federal Com 11H
Wellbore: Wellbore #1
Design: Final Surveys

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone



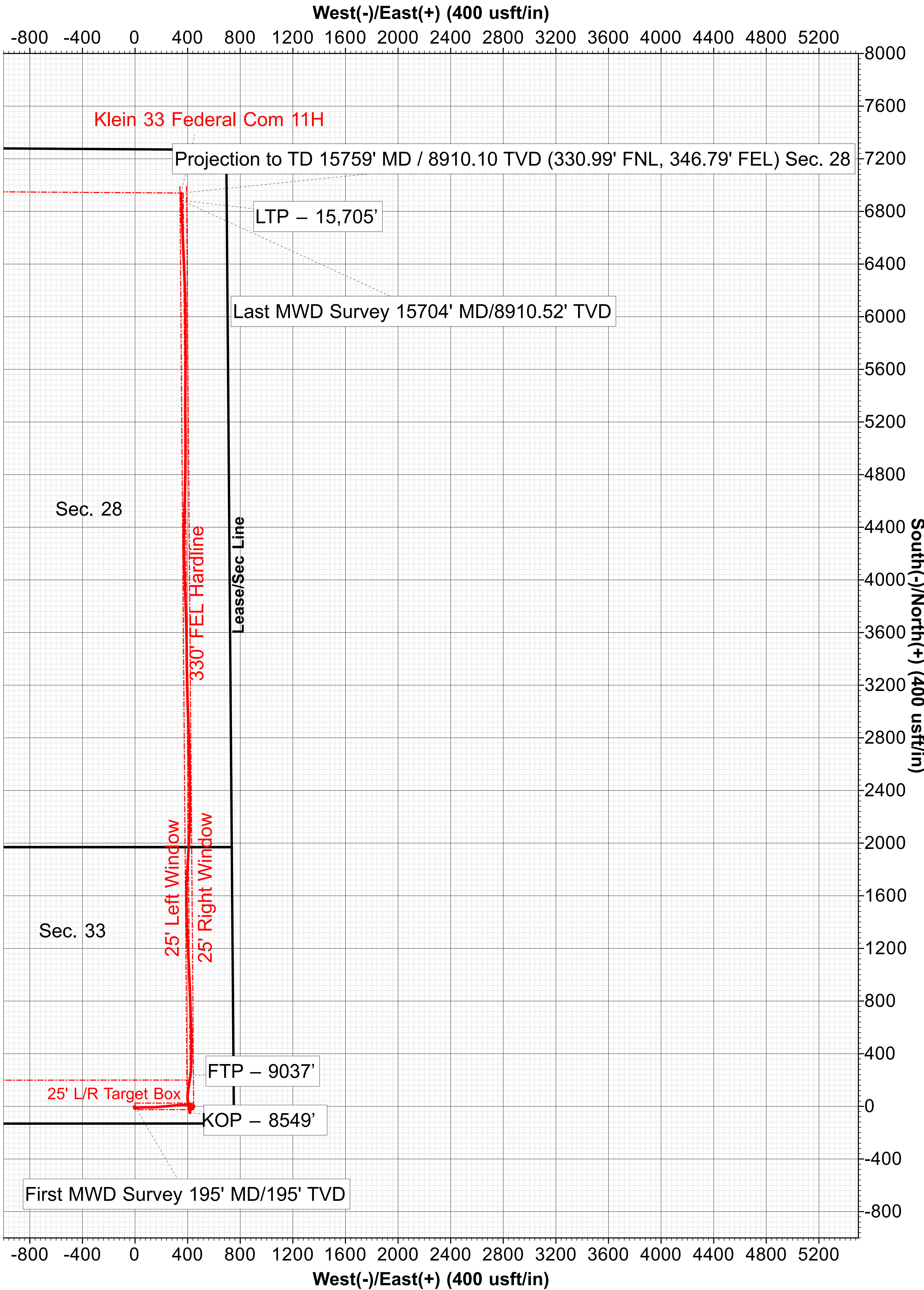
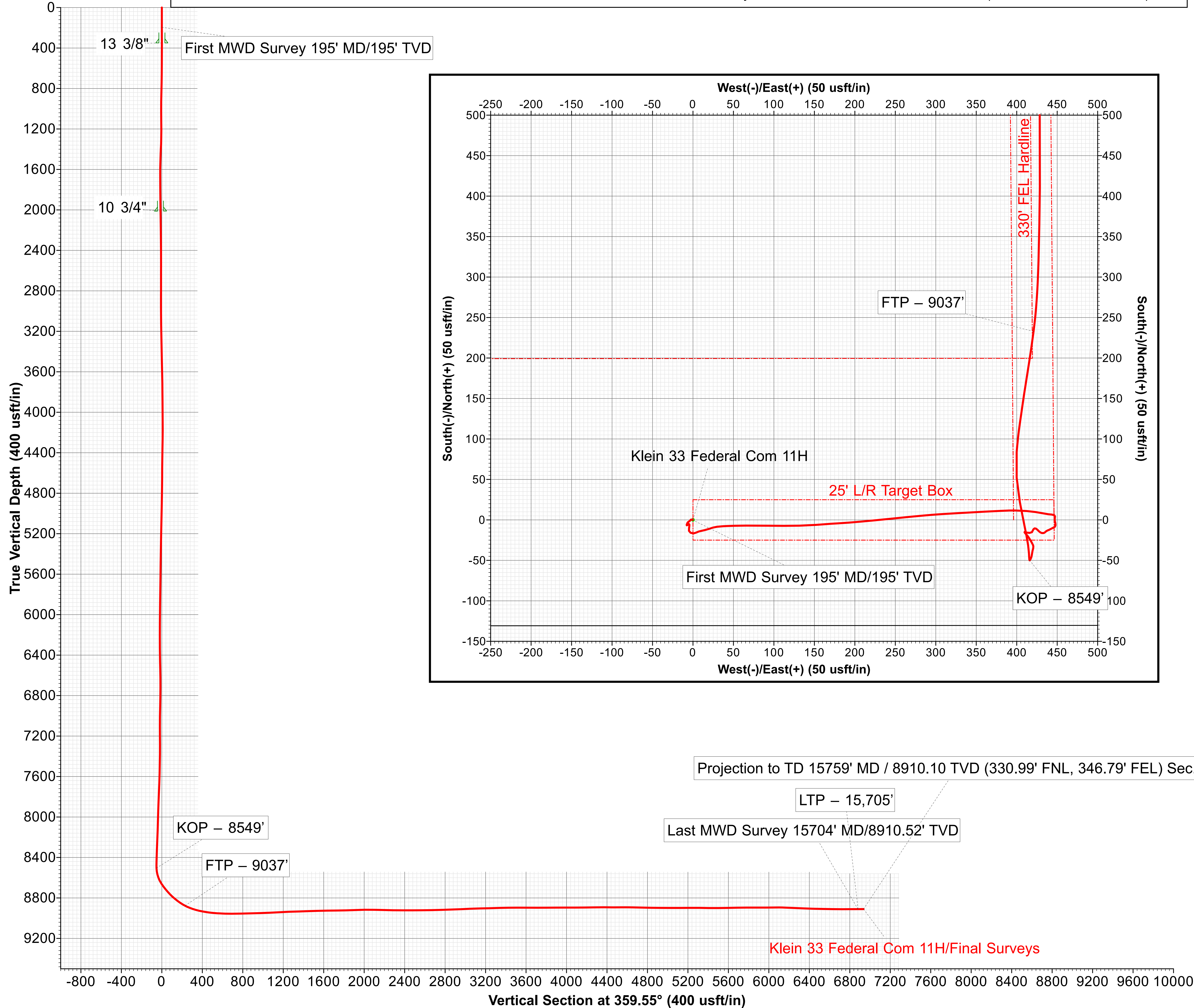
Azimuths to Grid North
True North: -0.08°
Magnetic North: 6.97°

Magnetic Field
Strength: 47517.8nT
Dip Angle: 59.63°
Date: 12/14/2019
Model: BGGM2018

WELL DETAILS 3213.30						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	363905.600	586182.930	32.0003740	-104.1886646	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
195.00	0.50	279.15	195.00	0.14	-0.84	0.14	0.85	First MWD Survey 195' MD/195' TVD
8549.00	2.61	350.77	8505.08	-49.59	415.72	-52.85	582.69	KOP – 8549'
9037.00	62.22	7.43	8876.91	232.80	420.82	229.48	867.97	FTP – 9037'
15704.00	90.44	357.76	8910.52	6884.01	352.08	6881.04	7522.36	Last MWD Survey 15704' MD/8910.52' TVD
15705.00	90.44	357.76	8910.51	6885.01	352.04	6882.04	7523.36	LTP – 15,705'
15759.00	90.44	357.76	8910.10	6938.97	349.93	6936.01	7577.36	Projection to TD 15759' MD / 8910.10 TVD (330.99' FNL, 346.79' FEL) Sec. 28



Cimarex

Eddy County, New Mexico (NAD83) Klein 33 Federal Com Pad (Grid)

API#

Klein 33 Federal Com 11H

SHL: (131' FSL - 750' FEL)

Wellbore #1

Design: Final Surveys

Sperry Drilling Services

Combo Report

13 October, 2020

Well Coordinates: 32.0003741
-104.1886645

North American Datum 1983
New Mexico Eastern Zone
363,905.60 N
586,182.93 E

Ground Level: 3,213.30 usft

Local Coordinate Origin:

Centered on Well Klein 33 Federal Com 11H

Viewing Datum:

RKB (Cactus 137) 25' + GL(3213.3') @ 3238.30usft

TVDs to System:

N

North Reference:

Grid

Unit System:

Midcon (2 decimal)

Version: 5000.15 Build: 91E

Report Version: Midcon Combo v1.15

HALLIBURTON

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Measured		Grid	Vertical	Local Coordinates		Map Coordinates		Dogleg	Vertical	Toolface	Comments
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)	Rate (°/100usft)	Section (usft)	Angle (°)	
0.00	0.00	0.00	0.00	0.00 N	0.00 E	363,905.600	586,182.930	0.00	0.00	0.00	
195.00	0.50	279.15	195.00	0.14 N	0.84 W	363,905.735	586,182.090	0.26	0.14	279.15	First MWD Survey 195' MD/195' TVD
292.00	0.44	292.12	291.99	0.34 N	1.60 W	363,905.943	586,181.327	0.13	0.36	125.80	
340.00	0.38	266.57	339.99	0.40 N	1.93 W	363,906.003	586,180.997	0.40	0.42	-120.66	
475.00	0.24	254.01	474.99	0.30 N	2.65 W	363,905.898	586,180.279	0.11	0.32	-160.30	
566.00	0.46	206.24	565.99	0.08 S	3.00 W	363,905.518	586,179.934	0.38	-0.06	-78.52	
657.00	0.87	221.73	656.98	0.93 S	3.62 W	363,904.675	586,179.313	0.49	-0.90	31.55	
747.00	1.81	239.53	746.96	2.16 S	5.30 W	363,903.444	586,177.633	1.13	-2.11	32.96	
838.00	1.72	203.27	837.92	4.14 S	7.08 W	363,901.461	586,175.855	1.21	-4.08	-112.58	
929.00	0.92	193.65	928.89	6.10 S	7.79 W	363,899.496	586,175.143	0.91	-6.04	-169.29	
1,023.00	0.51	72.98	1,022.89	6.71 S	7.57 W	363,898.885	586,175.365	1.34	-6.66	-159.61	
1,117.00	1.27	51.92	1,116.88	5.95 S	6.35 W	363,899.650	586,176.585	0.87	-5.90	-34.05	
1,212.00	0.76	63.28	1,211.86	5.02 S	4.95 W	363,900.583	586,177.976	0.57	-4.98	164.08	
1,305.00	1.61	179.43	1,304.85	6.05 S	4.39 W	363,899.553	586,178.540	2.22	-6.01	135.47	
1,399.00	2.84	191.05	1,398.78	9.65 S	4.82 W	363,895.947	586,178.107	1.39	-9.61	26.01	
1,494.00	1.83	168.24	1,493.70	13.45 S	4.97 W	363,892.152	586,177.965	1.42	-13.41	-148.40	
1,588.00	2.40	119.41	1,587.64	15.88 S	2.94 W	363,889.716	586,179.985	1.94	-15.86	-97.86	
1,683.00	2.22	84.30	1,682.57	16.68 S	0.62 E	363,888.922	586,183.549	1.48	-16.68	-114.56	
1,777.00	1.74	58.63	1,776.51	15.75 S	3.65 E	363,889.846	586,186.580	1.06	-15.78	-130.85	
1,871.00	2.96	74.16	1,870.43	14.35 S	7.20 E	363,891.251	586,190.133	1.45	-14.40	35.47	
1,966.00	3.20	78.22	1,965.30	13.14 S	12.16 E	363,892.462	586,195.088	0.34	-13.23	44.31	
2,013.00	3.05	76.99	2,012.23	12.59 S	14.66 E	363,893.011	586,197.591	0.35	-12.70	-156.53	
2,140.00	2.52	70.48	2,139.08	10.90 S	20.58 E	363,894.705	586,203.514	0.49	-11.06	-152.39	
2,235.00	2.62	71.69	2,233.98	9.52 S	24.61 E	363,896.085	586,207.544	0.12	-9.71	29.09	
2,329.00	3.90	82.53	2,327.83	8.42 S	29.82 E	363,897.176	586,212.754	1.51	-8.66	31.19	
2,424.00	5.27	86.77	2,422.52	7.76 S	37.38 E	363,897.841	586,220.313	1.48	-8.05	16.02	
2,518.00	7.09	88.47	2,515.97	7.36 S	47.49 E	363,898.240	586,230.423	1.95	-7.73	6.59	
2,612.00	8.72	89.48	2,609.08	7.14 S	60.42 E	363,898.459	586,243.348	1.74	-7.62	5.37	
2,706.00	9.79	89.75	2,701.85	7.04 S	75.54 E	363,898.559	586,258.466	1.14	-7.63	2.46	
2,801.00	11.47	91.14	2,795.22	7.19 S	93.06 E	363,898.406	586,275.987	1.79	-7.92	9.36	
2,896.00	12.07	89.77	2,888.22	7.34 S	112.43 E	363,898.258	586,295.364	0.70	-8.22	-25.65	
2,990.00	11.69	88.79	2,980.21	7.10 S	131.78 E	363,898.498	586,314.713	0.46	-8.14	-152.51	
3,084.00	12.24	85.78	3,072.16	6.17 S	151.24 E	363,899.433	586,334.171	0.88	-7.35	-50.09	
3,179.00	12.28	85.78	3,165.00	4.68 S	171.36 E	363,900.917	586,354.290	0.04	-6.03	0.00	
3,273.00	12.99	86.54	3,256.72	3.31 S	191.87 E	363,902.291	586,374.805	0.78	-4.82	13.55	
3,366.00	14.64	84.57	3,347.03	1.57 S	214.01 E	363,904.034	586,396.940	1.84	-3.25	-16.87	

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Measured Depth (usft)	Inclination (°)	Grid Azimuth (°)	Vertical Depth (usft)	Local Coordinates		Map Coordinates		Dogleg Rate (°/100usft)	Vertical Section (usft)	Toolface Angle (°)	Comments
				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
3,461.00	15.60	84.23	3,438.74	0.85 N	238.67 E	363,906.454	586,421.601	1.01	-1.02	-5.44	
3,555.00	14.71	84.29	3,529.47	3.31 N	263.12 E	363,908.912	586,446.052	0.95	1.25	179.02	
3,649.00	13.98	84.76	3,620.54	5.54 N	286.30 E	363,911.137	586,469.234	0.79	3.29	171.16	
3,743.00	12.97	86.45	3,711.95	7.23 N	308.14 E	363,912.827	586,491.070	1.15	4.81	159.52	
3,837.00	11.68	86.71	3,803.78	8.43 N	328.17 E	363,914.026	586,511.099	1.37	5.85	177.66	
3,931.00	11.09	87.00	3,895.93	9.45 N	346.70 E	363,915.045	586,529.626	0.63	6.72	174.60	
4,025.00	11.25	87.08	3,988.15	10.39 N	364.88 E	363,915.985	586,547.812	0.17	7.52	5.57	
4,120.00	10.57	87.04	4,081.43	11.31 N	382.84 E	363,916.907	586,565.768	0.72	8.30	-179.38	
4,215.00	8.95	90.84	4,175.05	11.65 N	398.93 E	363,917.249	586,581.860	1.83	8.52	160.18	
4,309.00	7.44	95.23	4,268.09	10.99 N	412.30 E	363,916.587	586,595.233	1.74	7.75	159.65	
4,403.00	6.21	98.10	4,361.43	9.72 N	423.40 E	363,915.316	586,606.327	1.36	6.39	165.92	
4,497.00	5.11	101.89	4,454.97	8.14 N	432.53 E	363,913.737	586,615.457	1.24	4.74	163.11	
4,592.00	3.01	95.85	4,549.72	7.01 N	439.15 E	363,912.611	586,622.079	2.25	3.56	-171.49	
4,686.00	2.37	94.73	4,643.62	6.60 N	443.54 E	363,912.199	586,626.471	0.68	3.12	-175.86	
4,781.00	1.43	122.52	4,738.57	5.80 N	446.50 E	363,911.400	586,629.429	1.36	2.29	148.89	
4,875.00	1.11	190.01	4,832.55	4.27 N	447.33 E	363,909.873	586,630.259	1.53	0.76	134.42	
4,970.00	1.22	184.17	4,927.53	2.36 N	447.10 E	363,907.958	586,630.026	0.17	-1.15	-50.13	
5,065.00	1.13	182.74	5,022.51	0.41 N	446.98 E	363,906.013	586,629.908	0.10	-3.10	-162.67	
5,159.00	1.17	169.33	5,116.49	1.46 S	447.11 E	363,904.145	586,630.041	0.29	-4.97	-88.29	
5,253.00	1.37	163.20	5,210.47	3.47 S	447.61 E	363,902.126	586,630.544	0.26	-6.99	-37.28	
5,348.00	0.80	186.97	5,305.45	5.22 S	447.86 E	363,900.380	586,630.791	0.75	-8.74	153.18	
5,442.00	1.14	172.05	5,399.44	6.80 S	447.91 E	363,898.803	586,630.841	0.45	-10.31	-44.22	
5,537.00	1.18	230.08	5,494.42	8.36 S	447.29 E	363,897.239	586,630.221	1.19	-11.87	117.23	
5,631.00	1.72	246.32	5,588.39	9.55 S	445.26 E	363,896.051	586,628.187	0.72	-13.05	45.58	
5,725.00	1.80	238.20	5,682.35	10.89 S	442.71 E	363,894.707	586,625.641	0.28	-14.37	-76.30	
5,819.00	1.71	247.32	5,776.30	12.21 S	440.16 E	363,893.388	586,623.092	0.31	-15.67	112.38	
5,914.00	1.24	250.13	5,871.27	13.11 S	437.89 E	363,892.492	586,620.817	0.50	-16.55	172.65	
6,008.00	1.30	226.13	5,965.25	14.19 S	436.16 E	363,891.407	586,619.092	0.57	-17.62	-95.66	
6,103.00	0.96	232.72	6,060.23	15.42 S	434.75 E	363,890.179	586,617.682	0.38	-18.84	162.35	
6,197.00	1.07	248.76	6,154.22	16.22 S	433.31 E	363,889.384	586,616.237	0.32	-19.62	76.98	
6,292.00	1.41	282.07	6,249.19	16.29 S	431.34 E	363,889.307	586,614.267	0.82	-19.68	82.03	
6,386.00	1.19	302.70	6,343.17	15.52 S	429.39 E	363,890.076	586,612.315	0.55	-18.90	125.25	
6,481.00	1.21	310.85	6,438.15	14.34 S	427.80 E	363,891.265	586,610.726	0.18	-17.69	87.40	
6,575.00	1.85	316.66	6,532.12	12.58 S	426.00 E	363,893.018	586,608.934	0.70	-15.93	16.54	
6,670.00	1.53	303.25	6,627.07	10.77 S	423.89 E	363,894.828	586,606.821	0.53	-14.10	-135.55	
6,765.00	0.90	242.92	6,722.06	10.42 S	422.17 E	363,895.184	586,605.096	1.41	-13.73	-144.20	
6,859.00	1.39	222.06	6,816.04	11.60 S	420.74 E	363,894.001	586,603.675	0.68	-14.90	-51.13	

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

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				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
6,953.00	1.24	194.68	6,910.01	13.43 S	419.72 E	363,892.171	586,602.653	0.68	-16.73	-116.87	
7,047.00	1.27	222.64	7,003.99	15.18 S	418.76 E	363,890.421	586,601.690	0.65	-18.47	101.23	
7,141.00	2.79	268.13	7,097.94	16.02 S	415.77 E	363,889.580	586,598.697	2.24	-19.29	70.96	
7,235.00	2.11	287.07	7,191.85	15.59 S	411.83 E	363,890.013	586,594.757	1.12	-18.82	139.23	
7,329.00	0.52	292.36	7,285.82	14.92 S	409.78 E	363,890.683	586,592.708	1.69	-18.13	178.28	
7,422.00	0.92	153.56	7,378.82	15.42 S	409.72 E	363,890.175	586,592.650	1.46	-18.64	-153.44	
7,516.00	1.26	133.43	7,472.80	16.81 S	410.81 E	363,888.789	586,593.736	0.54	-20.04	-58.76	
7,609.00	1.80	140.03	7,565.77	18.63 S	412.49 E	363,886.967	586,595.417	0.61	-21.87	21.39	
7,703.00	2.55	144.09	7,659.70	21.46 S	414.66 E	363,884.142	586,597.592	0.81	-24.71	13.64	
7,798.00	2.85	152.00	7,754.59	25.26 S	417.01 E	363,880.345	586,599.940	0.50	-28.53	55.16	
7,893.00	2.73	148.77	7,849.48	29.28 S	419.29 E	363,876.325	586,602.222	0.21	-32.57	-128.96	
7,987.00	1.78	174.64	7,943.41	32.64 S	420.59 E	363,872.957	586,603.519	1.46	-35.95	145.46	
8,081.00	1.32	199.86	8,037.38	35.11 S	420.36 E	363,870.485	586,603.288	0.86	-38.42	136.17	
8,176.00	2.19	191.10	8,132.33	37.93 S	419.64 E	363,867.675	586,602.567	0.96	-41.22	-21.55	
8,270.00	2.46	189.72	8,226.25	41.68 S	418.95 E	363,863.924	586,601.880	0.29	-44.97	-12.40	
8,364.00	2.11	190.98	8,320.18	45.36 S	418.28 E	363,860.237	586,601.210	0.38	-48.65	172.46	
8,458.00	1.94	209.95	8,414.12	48.44 S	417.16 E	363,857.159	586,600.086	0.73	-51.72	113.59	
8,517.00	1.63	219.14	8,473.09	49.96 S	416.13 E	363,855.643	586,599.058	0.71	-53.22	141.81	
8,549.00	2.61	350.77	8,505.08	49.59 S	415.72 E	363,856.009	586,598.654	12.15	-52.85	149.87	KOP – 8549'
8,581.00	8.20	355.72	8,536.93	46.59 S	415.44 E	363,859.007	586,598.366	17.51	-49.85	7.24	
8,612.00	13.80	357.06	8,567.35	40.69 S	415.08 E	363,864.908	586,598.011	18.08	-43.95	3.27	
8,644.00	20.01	351.96	8,597.95	31.45 S	414.12 E	363,874.151	586,597.049	19.93	-34.70	-15.89	
8,675.00	26.57	348.92	8,626.41	19.38 S	412.04 E	363,886.220	586,594.972	21.51	-22.62	-11.79	
8,706.00	32.68	348.25	8,653.34	4.37 S	409.00 E	363,901.232	586,591.933	19.74	-7.58	-3.40	
8,753.00	38.12	349.80	8,691.64	22.35 N	403.85 E	363,927.953	586,586.776	11.73	19.18	10.01	
8,801.00	39.84	355.30	8,728.97	52.27 N	399.96 E	363,957.869	586,582.891	8.05	49.13	65.72	
8,848.00	44.26	4.43	8,763.89	83.67 N	399.99 E	363,989.271	586,582.924	16.04	80.53	57.60	
8,895.00	48.99	7.78	8,796.16	117.62 N	403.66 E	364,023.217	586,586.594	11.32	114.44	28.40	
8,942.00	53.26	8.69	8,825.66	153.82 N	408.91 E	364,059.420	586,591.842	9.21	150.60	9.71	
8,990.00	56.93	9.11	8,853.12	192.70 N	415.00 E	364,098.303	586,597.935	7.68	189.44	5.48	
9,037.00	62.22	7.43	8,876.91	232.80 N	420.82 E	364,138.396	586,603.746	11.67	229.48	-15.75	FTP – 9037'
9,084.00	68.46	3.73	8,896.52	275.28 N	424.93 E	364,180.879	586,607.862	15.08	271.93	-29.11	
9,131.00	72.45	1.57	8,912.24	319.51 N	426.97 E	364,225.112	586,609.899	9.53	316.15	-27.40	
9,178.00	76.21	1.02	8,924.93	364.75 N	427.99 E	364,270.345	586,610.919	8.08	361.37	-8.09	
9,225.00	79.90	0.41	8,934.66	410.72 N	428.56 E	364,316.316	586,611.491	7.95	407.34	-9.25	
9,320.00	84.37	359.45	8,947.65	504.80 N	428.44 E	364,410.397	586,611.372	4.81	501.42	-12.08	
9,415.00	87.56	358.37	8,954.34	599.53 N	426.64 E	364,505.131	586,609.568	3.54	596.16	-18.70	

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

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9,509.00	90.37	357.88	8,956.04	693.46 N	423.56 E	364,599.055	586,606.493	3.03	690.11	-9.90	
9,603.00	90.90	358.22	8,955.00	787.39 N	420.36 E	364,692.995	586,603.295	0.67	784.07	32.68	
9,697.00	91.79	358.20	8,952.79	881.32 N	417.43 E	364,786.922	586,600.359	0.95	878.02	-1.29	
9,791.00	91.82	357.11	8,949.83	975.20 N	413.58 E	364,880.795	586,596.515	1.16	971.92	-88.41	
9,886.00	92.66	357.28	8,946.11	1,070.01 N	408.94 E	364,975.608	586,591.870	0.90	1,066.76	11.43	
9,980.00	93.31	356.74	8,941.22	1,163.75 N	404.04 E	365,069.352	586,586.973	0.90	1,160.54	-39.67	
10,074.00	91.72	357.49	8,937.09	1,257.54 N	399.32 E	365,163.139	586,582.247	1.87	1,254.36	154.75	
10,169.00	91.82	358.37	8,934.16	1,352.43 N	395.89 E	365,258.030	586,578.817	0.93	1,349.28	83.50	
10,262.00	92.19	358.01	8,930.91	1,445.33 N	392.95 E	365,350.927	586,575.882	0.55	1,442.20	-44.19	
10,356.00	91.72	359.21	8,927.70	1,539.24 N	390.67 E	365,444.842	586,573.603	1.37	1,536.13	111.38	
10,451.00	91.05	0.96	8,925.40	1,634.21 N	390.81 E	365,539.810	586,573.744	1.97	1,631.09	110.93	
10,545.00	89.91	2.54	8,924.62	1,728.16 N	393.68 E	365,633.759	586,576.615	2.07	1,725.01	125.80	
10,640.00	91.85	3.86	8,923.16	1,822.99 N	398.99 E	365,728.593	586,581.916	2.47	1,819.80	34.22	
10,734.00	92.35	3.65	8,919.71	1,916.73 N	405.14 E	365,822.328	586,588.068	0.58	1,913.49	-22.76	
10,828.00	90.77	3.16	8,917.15	2,010.52 N	410.72 E	365,916.124	586,593.649	1.76	2,007.24	-162.77	
10,922.00	89.10	2.29	8,917.26	2,104.41 N	415.19 E	366,010.013	586,598.118	2.00	2,101.09	-152.48	
11,015.00	88.15	0.39	8,919.49	2,197.36 N	417.36 E	366,102.956	586,600.292	2.28	2,194.01	-116.59	
11,109.00	89.04	359.72	8,921.80	2,291.33 N	417.45 E	366,196.926	586,600.382	1.18	2,287.98	-36.97	
11,203.00	89.88	359.50	8,922.68	2,385.32 N	416.81 E	366,290.918	586,599.742	0.92	2,381.97	-14.68	
11,297.00	90.15	359.37	8,922.66	2,479.31 N	415.89 E	366,384.914	586,598.815	0.32	2,475.97	-25.71	
11,392.00	90.68	358.93	8,921.97	2,574.30 N	414.48 E	366,479.900	586,597.406	0.73	2,570.97	-39.70	
11,487.00	91.11	358.81	8,920.49	2,669.27 N	412.60 E	366,574.870	586,595.533	0.47	2,665.95	-15.59	
11,582.00	91.58	358.05	8,918.26	2,764.21 N	410.00 E	366,669.807	586,592.931	0.94	2,760.90	-58.25	
11,678.00	92.29	358.15	8,915.01	2,860.10 N	406.82 E	366,765.699	586,589.750	0.75	2,856.82	8.01	
11,773.00	92.16	358.04	8,911.33	2,954.97 N	403.66 E	366,860.575	586,586.594	0.18	2,951.71	-139.78	
11,868.00	92.94	357.79	8,907.10	3,049.82 N	400.21 E	366,955.417	586,583.141	0.86	3,046.58	-17.75	
11,963.00	91.18	359.17	8,903.68	3,144.72 N	397.69 E	367,050.316	586,580.624	2.35	3,141.50	141.89	
12,057.00	91.15	358.78	8,901.77	3,238.68 N	396.01 E	367,144.282	586,578.943	0.42	3,235.47	-94.40	
12,152.00	91.98	359.00	8,899.18	3,333.63 N	394.17 E	367,239.228	586,577.103	0.90	3,330.43	14.84	
12,247.00	90.62	359.74	8,897.02	3,428.59 N	393.13 E	367,334.195	586,576.059	1.63	3,425.40	151.45	
12,341.00	90.19	359.46	8,896.36	3,522.59 N	392.47 E	367,428.190	586,575.403	0.55	3,519.40	-146.93	
12,435.00	89.48	358.46	8,896.63	3,616.57 N	390.77 E	367,522.172	586,573.697	1.30	3,613.39	-125.38	
12,529.00	89.97	358.26	8,897.08	3,710.53 N	388.08 E	367,616.132	586,571.006	0.56	3,707.37	-22.20	
12,623.00	90.40	358.17	8,896.78	3,804.49 N	385.15 E	367,710.086	586,568.078	0.47	3,801.34	-11.82	
12,718.00	90.96	357.85	8,895.65	3,899.42 N	381.85 E	367,805.021	586,564.780	0.68	3,896.30	-29.74	
12,812.00	89.54	357.88	8,895.24	3,993.35 N	378.35 E	367,898.953	586,561.278	1.51	3,990.26	178.79	

HALLIBURTON

Eddy County, New Mexico (NAD83)

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				Northing (usft)	Easting (usft)	Northing (usft)	Easting (usft)				
12,906.00	90.09	357.45	8,895.54	4,087.27 N	374.52 E	367,992.874	586,557.448	0.74	4,084.21	-38.02	
13,000.00	90.34	359.33	8,895.19	4,181.23 N	371.88 E	368,086.831	586,554.807	2.02	4,178.18	82.42	
13,095.00	91.76	359.77	8,893.45	4,276.21 N	371.13 E	368,181.810	586,554.061	1.56	4,273.16	17.21	
13,190.00	89.26	1.49	8,892.60	4,371.19 N	372.18 E	368,276.789	586,555.106	3.19	4,368.13	145.46	
13,284.00	89.91	1.41	8,893.29	4,465.16 N	374.55 E	368,370.756	586,557.485	0.70	4,462.08	-7.02	
13,378.00	90.56	1.15	8,892.90	4,559.13 N	376.65 E	368,464.731	586,559.584	0.74	4,556.03	-21.80	
13,473.00	88.80	1.80	8,893.43	4,654.09 N	379.10 E	368,559.694	586,562.030	1.97	4,650.97	159.73	
13,568.00	88.67	0.94	8,895.53	4,749.04 N	381.37 E	368,654.643	586,564.300	0.92	4,745.90	-98.61	
13,662.00	89.29	0.71	8,897.20	4,843.02 N	382.72 E	368,748.618	586,565.654	0.70	4,839.86	-20.35	
13,757.00	89.26	0.26	8,898.40	4,938.01 N	383.53 E	368,843.607	586,566.458	0.47	4,934.84	-93.82	
13,851.00	89.91	0.07	8,899.08	5,032.00 N	383.80 E	368,937.603	586,566.728	0.72	5,028.83	-16.29	
13,946.00	90.28	359.38	8,898.93	5,127.00 N	383.34 E	369,032.601	586,566.272	0.82	5,123.83	-61.80	
14,040.00	90.84	359.52	8,898.01	5,220.99 N	382.44 E	369,126.592	586,565.370	0.61	5,217.83	14.03	
14,135.00	88.95	0.31	8,898.18	5,315.99 N	382.30 E	369,221.587	586,565.229	2.16	5,312.82	157.32	
14,229.00	89.26	0.06	8,899.65	5,409.97 N	382.60 E	369,315.574	586,565.533	0.42	5,406.80	-38.88	
14,324.00	90.56	0.76	8,899.80	5,504.97 N	383.28 E	369,410.569	586,566.212	1.55	5,501.79	28.30	
14,418.00	91.02	0.58	8,898.50	5,598.95 N	384.38 E	369,504.554	586,567.311	0.53	5,595.76	-21.37	
14,512.00	91.42	359.98	8,896.50	5,692.93 N	384.84 E	369,598.531	586,567.771	0.77	5,689.73	-56.30	
14,606.00	90.03	359.91	8,895.31	5,786.92 N	384.75 E	369,692.521	586,567.681	1.48	5,783.72	-177.12	
14,701.00	89.91	359.73	8,895.36	5,881.92 N	384.45 E	369,787.520	586,567.382	0.23	5,878.72	-123.69	
14,795.00	90.25	359.62	8,895.23	5,975.92 N	383.92 E	369,881.518	586,566.849	0.38	5,972.72	-17.93	
14,889.00	90.65	359.37	8,894.49	6,069.91 N	383.09 E	369,975.512	586,566.020	0.50	6,066.72	-32.00	
14,983.00	87.90	358.21	8,895.68	6,163.87 N	381.11 E	370,069.473	586,564.036	3.18	6,160.69	-157.14	
15,077.00	87.56	357.85	8,899.41	6,257.74 N	377.88 E	370,163.343	586,560.807	0.53	6,254.58	-133.39	
15,172.00	87.56	357.68	8,903.45	6,352.58 N	374.18 E	370,258.185	586,557.106	0.18	6,349.45	-90.00	
15,266.00	88.30	357.44	8,906.85	6,446.44 N	370.18 E	370,352.037	586,553.107	0.83	6,443.33	-17.96	
15,360.00	88.86	357.42	8,909.17	6,540.31 N	365.96 E	370,445.914	586,548.893	0.60	6,537.24	-2.05	
15,454.00	89.35	357.51	8,910.64	6,634.21 N	361.81 E	370,539.810	586,544.736	0.53	6,631.16	10.41	
15,548.00	89.79	357.79	8,911.35	6,728.13 N	357.95 E	370,633.728	586,540.882	0.55	6,725.11	32.47	
15,642.00	90.56	357.91	8,911.06	6,822.06 N	354.43 E	370,727.660	586,537.355	0.83	6,819.07	8.86	
15,704.00	90.44	357.76	8,910.52	6,884.01 N	352.08 E	370,789.614	586,535.013	0.31	6,881.04	-128.66	Last MWD Survey 15704' MD/8910.52' TVD
15,705.00	90.44	357.76	8,910.51	6,885.01 N	352.04 E	370,790.613	586,534.974	0.00	6,882.04	0.00	LTP – 15,705'
15,759.00	90.44	357.76	8,910.10	6,938.97 N	349.93 E	370,844.570	586,532.863	0.00	6,936.01	0.00	Projection to TD 15759' MD / 8910.10 TVD (330.99' FNL, 346.79' FEL) Sec. 28

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys**Design Annotations**

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
195.00	195.00	0.14	-0.84	First MWD Survey 195' MD/195' TVD
8,549.00	8,505.08	-49.59	415.72	KOP – 8549'
9,037.00	8,876.91	232.80	420.82	FTP – 9037'
15,704.00	8,910.52	6,884.01	352.08	Last MWD Survey 15704' MD/8910.52' TVD
15,705.00	8,910.51	6,885.01	352.04	LTP – 15,705'
15,759.00	8,910.10	6,938.97	349.93	Projection to TD 15759' MD / 8910.10 TVD (330.99' FNL, 346.79' FEL) Sec. 28

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin		Start TVD (usft)
				+N/-S (usft)	+E/-W (usft)	
User	No Target (Freehand)	359.55	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
195.00	15,704.00	MWD (IFR Corrected)	3_MWD+IFR1+MS
15,759.00	15,759.00	Projection to TD	3_Blind

Casing Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
350.00	349.99	13 3/8"	13-3/8	17-1/2
2,013.00	2,012.23	10 3/4"	10-3/4	13-1/2

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	()	()	()	()	()	()	()		
- Shape									
()									

HALLIBURTON

Eddy County, New Mexico (NAD83)

Design Report for Klein 33 Federal Com 11H - Final Surveys

Directional Difficulty Index

Average Dogleg over Survey:	1.53 °/100usft	Maximum Dogleg over Survey:	21.51 °/100usft at 8,675.00 usft
Net Tortosity applicable to Plans:	0.39 °/100usft	Directional Difficulty Index:	6.507

Audit Info

HALLIBURTON

Eddy County, New Mexico (NAD83)

North Reference Sheet for Klein 33 Federal Com Pad (Grid) - Klein 33 Federal Com 11H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to RKB (Cactus 137) 25' + GL(3213.3') @ 3238.30usft. Northing and Easting are relative to Klein 33 Federal Com 11H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.3333333°, Longitude Origin:0.0000000°, Latitude Origin:0.0000000°

False Easting: 541,337.500usft, False Northing: 0.000usft, Scale Reduction: 0.99991139

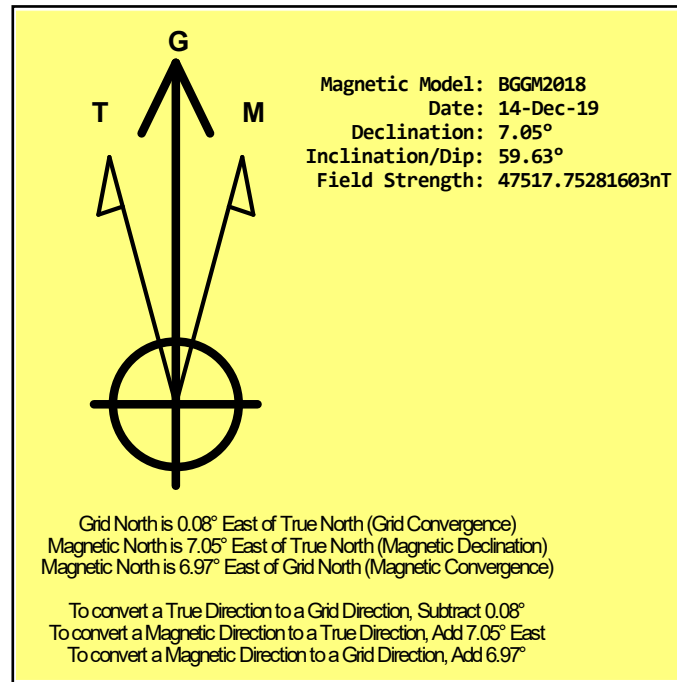
Grid Coordinates of Well: 363,905.600 usft N, 586,182.930 usft E

Geographical Coordinates of Well: 32.0003741, -104.1886645

Grid Convergence at Surface is: 0.08°

Based upon Minimum Curvature type calculations, at a Measured Depth of 15,759.00usft
the Bottom Hole Displacement is 6,947.79usft in the Direction of 2.89° (Grid).

Magnetic Convergence at surface is: -6.97° (14 December 2019, , BGGM2018)



District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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

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

ACKNOWLEDGMENTS

Action 92501

ACKNOWLEDGMENTS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 92501
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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CONDITIONS

Action 92501

CONDITIONS

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	Action Number: 92501
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
llowe	None	4/6/2022