

Well Name: BIG STAG FED COM	Well Location: T21S / R32E / SEC 1 / SWSE / 32.500766 / -103.6272207	County or Parish/State: LEA / NM
Well Number: 504H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM127892, NMNM92187	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547066	Well Status: Approved Application for Permit to Drill	Operator: ASCENT ENERGY LLC

Notice of Intent

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 05/28/2021

Time Sundry Submitted: 01:09

Date proposed operation will begin: 05/31/2021

Procedure Description: Ascent Energy respectfully requests approval for the following revisions to the Big Stag Fed Com 603H. -Change the well name from the Big Stag Fed Com 603H to Big Stag Fed Com 504H -Revise the BHL from 1270' FNL, 2310' FEL to 1271' FNL, 2178' FWL -Revise target formation from 3rd Bone Spring Sand to 2nd Bone Spring Sand. -Request approval to increase casing diameter on shallow casing strings to improve drilling efficiencies - Propose BOP substitution to fit on the larger casing sizes of the shallow casing strings. Attached documents include: Updated Big Stag Fed Com 504H C102, Proposed Directional Survey plan and drawing, Anti-Collision plan, Well Pad plat, and Proposed casing and BOP substitution document.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Big_Stag_504H_Sundry_24May_v3_20210528130400.pdf
- AC_REPORT_2_BIG_STAG_FED_COM_504H_20210527152230.pdf
- PROPOSAL_2_BIG_STAG_FED_COM_504H_20210527152226.pdf
- 2020010110_ASCENT_BIG_STAG_504H_WELL_SITE_REVISIED_05_07_2021_20210525163408.pdf
- 2020010110_ASCENT_BIG_STAG_FED_COM_LEA_504H_C_102_REVISIED_05_07_2021_FINAL_20210525163407.pdf
- DWG2__24X36_20210525163343.pdf

Well Name: BIG STAG FED COM

Well Location: T21S / R32E / SEC 1 / SWSE / 32.500766 / -103.6272207

County or Parish/State: LEA / NM

Well Number: 504H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM127892, NMNM92187

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002547066

Well Status: Approved Application for Permit to Drill

Operator: ASCENT ENERGY LLC

Conditions of Approval

Additional Reviews

Big_Stagg_Fed_Com_603H_Sundry_COA_20210601105012.pdf

1_21S_32E_O_ATS_19_3155_Big_Stagg_Fed_Com_603H_Sundry_Lea_NMNM127892_Ascent_Energy_LLC_13_22_06_01_2021_Yolanda_Jimenez_20210601105001.pdf

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: BEN METZ

Signed on: MAY 28, 2021 01:08 PM

Name: ASCENT ENERGY LLC

Title: Vice President Exploration

Street Address: PO BOX 270983

City: LITTLETON **State:** CO

Phone: (303) 513-8590

Email address: BMETZ@ASCENTENERGY.US

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 06/01/2021

Signature: Chris Walls

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-47066	² Pool Code 97895	³ Pool Name WC-025 G-08 S213304D; BONE SPRING
⁴ Property Code 327306	⁵ Property Name BIG STAG FED COM	
⁷ OGRID No. 325830	⁸ Operator Name ASCENT ENERGY, LLC.	
		⁶ Well Number 504H
		⁹ Elevation 3,795'

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
O	1	21 S	32 E		5	SOUTH	2,216	EAST	LEA

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
B	13	21 S	32 E		1,271	NORTH	2,178	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

SHL (NAD83 NME)
Y = 546,606.5
X = 759,091.8
LAT. = 32.500700 °N
LONG. = 103.627015 °W

FTP (NAD83 NME)
Y = 546,493.8
X = 758,219.8
LAT. = 32.500406 °N
LONG. = 103.629846 °W

CORNER COORDINATES (NAD83 NME)
A - Y = 546,597.8 N
B - Y = 543,956.2 N
C - Y = 541,317.0 N
D - Y = 539,996.6 N
E - Y = 539,984.9 N
F - Y = 541,305.4 N
G - Y = 543,945.2 N
H - Y = 546,586.2 N

LTP (NAD83 NME)
Y = 540,092.5
X = 758,259.8
LAT. = 32.482811 °N
LONG. = 103.629853 °W

BHL (NAD83 NME)
Y = 540,042.5
X = 758,260.1
LAT. = 32.482673 °N
LONG. = 103.629853 °W

SHL (NAD27 NME)
Y = 546,545.7
X = 717,910.5
LAT. = 32.500579 °N
LONG. = 103.626525 °W

FTP (NAD27 NME)
Y = 546,433.0
X = 717,038.5
LAT. = 32.500285 °N
LONG. = 103.629356 °W

CORNER COORDINATES (NAD27 NME)
A - Y = 546,537.0 N
B - Y = 543,895.4 N
C - Y = 541,256.3 N
D - Y = 539,935.9 N
E - Y = 539,924.2 N
F - Y = 541,244.7 N
G - Y = 543,884.5 N
H - Y = 546,525.3 N

LTP (NAD27 NME)
Y = 540,031.9
X = 717,078.3
LAT. = 32.482690 °N
LONG. = 103.629363 °W

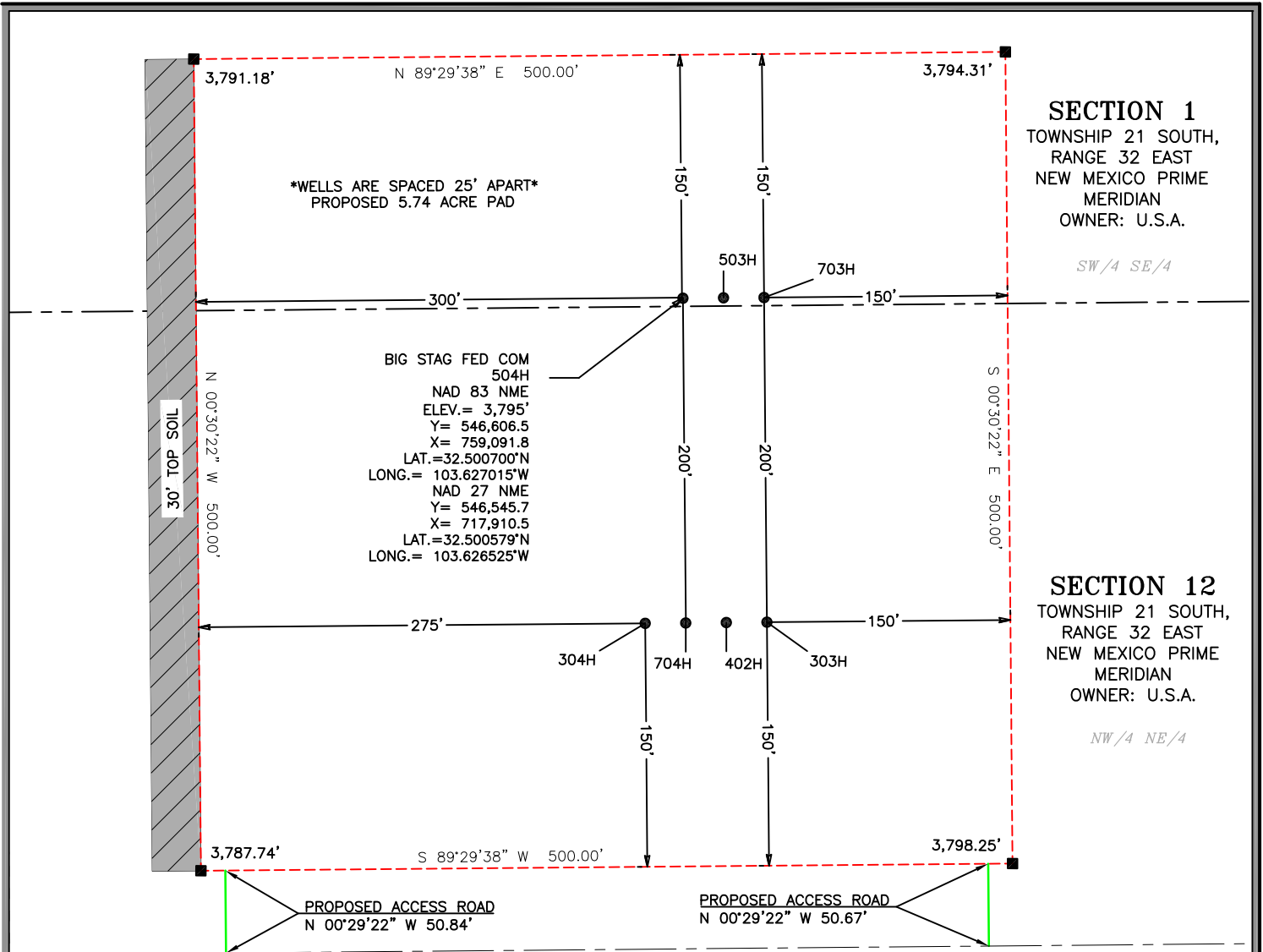
BHL (NAD27 NME)
Y = 539,981.9
X = 717,078.7
LAT. = 32.482553 °N
LONG. = 103.629363 °W

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.

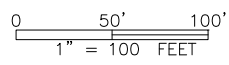
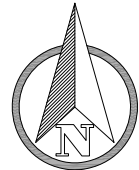
Signature _____ Date _____
Printed Name _____
E-mail Address _____

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.

05-07-2021
Date of Survey _____
Signature and Seal of Professional Surveyor:
MARK DILLON HARP 23786
Certificate Number _____ RR 20200110110



PROPOSED ACCESS ROAD (AS DESCRIBED ON A SEPARATE PLAT)



NOTE:
1). SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP"
FOR PROPOSED ROAD LOCATION
DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF N.M. HIGHWAY 176 AND BOOTLEG LANE,
GO SOUTH ON BOOTLEG LANE APPROX. 1.7 MILES . TURN LEFT (EAST) ON
A GRAVEL ROAD AND GO APPROX. 0.47 MILES TURN LEFT (NORTH) ,THE
LOCATION IS TO THE NORTH.

LEGEND

- PROPOSED ACCESS RD.
- PROPOSED PAD
- SECTION LINE

I, MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR
NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND
THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED
WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION;
THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY
MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW
MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF
MY KNOWLEDGE AND BELIEF.

MARK DILLON HARP
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 23786



ASCENT ENERGY, LLC.

WELL SITE PLAN

BIG STAG FED COM 504H
LOCATED 2,216 FEET FROM THE EAST LINE
AND 5 FEET FROM THE SOUTH LINE OF
SECTION 1, TOWNSHIP 21 SOUTH, RANGE 32
EAST, N.M.P.M. LEA COUNTY, NEW MEXICO



550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

DATE:	05-07-2021	PROJECT NO:	2020010110
DRAWN BY:	RR	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 3
FIELD CREW:	RE	REVISION:	0

ASCENT ENERGY

LEA COUNTY, NEW MEXICO (NAD 83) (GRID)

SEC. 1 T21S R32E N.M.P.M. (GRID)

BIG STAG FED COM 504H

ORIGINAL WELLBORE

10 May, 2021

Plan: PROPOSAL #2





Project: LEA COUNTY, NEW MEXICO (NAD 83) (GRID)
 Site: SEC. 1 T21S R32E N.M.P.M. (GRID)
 Well: BIG STAG FED COM 504H
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #2

ANNOTATIONS

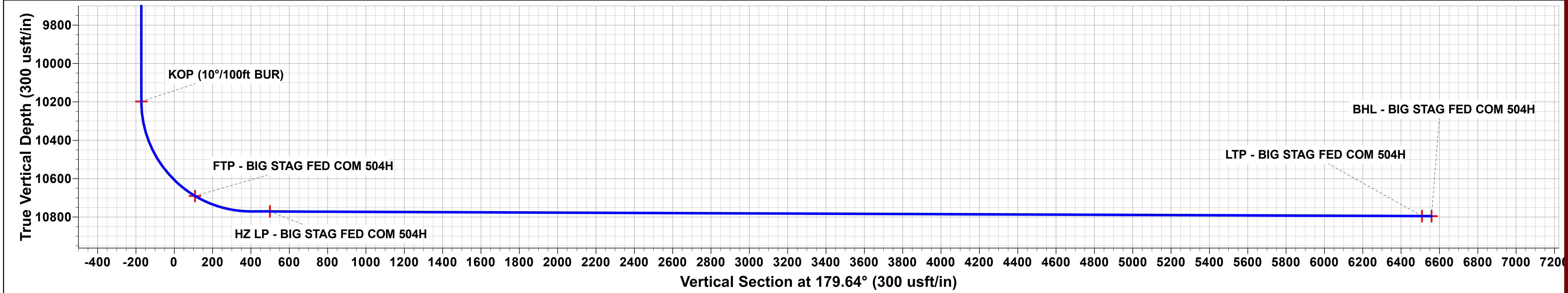
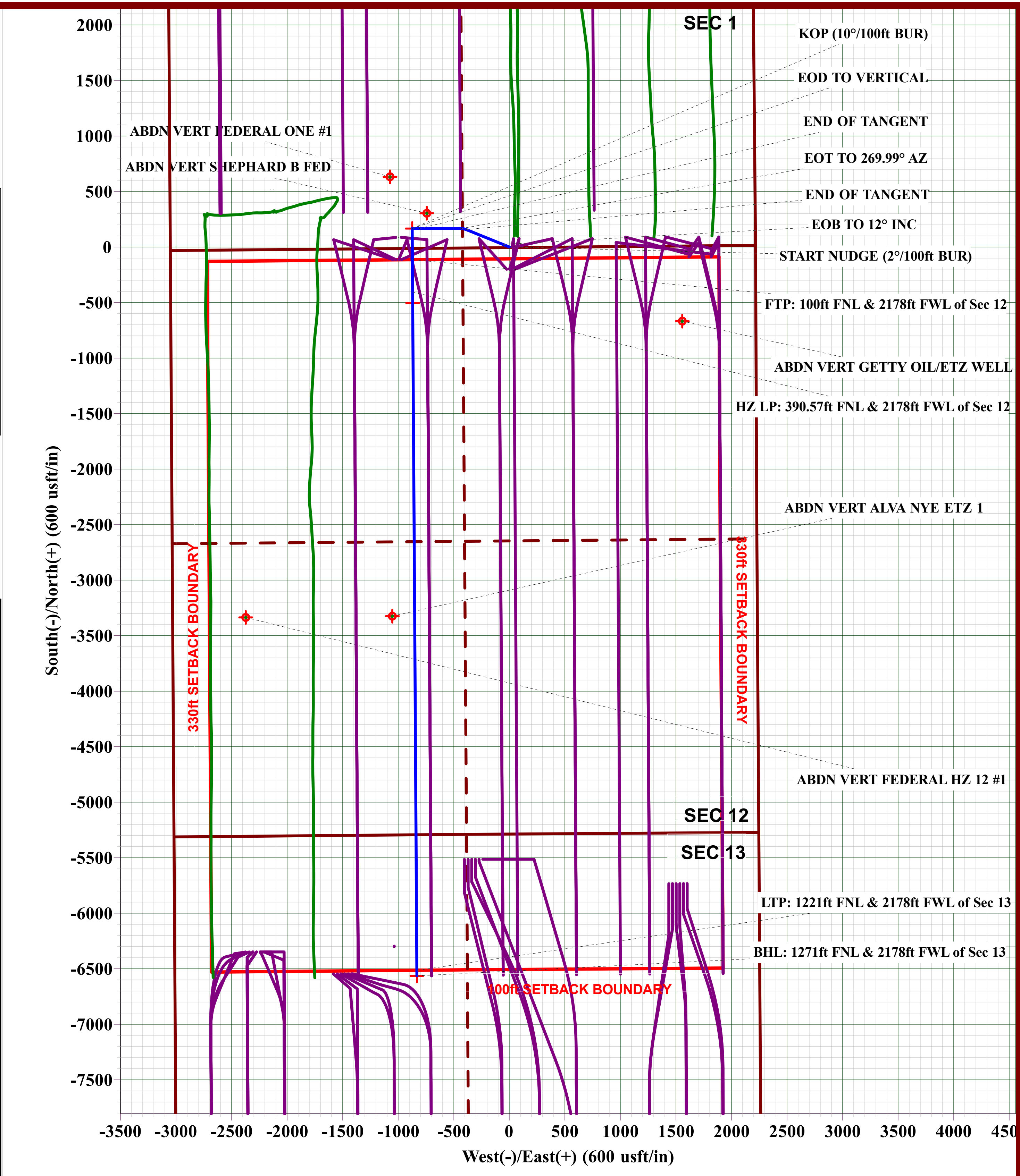
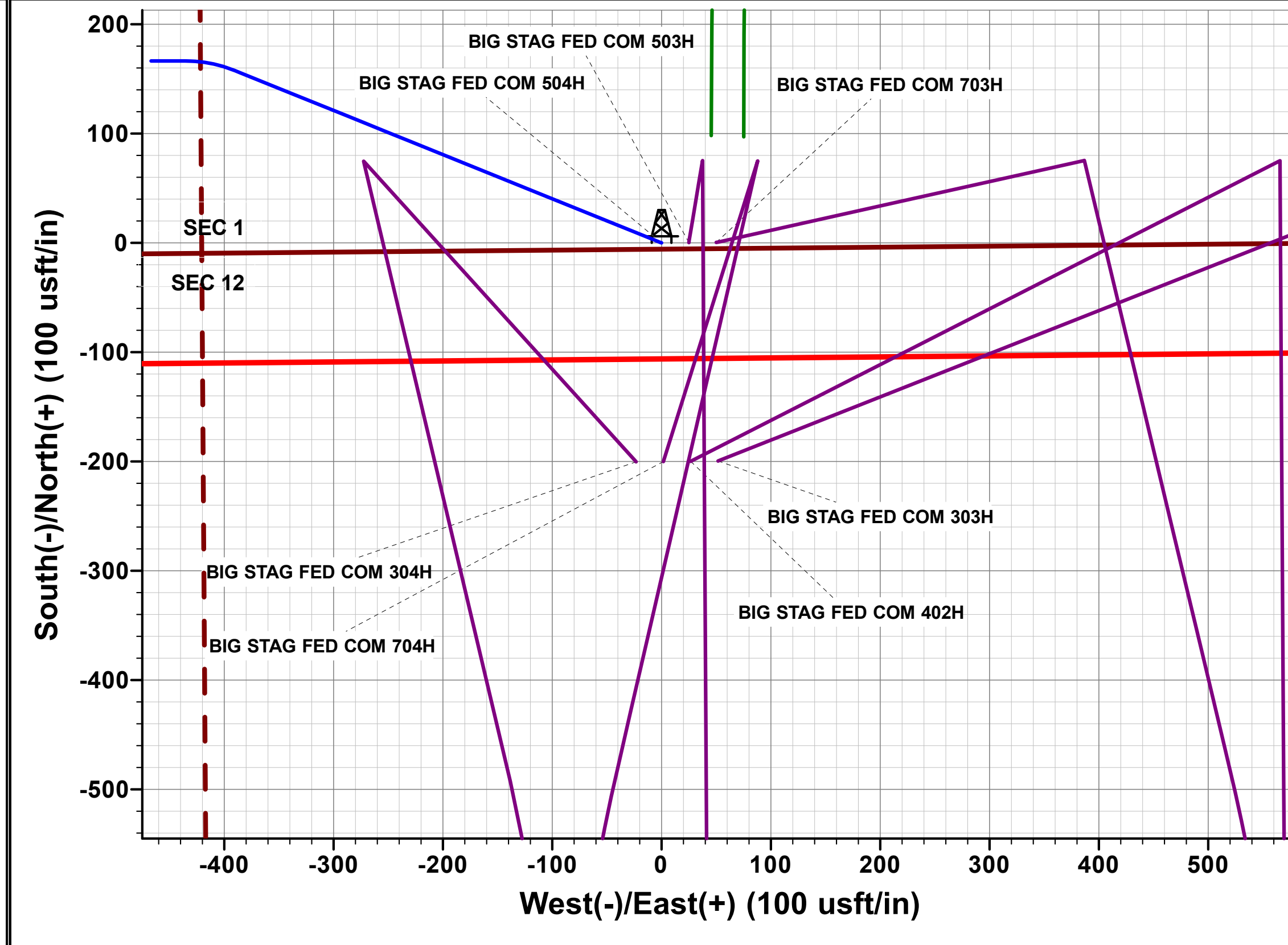
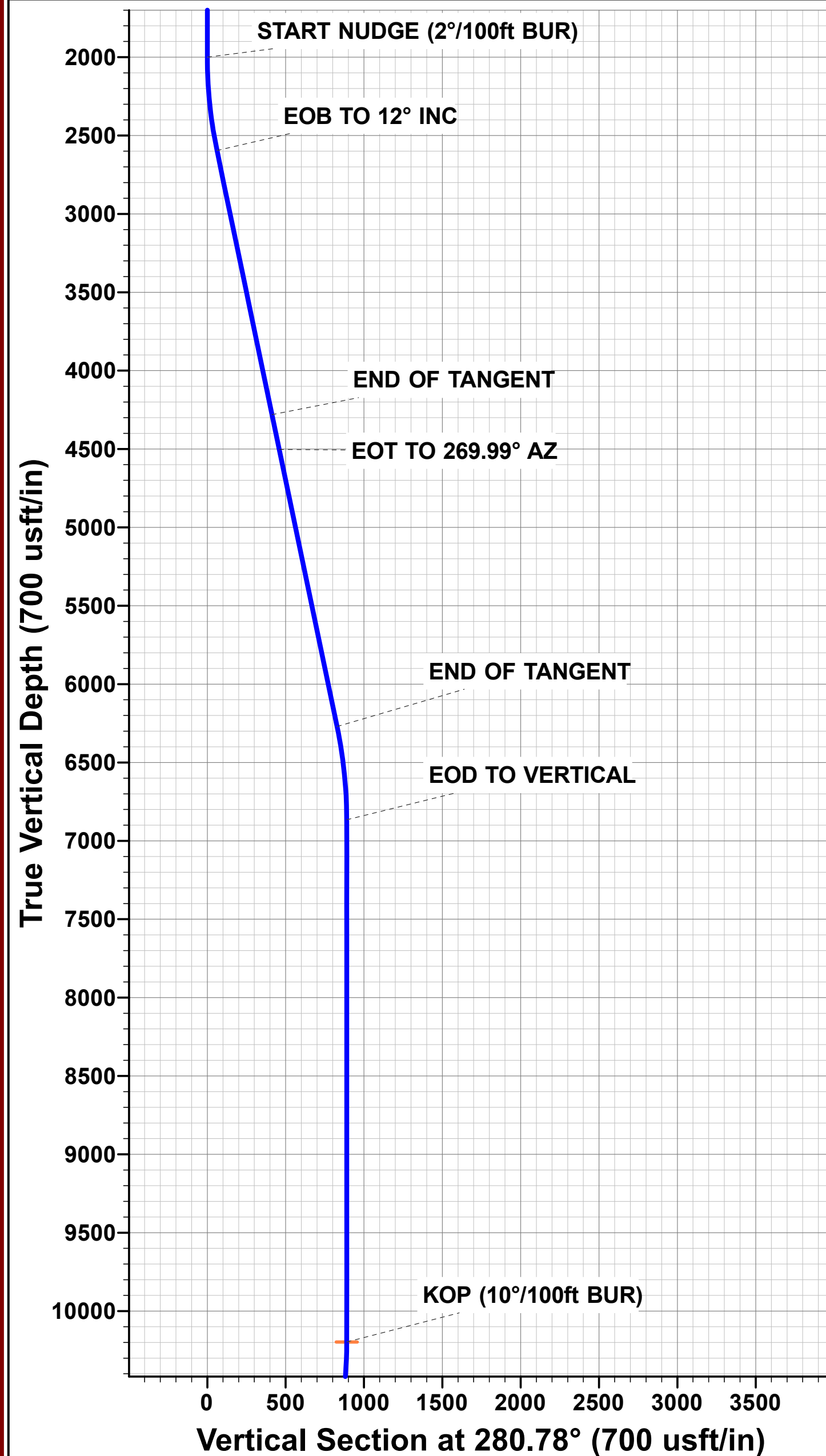
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Dep	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 5ft FSL & 2216ft FEL of Sec 1
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	START NUDDGE (2°/100ft BUR)
2600.00	12.00	292.00	2595.62	23.45	-58.04	-23.82	62.60	EOB TO 12° INC
4322.75	12.00	292.00	4280.73	157.63	-390.14	-160.08	420.78	END OF TANGENT
4550.23	12.00	269.99	4503.35	166.49	-435.74	-169.22	467.59	EOT TO 269.99° AZ
6356.68	12.00	269.99	6270.35	166.39	-811.25	-171.49	843.11	END OF TANGENT
6956.57	0.00	0.00	6865.86	166.38	-873.83	-171.87	905.69	EOD TO VERTICAL
10288.26	0.00	0.00	10197.55	166.38	-873.83	-171.87	905.69	KOP (10°/100ft BUR)
10880.86	59.26	179.64	10690.00	-113.71	-872.01	108.23	1186.05	FTP: 100ft FNL & 2178ft FWL of Sec 12
11185.97	89.77	179.64	10770.50	-404.28	-870.24	398.80	1476.35	HZ LP: 390.57ft FNL & 2178ft FWL of Sec 12
17295.93	89.77	179.64	10794.80	-6514.07	-832.05	6508.71	7586.27	LTP: 1221ft FNL & 2178ft FWL of Sec 13
17345.93	89.77	179.63	10795.00	-6564.07	-831.73	6558.71	7636.27	BHL: 1271ft FNL & 2178ft FWL of Sec 13

PROPOSED LOCAL COORDINATES:

SHL: 5ft FSL & 2216ft FeL Sec 1
 FTP: 100ft FNL & 2178ft FWL of Sec 12
 HZ LP: 390.57ft FNL & 2178ft FWL Sec 12
 LTP: 1221ft FNL & 2178ft FWL of Sec 13
 BHL: 1271ft FNL & 2178ft FWL of Sec 13

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - BIG STAG FED COM 504H	10197.55	166.38	-873.83	32.501173	-103.629846
FTP - BIG STAG FED COM 504H	10690.00	-113.71	-872.01	32.500403	-103.629846
HZ LP - BIG STAG FED COM 504H	10770.50	-504.26	-869.62	32.499330	-103.629847
LTP - BIG STAG FED COM 504H	10794.80	-6514.07	-832.05	32.482811	-103.629853
BHL - BIG STAG FED COM 504H	10795.00	-6564.07	-831.73	32.482674	-103.629853



Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well BIG STAG FED COM 504H
Company:	ASCENT ENERGY	TVD Reference:	KB 25ft @ 3820.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB 25ft @ 3820.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	North Reference:	Grid
Well:	BIG STAG FED COM 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Project	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	SEC. 1 T21S R32E N.M.P.M. (GRID)				
Site Position:		Northing:	546,692.70 usft	Latitude:	32.500955
From:	Map	Easting:	758,094.60 usft	Longitude:	-103.630248
Position Uncertainty:	0.00 usft	Slot Radius:	1.10ft	Grid Convergence:	0.38 °

Well	BIG STAG FED COM 504H					
Well Position	+N/-S	-86.20 usft	Northing:	546,606.50 usft	Latitude:	32.500700
	+E/-W	997.24 usft	Easting:	759,091.80 usft	Longitude:	-103.627015
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,795.00 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2021-05-10	6.60	60.15	47,659.41276401

Design	PROPOSAL #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.64

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.00	0.00	0.00	0.00	-3,820.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	-1,820.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	12.00	292.00	2,595.62	-1,224.38	23.45	-58.04	2.00	2.00	0.00	292.00	
4,322.75	12.00	292.00	4,280.73	460.73	157.63	-390.14	0.00	0.00	0.00	0.00	
4,550.23	12.00	269.99	4,503.36	683.36	166.49	-435.74	2.00	0.00	-9.68	-100.80	
6,356.68	12.00	269.99	6,270.35	2,450.35	166.39	-811.25	0.00	0.00	0.00	0.00	
6,956.57	0.00	0.00	6,865.86	3,045.86	166.38	-873.83	2.00	-2.00	15.01	180.00	
10,288.26	0.00	0.00	10,197.55	6,377.55	166.38	-873.83	0.00	0.00	0.00	0.00	KOP - BIG STAG F
11,185.97	89.77	179.64	10,770.50	6,950.50	-404.28	-870.24	10.00	10.00	0.00	179.64	
17,295.93	89.77	179.64	10,794.80	6,974.80	-6,514.07	-832.05	0.00	0.00	0.00	0.00	LTP - BIG STAG FE
17,345.93	89.77	179.63	10,795.00	6,975.00	-6,564.07	-831.73	0.02	0.00	-0.02	-92.35	BHL - BIG STAG FE

Planning Report

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Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB 25ft @ 3820.00usft
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Well:	BIG STAG FED COM 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
SHL: 5ft FSL & 2216ft FEL of Sec 1										
0.00	0.00	0.00	0.00	3,820.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	3,720.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	3,620.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	3,520.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	3,420.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	3,320.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	3,220.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	3,120.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	3,020.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	2,920.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	2,820.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	2,720.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	2,620.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	2,520.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	2,420.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	2,320.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	2,220.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	2,120.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	2,020.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	1,920.00	0.00	0.00	0.00	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
2,000.00	0.00	0.00	2,000.00	1,820.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	2.00	292.00	2,099.98	1,720.02	0.65	-1.62	-0.66	2.00	2.00	0.00
2,200.00	4.00	292.00	2,199.84	1,620.16	2.61	-6.47	-2.65	2.00	2.00	0.00
2,300.00	6.00	292.00	2,299.45	1,520.55	5.88	-14.55	-5.97	2.00	2.00	0.00
2,400.00	8.00	292.00	2,398.70	1,421.30	10.44	-25.85	-10.61	2.00	2.00	0.00
2,500.00	10.00	292.00	2,497.47	1,322.53	16.30	-40.35	-16.56	2.00	2.00	0.00
EOB TO 12° INC										
2,600.00	12.00	292.00	2,595.62	1,224.38	23.45	-58.04	-23.82	2.00	2.00	0.00
2,700.00	12.00	292.00	2,693.44	1,126.56	31.24	-77.32	-31.73	0.00	0.00	0.00
2,800.00	12.00	292.00	2,791.25	1,028.75	39.03	-96.60	-39.63	0.00	0.00	0.00
2,900.00	12.00	292.00	2,889.07	930.93	46.82	-115.88	-47.54	0.00	0.00	0.00
3,000.00	12.00	292.00	2,986.88	833.12	54.61	-135.15	-55.45	0.00	0.00	0.00
3,100.00	12.00	292.00	3,084.70	735.30	62.39	-154.43	-63.36	0.00	0.00	0.00
3,200.00	12.00	292.00	3,182.51	637.49	70.18	-173.71	-71.27	0.00	0.00	0.00
3,300.00	12.00	292.00	3,280.33	539.67	77.97	-192.98	-79.18	0.00	0.00	0.00
3,400.00	12.00	292.00	3,378.14	441.86	85.76	-212.26	-87.09	0.00	0.00	0.00
3,500.00	12.00	292.00	3,475.96	344.04	93.55	-231.54	-95.00	0.00	0.00	0.00
3,600.00	12.00	292.00	3,573.77	246.23	101.34	-250.82	-102.91	0.00	0.00	0.00
3,700.00	12.00	292.00	3,671.59	148.41	109.12	-270.09	-110.82	0.00	0.00	0.00
3,800.00	12.00	292.00	3,769.40	50.60	116.91	-289.37	-118.73	0.00	0.00	0.00
3,900.00	12.00	292.00	3,867.22	-47.22	124.70	-308.65	-126.64	0.00	0.00	0.00
4,000.00	12.00	292.00	3,965.03	-145.03	132.49	-327.93	-134.55	0.00	0.00	0.00
4,100.00	12.00	292.00	4,062.84	-242.84	140.28	-347.20	-142.46	0.00	0.00	0.00
4,200.00	12.00	292.00	4,160.66	-340.66	148.07	-366.48	-150.37	0.00	0.00	0.00
4,300.00	12.00	292.00	4,258.47	-438.47	155.86	-385.76	-158.28	0.00	0.00	0.00
END OF TANGENT										
4,322.75	12.00	292.00	4,280.73	-460.73	157.63	-390.14	-160.08	0.00	0.00	0.00
4,400.00	11.81	284.56	4,356.32	-536.32	162.62	-405.24	-165.17	2.00	-0.25	-9.63
4,500.00	11.85	274.80	4,454.21	-634.21	166.06	-425.38	-168.72	2.00	0.04	-9.77
EOT TO 269.99° AZ										
4,550.23	12.00	269.99	4,503.35	-683.35	166.49	-435.74	-169.22	2.00	0.29	-9.58

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well BIG STAG FED COM 504H
Company:	ASCENT ENERGY	TVD Reference:	KB 25ft @ 3820.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB 25ft @ 3820.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	North Reference:	Grid
Well:	BIG STAG FED COM 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.00	12.00	269.99	4,552.04	-732.04	166.48	-446.08	-169.28	0.00	0.00	0.00
4,700.00	12.00	269.99	4,649.85	-829.85	166.48	-466.87	-169.41	0.00	0.00	0.00
4,800.00	12.00	269.99	4,747.67	-927.67	166.47	-487.66	-169.53	0.00	0.00	0.00
4,900.00	12.00	269.99	4,845.48	-1,025.48	166.47	-508.44	-169.66	0.00	0.00	0.00
5,000.00	12.00	269.99	4,943.30	-1,123.30	166.46	-529.23	-169.78	0.00	0.00	0.00
5,100.00	12.00	269.99	5,041.11	-1,221.11	166.46	-550.02	-169.91	0.00	0.00	0.00
5,200.00	12.00	269.99	5,138.93	-1,318.93	166.45	-570.81	-170.04	0.00	0.00	0.00
5,300.00	12.00	269.99	5,236.75	-1,416.75	166.45	-591.59	-170.16	0.00	0.00	0.00
5,400.00	12.00	269.99	5,334.56	-1,514.56	166.44	-612.38	-170.29	0.00	0.00	0.00
5,500.00	12.00	269.99	5,432.38	-1,612.38	166.44	-633.17	-170.41	0.00	0.00	0.00
5,600.00	12.00	269.99	5,530.19	-1,710.19	166.43	-653.96	-170.54	0.00	0.00	0.00
5,700.00	12.00	269.99	5,628.01	-1,808.01	166.43	-674.74	-170.66	0.00	0.00	0.00
5,800.00	12.00	269.99	5,725.82	-1,905.82	166.42	-695.53	-170.79	0.00	0.00	0.00
5,900.00	12.00	269.99	5,823.64	-2,003.64	166.42	-716.32	-170.91	0.00	0.00	0.00
6,000.00	12.00	269.99	5,921.45	-2,101.45	166.41	-737.10	-171.04	0.00	0.00	0.00
6,100.00	12.00	269.99	6,019.27	-2,199.27	166.41	-757.89	-171.17	0.00	0.00	0.00
6,200.00	12.00	269.99	6,117.09	-2,297.09	166.40	-778.68	-171.29	0.00	0.00	0.00
6,300.00	12.00	269.99	6,214.90	-2,394.90	166.40	-799.47	-171.42	0.00	0.00	0.00
END OF TANGENT										
6,356.68	12.00	269.99	6,270.35	-2,450.35	166.39	-811.25	-171.49	0.00	0.00	0.00
6,400.00	11.13	269.99	6,312.78	-2,492.78	166.39	-819.93	-171.54	2.00	-2.00	0.00
6,500.00	9.13	269.99	6,411.22	-2,591.22	166.39	-837.52	-171.65	2.00	-2.00	0.00
6,600.00	7.13	269.99	6,510.21	-2,690.21	166.38	-851.67	-171.73	2.00	-2.00	0.00
6,700.00	5.13	269.99	6,609.63	-2,789.63	166.38	-862.35	-171.80	2.00	-2.00	0.00
6,800.00	3.13	269.99	6,709.37	-2,889.37	166.38	-869.55	-171.84	2.00	-2.00	0.00
6,900.00	1.13	269.99	6,809.29	-2,989.29	166.38	-873.27	-171.86	2.00	-2.00	0.00
EOD TO VERTICAL										
6,956.57	0.00	0.00	6,865.86	-3,045.86	166.38	-873.83	-171.87	2.00	-2.00	159.12
7,000.00	0.00	0.00	6,909.29	-3,089.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,100.00	0.00	0.00	7,009.29	-3,189.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,200.00	0.00	0.00	7,109.29	-3,289.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,300.00	0.00	0.00	7,209.29	-3,389.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,400.00	0.00	0.00	7,309.29	-3,489.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,500.00	0.00	0.00	7,409.29	-3,589.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,600.00	0.00	0.00	7,509.29	-3,689.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,700.00	0.00	0.00	7,609.29	-3,789.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,800.00	0.00	0.00	7,709.29	-3,889.29	166.38	-873.83	-171.87	0.00	0.00	0.00
7,900.00	0.00	0.00	7,809.29	-3,989.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,000.00	0.00	0.00	7,909.29	-4,089.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,100.00	0.00	0.00	8,009.29	-4,189.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,200.00	0.00	0.00	8,109.29	-4,289.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,300.00	0.00	0.00	8,209.29	-4,389.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,400.00	0.00	0.00	8,309.29	-4,489.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,500.00	0.00	0.00	8,409.29	-4,589.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,600.00	0.00	0.00	8,509.29	-4,689.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,700.00	0.00	0.00	8,609.29	-4,789.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,800.00	0.00	0.00	8,709.29	-4,889.29	166.38	-873.83	-171.87	0.00	0.00	0.00
8,900.00	0.00	0.00	8,809.29	-4,989.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,000.00	0.00	0.00	8,909.29	-5,089.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,100.00	0.00	0.00	9,009.29	-5,189.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,200.00	0.00	0.00	9,109.29	-5,289.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,300.00	0.00	0.00	9,209.29	-5,389.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,400.00	0.00	0.00	9,309.29	-5,489.29	166.38	-873.83	-171.87	0.00	0.00	0.00

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well BIG STAG FED COM 504H
Company:	ASCENT ENERGY	TVD Reference:	KB 25ft @ 3820.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB 25ft @ 3820.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	North Reference:	Grid
Well:	BIG STAG FED COM 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,500.00	0.00	0.00	9,409.29	-5,589.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,600.00	0.00	0.00	9,509.29	-5,689.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,700.00	0.00	0.00	9,609.29	-5,789.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,800.00	0.00	0.00	9,709.29	-5,889.29	166.38	-873.83	-171.87	0.00	0.00	0.00
9,900.00	0.00	0.00	9,809.29	-5,989.29	166.38	-873.83	-171.87	0.00	0.00	0.00
10,000.00	0.00	0.00	9,909.29	-6,089.29	166.38	-873.83	-171.87	0.00	0.00	0.00
10,100.00	0.00	0.00	10,009.29	-6,189.29	166.38	-873.83	-171.87	0.00	0.00	0.00
10,200.00	0.00	0.00	10,109.29	-6,289.29	166.38	-873.83	-171.87	0.00	0.00	0.00
KOP (10°/100ft BUR)										
10,288.26	0.00	0.00	10,197.55	-6,377.55	166.38	-873.83	-171.87	0.00	0.00	0.00
10,300.00	1.17	179.64	10,209.29	-6,389.29	166.26	-873.83	-171.75	10.00	10.00	1,530.31
10,400.00	11.17	179.64	10,308.58	-6,488.58	155.52	-873.76	-161.00	10.00	10.00	0.00
10,500.00	21.17	179.64	10,404.50	-6,584.50	127.70	-873.59	-133.18	10.00	10.00	0.00
10,600.00	31.17	179.64	10,494.13	-6,674.13	83.65	-873.31	-89.13	10.00	10.00	0.00
10,700.00	41.17	179.64	10,574.75	-6,754.75	24.70	-872.94	-30.18	10.00	10.00	0.00
10,800.00	51.17	179.64	10,643.91	-6,823.91	-47.35	-872.49	41.87	10.00	10.00	0.00
FTP: 100ft FNL & 2178ft FWL of Sec 12										
10,880.86	59.26	179.64	10,690.00	-6,870.00	-113.71	-872.07	108.23	10.00	10.00	0.00
10,900.00	61.17	179.64	10,699.51	-6,879.51	-130.32	-871.96	124.84	10.00	10.00	0.00
11,000.00	71.17	179.64	10,739.86	-6,919.86	-221.68	-871.39	216.20	10.00	10.00	0.00
11,100.00	81.17	179.64	10,763.72	-6,943.72	-318.66	-870.78	313.18	10.00	10.00	0.00
HZ LP: 390.57ft FNL & 2178ft FWL of Sec 12										
11,185.97	89.77	179.64	10,770.50	-6,950.50	-404.28	-870.24	398.80	10.00	10.00	0.00
11,200.00	89.77	179.64	10,770.56	-6,950.56	-418.31	-870.15	412.83	0.00	0.00	0.00
11,300.00	89.77	179.64	10,770.96	-6,950.96	-518.30	-869.53	512.83	0.00	0.00	0.00
11,400.00	89.77	179.64	10,771.36	-6,951.36	-618.30	-868.90	612.83	0.00	0.00	0.00
11,500.00	89.77	179.64	10,771.76	-6,951.76	-718.30	-868.27	712.83	0.00	0.00	0.00
11,600.00	89.77	179.64	10,772.16	-6,952.16	-818.30	-867.64	812.83	0.00	0.00	0.00
11,700.00	89.77	179.64	10,772.56	-6,952.56	-918.29	-867.01	912.83	0.00	0.00	0.00
11,800.00	89.77	179.64	10,772.96	-6,952.96	-1,018.29	-866.38	1,012.83	0.00	0.00	0.00
11,900.00	89.77	179.64	10,773.36	-6,953.36	-1,118.29	-865.76	1,112.83	0.00	0.00	0.00
12,000.00	89.77	179.64	10,773.76	-6,953.76	-1,218.28	-865.13	1,212.82	0.00	0.00	0.00
12,100.00	89.77	179.64	10,774.16	-6,954.16	-1,318.28	-864.50	1,312.82	0.00	0.00	0.00
12,200.00	89.77	179.64	10,774.56	-6,954.56	-1,418.28	-863.87	1,412.82	0.00	0.00	0.00
12,300.00	89.77	179.64	10,774.96	-6,954.96	-1,518.28	-863.24	1,512.82	0.00	0.00	0.00
12,400.00	89.77	179.64	10,775.36	-6,955.36	-1,618.27	-862.61	1,612.82	0.00	0.00	0.00
12,500.00	89.77	179.64	10,775.76	-6,955.76	-1,718.27	-861.99	1,712.82	0.00	0.00	0.00
12,600.00	89.77	179.64	10,776.15	-6,956.15	-1,818.27	-861.36	1,812.82	0.00	0.00	0.00
12,700.00	89.77	179.64	10,776.55	-6,956.55	-1,918.26	-860.73	1,912.82	0.00	0.00	0.00
12,800.00	89.77	179.64	10,776.95	-6,956.95	-2,018.26	-860.10	2,012.82	0.00	0.00	0.00
12,900.00	89.77	179.64	10,777.35	-6,957.35	-2,118.26	-859.47	2,112.82	0.00	0.00	0.00
13,000.00	89.77	179.64	10,777.75	-6,957.75	-2,218.26	-858.85	2,212.82	0.00	0.00	0.00
13,100.00	89.77	179.64	10,778.15	-6,958.15	-2,318.25	-858.22	2,312.82	0.00	0.00	0.00
13,200.00	89.77	179.64	10,778.55	-6,958.55	-2,418.25	-857.59	2,412.81	0.00	0.00	0.00
13,300.00	89.77	179.64	10,778.95	-6,958.95	-2,518.25	-856.96	2,512.81	0.00	0.00	0.00
13,400.00	89.77	179.64	10,779.35	-6,959.35	-2,618.25	-856.33	2,612.81	0.00	0.00	0.00
13,500.00	89.77	179.64	10,779.75	-6,959.75	-2,718.24	-855.70	2,712.81	0.00	0.00	0.00
13,600.00	89.77	179.64	10,780.15	-6,960.15	-2,818.24	-855.08	2,812.81	0.00	0.00	0.00
13,700.00	89.77	179.64	10,780.55	-6,960.55	-2,918.24	-854.45	2,912.81	0.00	0.00	0.00
13,800.00	89.77	179.64	10,780.95	-6,960.95	-3,018.23	-853.82	3,012.81	0.00	0.00	0.00
13,900.00	89.77	179.64	10,781.35	-6,961.35	-3,118.23	-853.19	3,112.81	0.00	0.00	0.00
14,000.00	89.77	179.64	10,781.75	-6,961.75	-3,218.23	-852.56	3,212.81	0.00	0.00	0.00
14,100.00	89.77	179.64	10,782.15	-6,962.15	-3,318.23	-851.93	3,312.81	0.00	0.00	0.00

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well BIG STAG FED COM 504H
Company:	ASCENT ENERGY	TVD Reference:	KB 25ft @ 3820.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB 25ft @ 3820.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	North Reference:	Grid
Well:	BIG STAG FED COM 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,200.00	89.77	179.64	10,782.55	-6,962.55	-3,418.22	-851.31	3,412.81	0.00	0.00	0.00
14,300.00	89.77	179.64	10,782.95	-6,962.95	-3,518.22	-850.68	3,512.81	0.00	0.00	0.00
14,400.00	89.77	179.64	10,783.35	-6,963.35	-3,618.22	-850.05	3,612.81	0.00	0.00	0.00
14,500.00	89.77	179.64	10,783.75	-6,963.75	-3,718.21	-849.42	3,712.80	0.00	0.00	0.00
14,600.00	89.77	179.64	10,784.15	-6,964.15	-3,818.21	-848.79	3,812.80	0.00	0.00	0.00
14,700.00	89.77	179.64	10,784.55	-6,964.55	-3,918.21	-848.16	3,912.80	0.00	0.00	0.00
14,800.00	89.77	179.64	10,784.95	-6,964.95	-4,018.21	-847.54	4,012.80	0.00	0.00	0.00
14,900.00	89.77	179.64	10,785.35	-6,965.35	-4,118.20	-846.91	4,112.80	0.00	0.00	0.00
15,000.00	89.77	179.64	10,785.75	-6,965.75	-4,218.20	-846.28	4,212.80	0.00	0.00	0.00
15,100.00	89.77	179.64	10,786.15	-6,966.15	-4,318.20	-845.65	4,312.80	0.00	0.00	0.00
15,200.00	89.77	179.64	10,786.55	-6,966.55	-4,418.20	-845.02	4,412.80	0.00	0.00	0.00
15,300.00	89.77	179.64	10,786.95	-6,966.95	-4,518.19	-844.39	4,512.80	0.00	0.00	0.00
15,400.00	89.77	179.64	10,787.35	-6,967.35	-4,618.19	-843.77	4,612.80	0.00	0.00	0.00
15,500.00	89.77	179.64	10,787.75	-6,967.75	-4,718.19	-843.14	4,712.80	0.00	0.00	0.00
15,600.00	89.77	179.64	10,788.15	-6,968.15	-4,818.18	-842.51	4,812.80	0.00	0.00	0.00
15,700.00	89.77	179.64	10,788.54	-6,968.54	-4,918.18	-841.88	4,912.79	0.00	0.00	0.00
15,800.00	89.77	179.64	10,788.94	-6,968.94	-5,018.18	-841.25	5,012.79	0.00	0.00	0.00
15,900.00	89.77	179.64	10,789.34	-6,969.34	-5,118.18	-840.62	5,112.79	0.00	0.00	0.00
16,000.00	89.77	179.64	10,789.74	-6,969.74	-5,218.17	-840.00	5,212.79	0.00	0.00	0.00
16,100.00	89.77	179.64	10,790.14	-6,970.14	-5,318.17	-839.37	5,312.79	0.00	0.00	0.00
16,200.00	89.77	179.64	10,790.54	-6,970.54	-5,418.17	-838.74	5,412.79	0.00	0.00	0.00
16,300.00	89.77	179.64	10,790.94	-6,970.94	-5,518.17	-838.11	5,512.79	0.00	0.00	0.00
16,400.00	89.77	179.64	10,791.34	-6,971.34	-5,618.16	-837.48	5,612.79	0.00	0.00	0.00
16,500.00	89.77	179.64	10,791.74	-6,971.74	-5,718.16	-836.85	5,712.79	0.00	0.00	0.00
16,600.00	89.77	179.64	10,792.14	-6,972.14	-5,818.16	-836.23	5,812.79	0.00	0.00	0.00
16,700.00	89.77	179.64	10,792.54	-6,972.54	-5,918.15	-835.60	5,912.79	0.00	0.00	0.00
16,800.00	89.77	179.64	10,792.94	-6,972.94	-6,018.15	-834.97	6,012.79	0.00	0.00	0.00
16,900.00	89.77	179.64	10,793.34	-6,973.34	-6,118.15	-834.34	6,112.79	0.00	0.00	0.00
17,000.00	89.77	179.64	10,793.74	-6,973.74	-6,218.15	-833.71	6,212.78	0.00	0.00	0.00
17,100.00	89.77	179.64	10,794.14	-6,974.14	-6,318.14	-833.08	6,312.78	0.00	0.00	0.00
17,200.00	89.77	179.64	10,794.54	-6,974.54	-6,418.14	-832.46	6,412.78	0.00	0.00	0.00
LTP: 1221ft FNL & 2178ft FWL of Sec 13										
17,295.93	89.77	179.64	10,794.80	-6,974.80	-6,514.07	-832.05	6,508.71	0.00	0.00	0.00
17,300.00	89.77	179.64	10,794.82	-6,974.82	-6,518.14	-832.02	6,512.78	0.02	0.00	-0.02
BHL: 1271ft FNL & 2178ft FWL of Sec 13										
17,345.93	89.77	179.63	10,795.00	-6,975.00	-6,564.07	-831.73	6,558.71	0.02	0.00	-0.02

Planning Report

Database:	Database 1	Local Co-ordinate Reference:	Well BIG STAG FED COM 504H
Company:	ASCENT ENERGY	TVD Reference:	KB 25ft @ 3820.00usft
Project:	LEA COUNTY, NEW MEXICO (NAD 83) (GRID)	MD Reference:	KB 25ft @ 3820.00usft
Site:	SEC. 1 T21S R32E N.M.P.M. (GRID)	North Reference:	Grid
Well:	BIG STAG FED COM 504H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 5ft FSL & 2216ft FEL of Sec 1
2,000.00	2,000.00	0.00	0.00	START NUDGE (2°/100ft BUR)
2,600.00	2,595.62	23.45	-58.04	EOB TO 12° INC
4,322.75	4,280.73	157.63	-390.14	END OF TANGENT
4,550.23	4,503.35	166.49	-435.74	EOT TO 269.99° AZ
6,356.68	6,270.35	166.39	-811.25	END OF TANGENT
6,956.57	6,865.86	166.38	-873.83	EOD TO VERTICAL
10,288.26	10,197.55	166.38	-873.83	KOP (10°/100ft BUR)
10,880.86	10,690.00	-113.71	-872.07	FTP: 100ft FNL & 2178ft FWL of Sec 12
11,185.97	10,770.50	-404.28	-870.24	HZ LP: 390.57ft FNL & 2178ft FWL of Sec 12
17,295.93	10,794.80	-6,514.07	-832.05	LTP: 1221ft FNL & 2178ft FWL of Sec 13
17,345.93	10,795.00	-6,564.07	-831.73	BHL: 1271ft FNL & 2178ft FWL of Sec 13



Project: LEA COUNTY, NEW MEXICO (NAD 83) (GRID)
 Site: SEC. 1 T21S R32E N.M.P.M. (GRID)
 Well: BIG STAG FED COM 504H
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #2

ANNOTATIONS

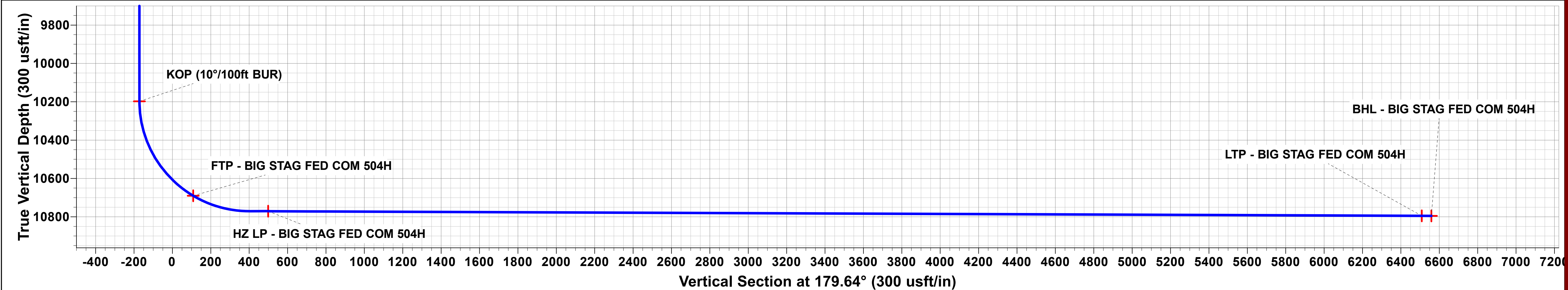
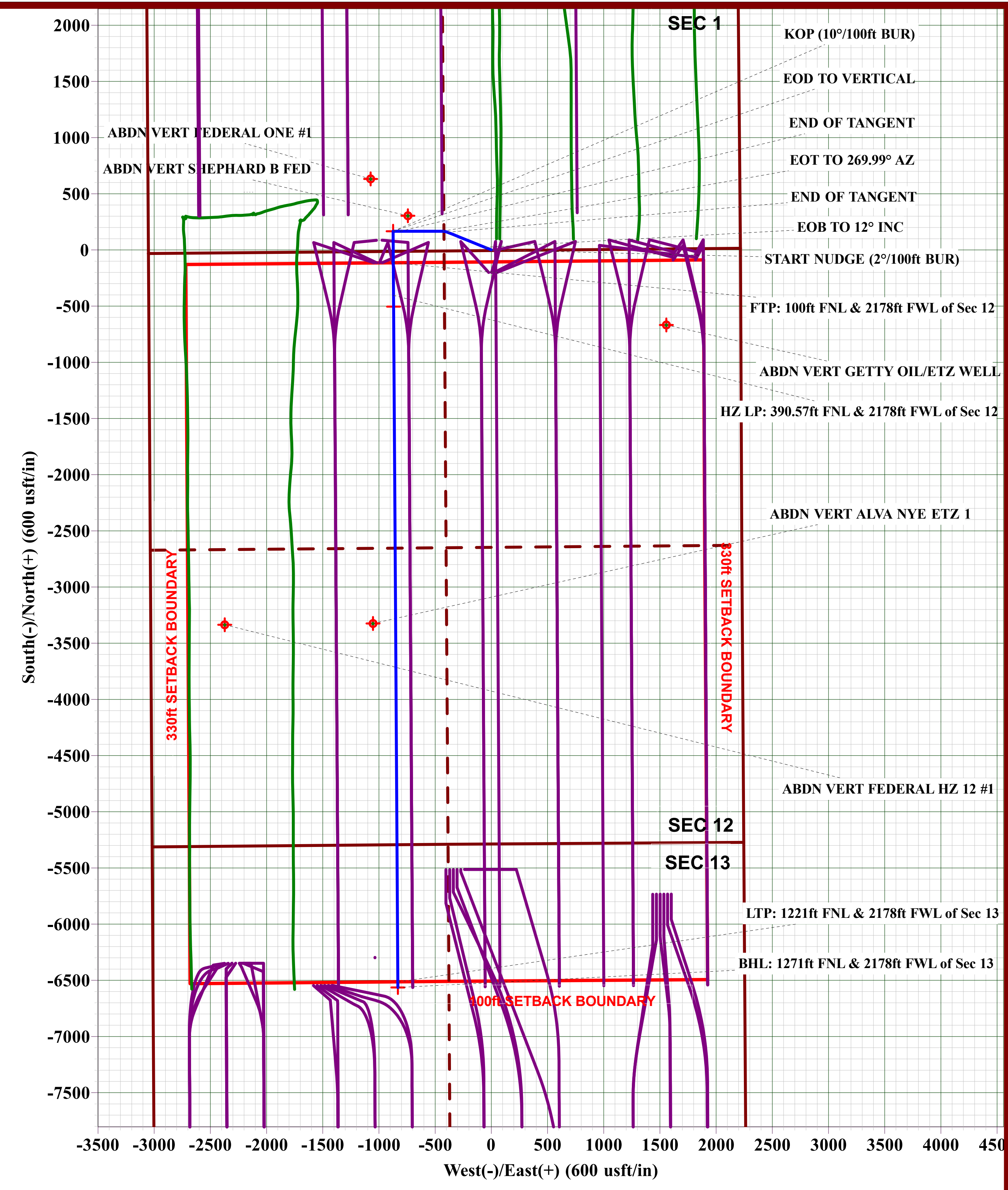
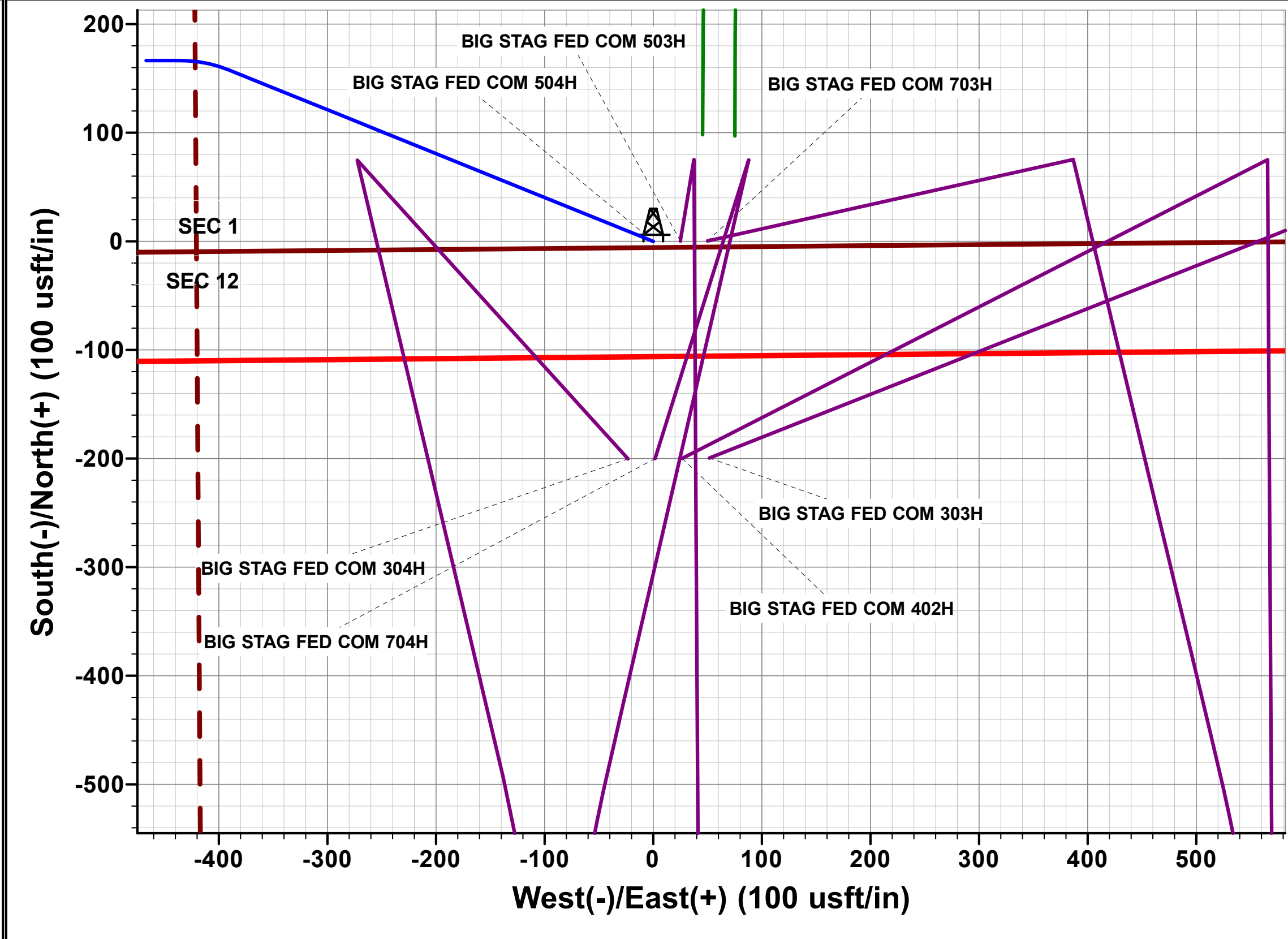
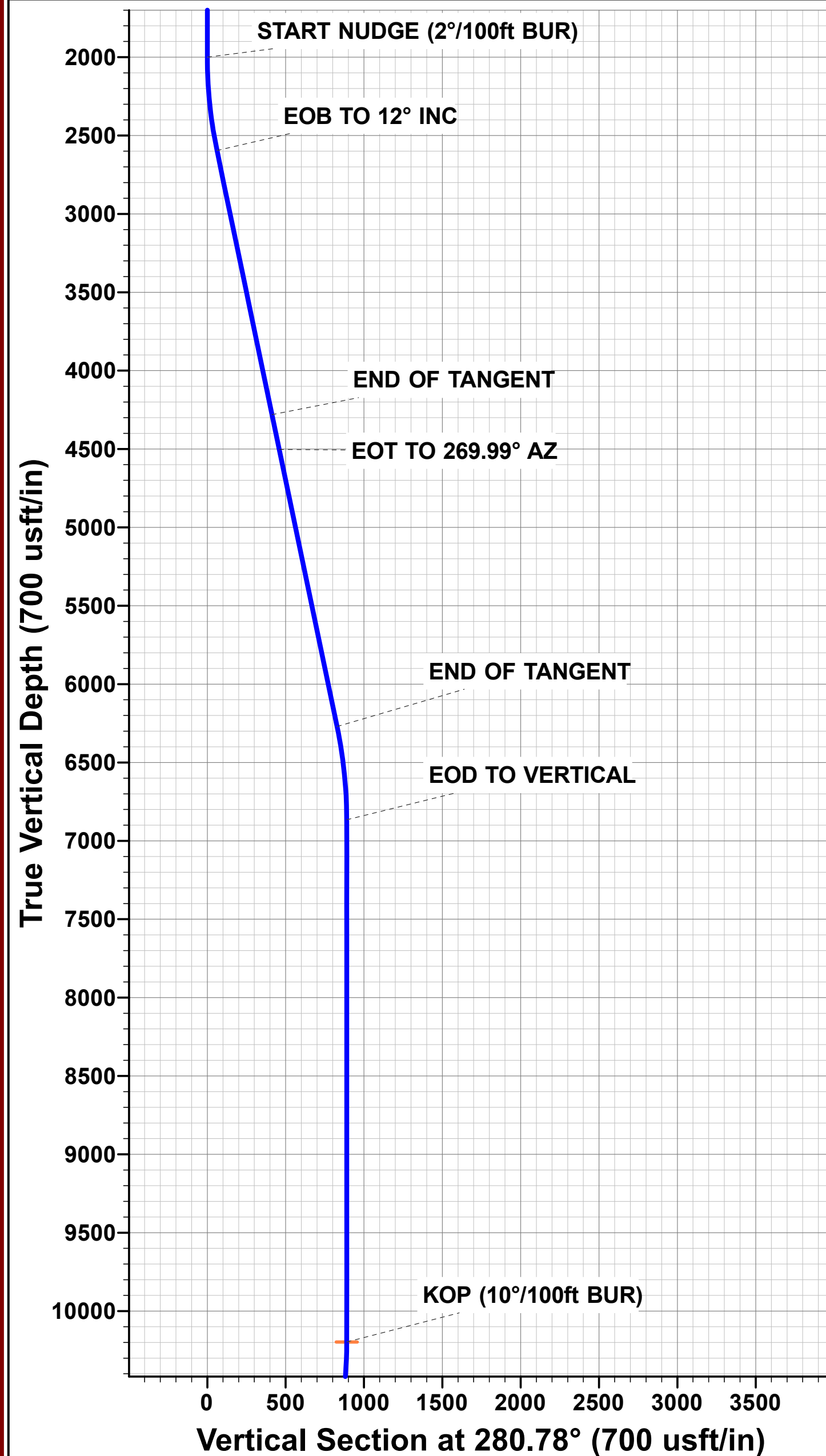
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Dep	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 5ft FSL & 2216ft FEL of Sec 1
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	START NUDDGE (2°/100ft BUR)
2600.00	12.00	292.00	2595.62	23.45	-58.04	-23.82	62.60	EOB TO 12° INC
4322.75	12.00	292.00	4280.73	157.63	-390.14	-160.08	420.78	END OF TANGENT
4550.23	12.00	269.99	4503.35	166.49	-435.74	-169.22	467.59	EOT TO 269.99° AZ
6356.68	12.00	269.99	6270.35	166.39	-811.25	-171.49	843.11	END OF TANGENT
6956.57	0.00	0.00	6865.86	166.38	-873.83	-171.87	905.69	EOD TO VERTICAL
10288.26	0.00	0.00	10197.55	166.38	-873.83	-171.87	905.69	KOP (10°/100ft BUR)
10880.86	59.26	179.64	10690.00	-113.71	-872.07	108.23	1186.05	FTP: 100ft FNL & 2178ft FWL of Sec 12
11185.97	89.77	179.64	10770.50	-404.28	-870.24	398.80	1476.35	HZ LP: 390.57ft FNL & 2178ft FWL of Sec 12
17295.93	89.77	179.64	10794.80	-6514.07	-832.05	6508.71	7586.27	LTP: 1221ft FNL & 2178ft FWL of Sec 13
17345.93	89.77	179.63	10795.00	-6564.07	-831.73	6558.71	7636.27	BHL: 1271ft FNL & 2178ft FWL of Sec 13

PROPOSED LOCAL COORDINATES:

SHL: 5ft FSL & 2216ft FeL Sec 1
 FTP: 100ft FNL & 2178ft FWL of Sec 12
 HZ LP: 390.57ft FNL & 2178ft FWL Sec 12
 LTP: 1221ft FNL & 2178ft FWL of Sec 13
 BHL: 1271ft FNL & 2178ft FWL of Sec 13

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - BIG STAG FED COM 504H	10197.55	166.38	-873.83	32.501173	-103.629846
FTP - BIG STAG FED COM 504H	10690.00	-113.71	-872.01	32.500403	-103.629846
HZ LP - BIG STAG FED COM 504H	10770.50	-504.26	-869.62	32.499330	-103.629847
LTP - BIG STAG FED COM 504H	10794.80	-6514.07	-832.05	32.482811	-103.629853
BHL - BIG STAG FED COM 504H	10795.00	-6564.07	-831.73	32.482674	-103.629853



Ascent Energy respectfully requests approval on the Big Stag Fed Com 603H (proposed name change to: Big Stag Fed Com 504H) for an option to:

- Addition of an External Casing Packer on the 9-5/8” Casing
- Increase the casing size of our vertical casing strings
- Revise proposed BOP beneath the base of the 20” surface shoe to setting the 1st Intermediate casing string only (13 3/8”).

The reason for the request is based on improved drilling efficiencies and improved cementing in-place for each casing string. We believe the larger casing diameters in the vertical section will increase the likelihood of getting cement to surface for each string.

There will be no change in Geology formations, and mud specifications.

External Casing Packer:

The pending hole conditions the addition of an External Casing Packer to the Intermediate #2 9-5/8” casing string is requested. A DV Tool is already approved, and the cement volumes will not change with the addition of an External Casing Packer.

New/Optional proposed design:

Casing:

DESCRIPTION	Hole Size (in)	CSG Size (in)	INTERVAL (ft)			WEIGHT (ppf)	GRADE	COUPLING	FORMATION PRESS @ CSG DEPTH (PPG)	MW @ CSG DEPTH (PPG)	SAFETY FACTORS		
			TOP MD	BTM MD							BURST (psi)	COLLAPSE (psi)	TENSION (1000 lbs)
CONDUCTOR	36	30	0	120	120	---	---	WELD	---	---	---	---	---
SURFACE	26	20	0	1,600	1,600	94	J-55	BTC	8.3	9.0	2,110	520	1480
											2.8	2.7	9.8
INT. #1	17.5	13.375	0	3,600	3,627	54.5	J-55	BTC	8.3	10.0	2,730	1,130	853
											1.5	1.6	4.3
INT. #2	12.25	9.625	0	5,600	5,671	40	J-55	BTC	8.3	9.2	3,950	2,570	630
											1.1	3.2	2.8
PRODUCTION	8.75	5.5	0	10,795	17,345	20	P-110	BTC	8.7	9.6	12,630	11,100	641
											3.5	2.7	1.8

Cement:

DESCRIPTION	HOLE (IN)	CSG (IN)	TOP	BTM	LENGTH (FT)	SLURRY DESCRIPTION	FT ³	EXCESS	WEIGHT (PPG)	YIELD (FT ³ /SK)
							SACKS			
CONDUCTOR	36	30	0	120	120	Class G	518	100%	15.8	1.17
							443			
SURFACE - LEAD	26	20	0	1,100	1,100	Class C	3203	100%	13.5	1.72
							1862			
SURFACE - TAIL	26	20	1,100	1,600	500	Class C	1506	100%	14.8	1.33
							1132			
INT #1 - LEAD	17.5	13.375	0	3,127	3,127	Class C	3488	75%	12.7	2.32
							1503			
INT #1 - TAIL	17.5	13.375	3,127	3,627	500	Class C	608	75%	14.8	1.33
							457			
INT #2 - LEAD	12.25	9.625	0	5,171	5,171	50/50Poz Class C	2283	100%	11.5	2.2
							1038			
INT #2 - TAIL	12.25	9.625	5,171	5,671	500	Class C	313	100%	14.8	1.33
							236			
INT #2 - DV LEAD	12.25	9.625	0	3,177	3,177	50/50Poz Class C	1104	50%	11.5	2.2
							502			
INT #2 - DV TAIL	12.25	9.625	3,177	3,677	500	Class C	235	50%	14.8	1.33
							177			
PRODUCTION - LEAD	8.75	5.5	0	9,000	9,000	Nine Lite	2488	20%	11.0	2.48
							1003			
PRODUCTION - TAIL	8.75	5.5	9,000	17,345	8,345	35/65 Poz Class H	2530	20%	13.2	1.47
							1721			

Note: Int 2 is two stage cement job. DVT and External Casing packer to be placed @ approximately 3,677' MD. 50ft from previous casing shoe and will be adjusted real time

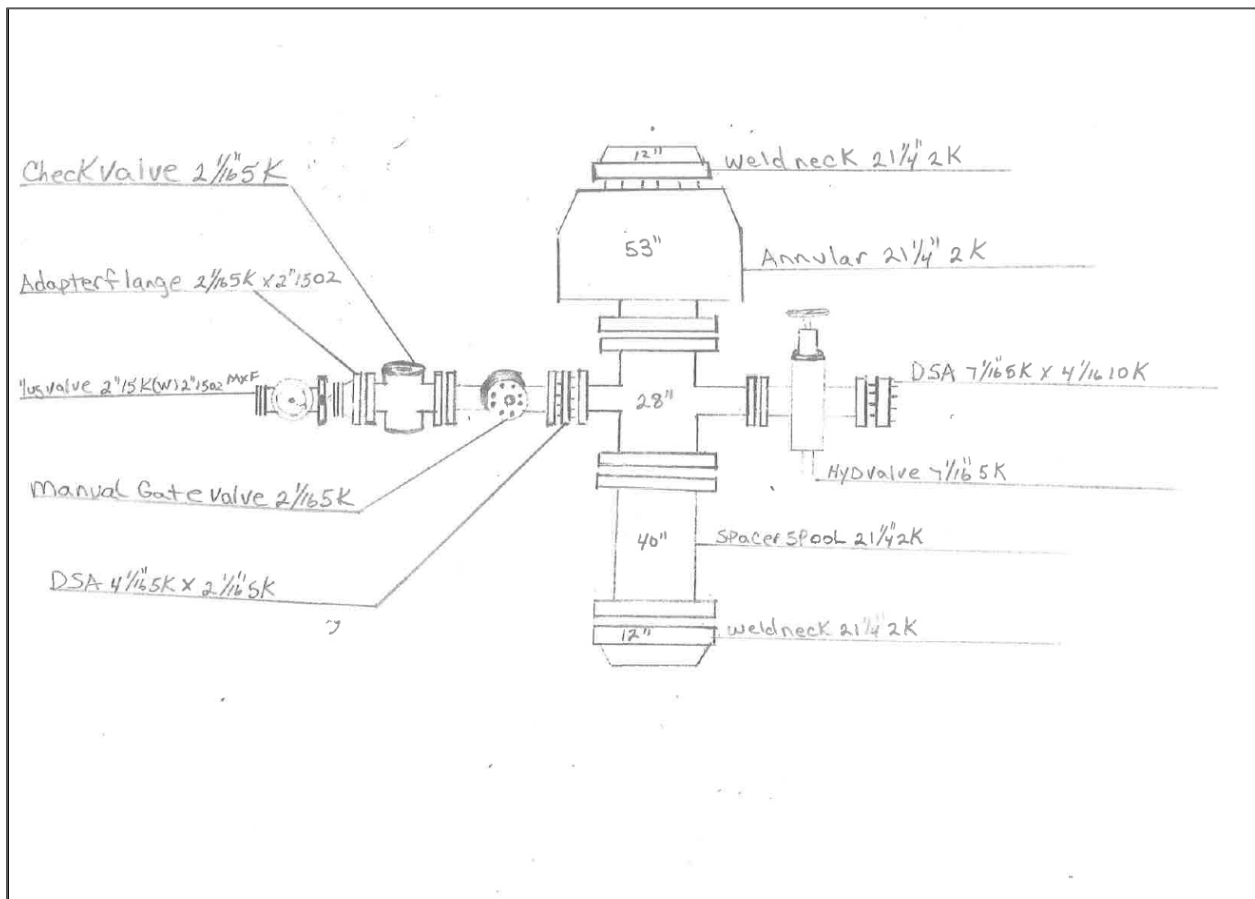
New Proposed BOP:

From the Base of the 20" Surface pipe, the well will be equipped with a 2M Annular system. Before drilling out the 20" surface pipe, the 2M system will be tested to 250psi low and 1000psi high by an 3rd party service company. The 2M BOPE and related equipment will meet or exceed the requirements of a 2M psi system as set forth in On Shore Order No. 2 while drilling below the 20" surface shoe and to TD of Intermediate #1 (13-3/8" Casing). Once the Intermediate #1 13-3/8" Casing is cemented the 20" 2M BOPE and 21-1/4" wellhead will be removed and a 13-5/8" Multi-bowl wellhead and previously permitted 13-5/8" 5M BOPE will be installed. From the base of the Intermediate #1 13-3/8" casing string through running of the 5-1/2" production string the 5M BOPE will be equipped.

The previously permitted 5M choke will be utilized in conjunction with the 2M Annular System.

ASCENT ENERGY

2M ANNULAR BOPE & DIAGRAM



1-21S-32E-O ATS-19-3155 Big Stagg Fed Com 603H Sundry Lea NMNM127892 Ascent Energy LLC 13-22 06-01-2021 Yolanda Jimenez

Big Stagg Fed Com 603H

20		surface csg in a		26		inch hole.		Design Factors				Surface	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight		
"A"	94.00	J 55	BTC	9.32	0.7	1.12	1,600	3	1.94	1.31	150,400		
"B"			BTC				0				0		
w/8.4#/g mud, 30min Sfc Csg Test psig: 779							Tail Cmt	does not	circ to sfc.	Totals:	1,600	150,400	
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		
26	1.5053	2994	4708	2409	95	9.00	1086	2M			2.50		

13 3/8		casing inside the		20		Design Factors				Int 1		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	54.50	J 55	BTC	4.35	0.6	1.01	3,600	1	1.87	1.05	196,200	
"B"							0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	3,600			196,200	
The cement volume(s) are intended to achieve a top of							0	ft from surface or a	1600			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	
17 1/2	0.6946	1960	4095	3020	36	10.00	1463	2M			1.56	
Class 'H' tail cmt yld > 1.20												

9 5/8		casing inside the		13 3/8		Design Factors				Int 2		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	40.00	J 55	BTC	2.81	0.96	0.73	5,600	1	1.31	1.78	224,000	
"B"							0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 321							Totals:	5,600			224,000	
The cement volume(s) are intended to achieve a top of							0	ft from surface or a	3600			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	
12 1/4	0.3132	1274	2597	1932	34	9.20	3009	5M			0.81	
Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.71,												

5 1/2		casing inside the		9 5/8		Design Factors				Prod 1		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	20.00	P 110	BTC	2.97	2.06	2.35	17,345	2	4.20	3.68	346,900	
"B"							0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,375							Totals:	17,345			346,900	
The cement volume(s) are intended to achieve a top of							0	ft from surface or a	5600			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	
8 3/4	0.2526	2724	5017	4427	13	9.60					1.35	
Class 'H' tail cmt yld > 1.20												
Capitan Reef est top XXXX.												

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL Sundry

OPERATOR'S NAME:	Ascent Energy LLC
LEASE NO.:	NMNM127892
WELL NAME & NO.:	Big Stagg Federal Com 603H
SURFACE HOLE FOOTAGE:	5'S & 2216'E
BOTTOM HOLE FOOTAGE:	1271'N & 2178'W
LOCATION:	Section 1, T.21 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

COA

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

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Bone Spring** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Surface, Intermediate 1, and Intermediate 2 casing must be kept fluid filled to meet BLM minimum collapse requirement.

1. The **20 inch** surface casing shall be set at approximately **1600 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **13-3/8 inch** Intermediate 1 casing shall be set at approximately **3600 feet** and the minimum required fill of cement behind the Intermediate 1 casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

- ❖ In R111 Potash 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.
- ❖ In Capitan Reef 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.
- ❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)
 - Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. The minimum required fill of cement behind the **9-5/8 inch** Intermediate 2 casing is:

Option 1

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

Option 2

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate 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.

4. The minimum required fill of cement behind the **5-1/2 inch** production casing with a tie-back to the surface is:
- Cement should tie-back at least **50 feet** on top of Capitan Reef top. 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.

PRODUCTION CASING HAS AN EXCESS OF 13%. ADDITIONAL CEMENT MAY BE NEEDED.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

3. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate 1 and 2 casing shoe shall be **5000 (5M)** psi.
 - f. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - g. 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.
 - h. Manufacturer representative shall install the test plug for the initial BOP test.
 - i. 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.
 - j. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or

certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575)
361-2822

Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing 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. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

YJ 06/01/2021

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

CONDITIONS
 Action 30147

CONDITIONS

Operator: ASCENT ENERGY, LLC. 1125 17th St Denver, CO 80202	OGRID: 325830
	Action Number: 30147
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	7/26/2021