

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

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

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

11. Country or Parish, State

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

TYPE OF SUBMISSION	TYPE OF ACTION				
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
☐ Final Abandonment Notice	☐ 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 recompleat 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 recompleat 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 detennined that the site is ready for final inspection.)

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

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWNE / 330 FNL / 1550 FEL / TWSP: 25S / RANGE: 27E / SECTION: 7 / LAT: 32.150942 / LONG: -104.225964 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 2640 FNL / 2310 FEL / TWSP: 25S / RANGE: 27E / SECTION: 7 / LAT: 32.14455 / LONG: -104.228405 (TVD: 9745 feet, MD: 11800 feet)

PPP: NWNE / 396 FNL / 2310 FEL / TWSP: 25S / RANGE: 27E / SECTION: 7 / LAT: 32.1507611 / LONG: -104.2284167 (TVD: 8713 feet, MD: 8760 feet)

BHL: SWSE / 330 FSL / 2310 FEL / TWSP: 25S / RANGE: 27E / SECTION: 18 / LAT: 23.123597 / LONG: -104.228367 (TVD: 9828 feet, MD: 19424 feet)

CONFIDENTIAL

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 30-015-46303	² Pool Code 98220	³ Pool Name Purple Sage Wolfcamp Gas
⁴ Property Code 317791	⁵ Property Name DAVINCI 7-18 FEDERAL	⁶ Well Number 35H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 3306.2'

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
B	7	25S	27E		330	NORTH	1550	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
N	18	25S	27E		100	SOUTH	1535	WEST	EDDY
¹² Dedicated Acres 640	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.

¹⁶ NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

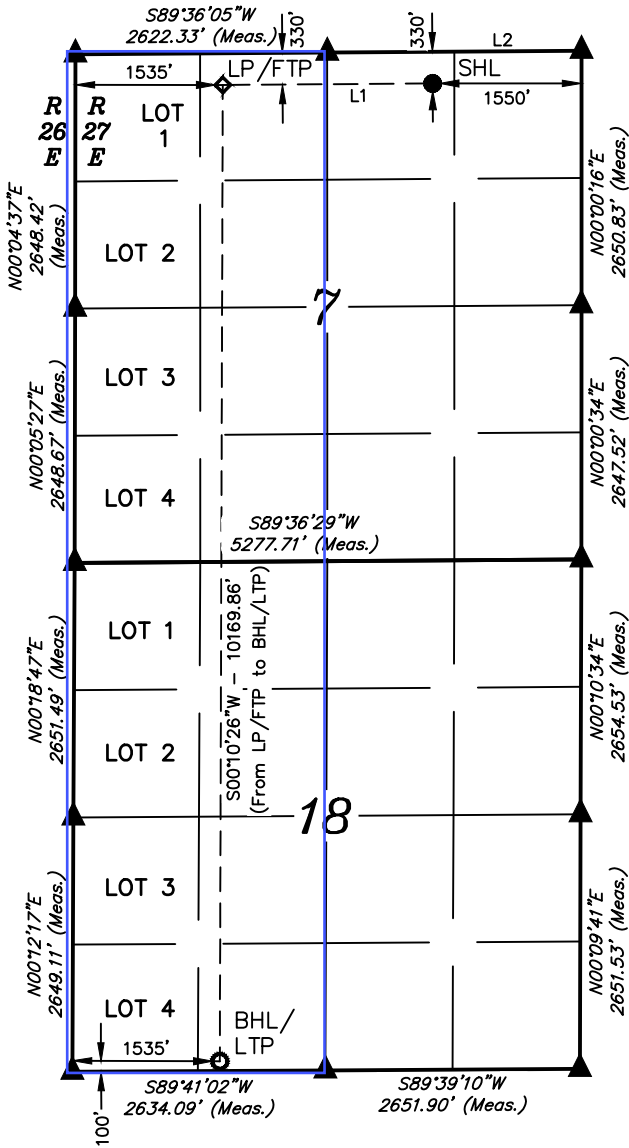
NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'03.39" (32.150942°)
LONGITUDE = 104°13'33.47" (104.225964°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'02.95" (32.150819°)
LONGITUDE = 104°13'31.69" (104.225469°)
STATE PLANE NAD 83 (N.M. EAST)
N: 418664.02' E: 574565.73'
STATE PLANE NAD 27 (N.M. EAST)
N: 418606.50' E: 533382.76'

NAD 83 (LP/FTP)
LATITUDE = 32°09'03.16" (32.150878°)
LONGITUDE = 104°13'58.89" (104.233025°)
NAD 27 (LP/FTP)
LATITUDE = 32°09'02.73" (32.150758°)
LONGITUDE = 104°13'57.10" (104.232528°)
STATE PLANE NAD 83 (N.M. EAST)
N: 418639.41' E: 572380.92'
STATE PLANE NAD 27 (N.M. EAST)
N: 418581.91' E: 531197.99'

NAD 83 (BHL/LTP)
LATITUDE = 32°07'22.54" (32.122929°)
LONGITUDE = 104°13'58.86" (104.233018°)
NAD 27 (BHL/LTP)
LATITUDE = 32°07'22.11" (32.122808°)
LONGITUDE = 104°13'57.08" (104.232521°)
STATE PLANE NAD 83 (N.M. EAST)
N: 408471.95' E: 572392.52'
STATE PLANE NAD 27 (N.M. EAST)
N: 408414.64' E: 531209.43'

LINE TABLE

LINE	DIRECTION	LENGTH
L1	S89°35'39"W	2185.47'
L2	S89°35'10"W	2648.27'



S C A L E

DRAWN BY: S.F. 05-29-17

REV: 1 05-18-21 R.J. (LP & BHL CHANGE)

- = SURFACE HOLE LOCATION
- = BOTTOM HOLE LOCATION/ LAST TAKE POINT
- ▲ = SECTION CORNER LOCATED
- ◆ = LANDING POINT/FIRST TAKE POINT

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.

Amithy Crawford 6/16/21
Signature Date

Amithy Crawford
Printed Name

acrawford@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.

May 11, 2017

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:

1. Geological Formations

TVD of target 9,500

Pilot Hole TD N/A

MD at TD 19,797

Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	0	Useable Water	
Salado	1252	N/A	
Castille	1870	N/A	
Bell Canyon	2088	Hydrocarbons	
Cherry Canyon	3075	Hydrocarbons	
Brushy Canyon	4127	Hydrocarbons	
Brushy Canyon Lower	5296	Hydrocarbons	
Bone Spring	5621	Hydrocarbons	
Bone Spring A Shale	5739	Hydrocarbons	
Bone Spring C Shale	6085	Hydrocarbons	
1st Bone Spring Ss	6576	Hydrocarbons	
2nd Bone Spring Ss	7037	Hydrocarbons	
2nd BS Ss Lower	7788	Hydrocarbons	
3rd Bone Spring Ss	8389	Hydrocarbons	
Wolfcamp	8713	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	450	450	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.59	8.40	14.91
12 1/4	0	2068	2068	9-5/8"	36.00	J-55	LT&C	1.84	3.21	6.08
8 3/4	0	8389	8389	7"	26.00	L-80	LT&C	1.38	1.85	2.08
8 3/4	8389	9931	9451	7"	26.00	N-80	BT&C	1.22	1.64	21.87
6	8289	19797	9500	4-1/2"	11.60	P-110	BT&C	1.18	1.67	26.13
BLM Minimum Safety Factor								1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Cimarex Energy Co., Davinci 7-18 Federal Com 35H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	N
Is AC Report included?	N

3. Cementing Program

Casing	# Sk	Wt. lb/gal	Yld ft ³ /sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	91	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	195	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	392	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	121	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	457	10.30	3.64	22.18		Lead: Tuned Light + LCM
	112	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS
Completion System	734	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	33
Intermediate	0	50
Production	1868	25
Completion System	9731	10

Cimarex request the ability to perform casing integrity tests after plug bump of cement job.

4. Pressure Control Equipment

A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	2M	Annular	X	2M
			Blind Ram		
			Pipe Ram		
			Double Ram	X	
			Other		
8 3/4	13 5/8	5M	Annular	X	5M
			Blind Ram		
			Pipe Ram	X	
			Double Ram	X	
			Other		
6	13 5/8	5M	Annular	X	5M
			Blind Ram		
			Pipe Ram	X	
			Double Ram	X	
			Other		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or 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. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.				
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.				
N	Are anchors required by manufacturer?				

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 450'	FW Spud Mud	8.30 - 8.80	30-32	N/C
450' to 2068'	Brine Water	9.70 - 10.20	30-32	N/C
2068' to 9931'	FW/Cut Brine	8.50 - 9.00	30-32	N/C
9931' to 19797'	Oil Based Mud	12.50 - 13.00	50-70	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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6. Logging and Testing Procedures

Logging, Coring and Testing	
X	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test?
	Coring?

Additional Logs Planned	Interval
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7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	6422 psi
Abnormal Temperature	No

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

X	H ₂ S is present
X	H ₂ S plan is attached

8. Other Facets of Operation**9. Wellhead**

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 psi test. Annular will be tested to 100% of working pressure. The pressure test will be repeated at least every 30 days, as per Onshore Order No. 2.

The multi-bowl wellhead will be installed by vendor's representative. A copy of the installation instructions has been sent to the BLM field office.

The wellhead will be installed by a third-party welder while being monitored by the wellhead vendor representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

A solid steel body pack-off will be utilized after running and cementing the production casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

All casing strings will be tested as per Onshore Order No.2 to at least 0.22 psi/ft or 1,500 whichever is greater and not to exceed 70% of casing burst.

If well conditions dictate conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.



Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21 Proposal
Geodetic Report
 (Non-Def Plan)



Report Date:	May 24, 2021 - 05:27 PM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Cimarex Energy	Vertical Section Azimuth:	179.853 ° (Grid North)
Field:	NM Eddy County (NAD 83)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Davinci 7-18 Federal Pad / New Slot	TVD Reference Datum:	RKB
Well:	Davinci 7-18 Federal Com #35H	TVD Reference Elevation:	3329.200 ft above MSL
Borehole:	Davinci 7-18 Federal Com #35H	Seabed / Ground Elevation:	3306.200 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7.030 °
Survey Name:	Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21	Total Gravity Field Strength:	998.4349mgm (9.80665 Based)
Survey Date:	May 24, 2021	Gravity Model:	GARM
Tort / AHD / DDI / ERD Ratio:	108.870 ° / 12378.340 ft / 6.448 / 1.303	Total Magnetic Field Strength:	47629.679 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.768 °
Location Lat / Long:	N 32° 9' 3.38513", W 104° 13' 33.47447"	Declination Date:	May 24, 2021
Location Grid N/E Y/X:	N 418664.020 ftUS, E 574565.730 ftUS	Magnetic Declination Model:	HDGM 2021
CRS Grid Convergence Angle:	0.0571 °	North Reference:	Grid North
Grid Scale Factor:	0.99991036	Grid Convergence Used:	0.0571 °
Version / Patch:	2.10.825.0	Total Corr Mag North->Grid North:	6.9731 °
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
SHL [330' FNL, 1550' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	418664.02	574565.73	32.15	-104.23
	100.00	0.00	270.75	100.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	200.00	0.00	270.75	200.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	300.00	0.00	270.75	300.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	400.00	0.00	270.75	400.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	500.00	0.00	270.75	500.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	600.00	0.00	270.75	600.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	700.00	0.00	270.75	700.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	800.00	0.00	270.75	800.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	900.00	0.00	270.75	900.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	1000.00	0.00	270.75	1000.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	1100.00	0.00	270.75	1100.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	1200.00	0.00	270.75	1200.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	1300.00	0.00	270.75	1300.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
Salado (Top Salt)	1334.00	0.00	270.75	1334.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
Nudge 2°/100'	1400.00	0.00	270.75	1400.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
DLS	1500.00	0.00	270.75	1500.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
	1600.00	2.00	270.75	1599.98	-0.03	0.02	-1.75	2.00	418664.04	574563.99	32.15	-104.23
	1700.00	4.00	270.75	1699.84	-0.11	0.09	-6.98	2.00	418664.11	574558.75	32.15	-104.23
	1800.00	6.00	270.75	1799.45	-0.25	0.21	-15.69	2.00	418664.23	574550.04	32.15	-104.23
Castille (Base Salt)	1859.95	7.20	270.75	1859.00	-0.36	0.30	-22.58	2.00	418664.32	574543.15	32.15	-104.23
	1900.00	8.00	270.75	1898.70	-0.44	0.37	-27.88	2.00	418664.39	574537.86	32.15	-104.23
	2000.00	10.00	270.75	1997.47	-0.68	0.57	-43.52	2.00	418664.59	574522.22	32.15	-104.23
Bell Canyon (Top Delaware)	2094.25	11.89	270.75	2090.00	-0.97	0.81	-61.41	2.00	418664.83	574504.33	32.15	-104.23
	2100.00	12.00	270.75	2095.62	-0.99	0.82	-62.60	2.00	418664.84	574503.14	32.15	-104.23
	2200.00	14.00	270.75	2193.06	-1.34	1.12	-85.09	2.00	418665.14	574480.65	32.15	-104.23
	2300.00	16.00	270.75	2289.64	-1.75	1.46	-110.97	2.00	418665.48	574454.77	32.15	-104.23
	2340.00	16.80	270.75	2328.02	-1.92	1.61	-122.26	2.00	418665.63	574443.48	32.15	-104.23
	2400.00	16.80	270.75	2385.45	-2.20	1.84	-139.60	0.00	418665.86	574426.14	32.15	-104.23
	2500.00	16.80	270.75	2481.19	-2.65	2.22	-168.50	0.00	418666.24	574397.24	32.15	-104.23
	2600.00	16.80	270.75	2576.92	-3.11	2.60	-197.40	0.00	418666.62	574368.35	32.15	-104.23
	2700.00	16.80	270.75	2672.65	-3.56	2.98	-226.30	0.00	418667.00	574339.45	32.15	-104.23
	2800.00	16.80	270.75	2768.38	-4.02	3.36	-255.20	0.00	418667.38	574310.55	32.15	-104.23
	2900.00	16.80	270.75	2864.11	-4.47	3.74	-284.10	0.00	418667.76	574281.65	32.15	-104.23
Cherry Canyon	2983.45	16.80	270.75	2944.00	-4.85	4.06	-308.22	0.00	418668.08	574257.54	32.15	-104.23
	3000.00	16.80	270.75	2959.85	-4.93	4.12	-313.00	0.00	418668.14	574252.75	32.15	-104.23
	3100.00	16.80	270.75	3055.58	-5.38	4.50	-341.91	0.00	418668.52	574223.86	32.15	-104.23
	3200.00	16.80	270.75	3151.31	-5.84	4.88	-370.81	0.00	418668.90	574194.96	32.15	-104.23
	3300.00	16.80	270.75	3247.04	-6.29	5.26	-399.71	0.00	418669.28	574166.06	32.15	-104.23
	3400.00	16.80	270.75	3342.77	-6.74	5.65	-428.61	0.00	418669.66	574137.16	32.15	-104.23
	3500.00	16.80	270.75	3438.51	-7.20	6.03	-457.51	0.00	418670.05	574108.26	32.15	-104.23
	3600.00	16.80	270.75	3534.24	-7.65	6.41	-486.41	0.00	418670.43	574079.37	32.15	-104.23
	3700.00	16.80	270.75	3629.97	-8.11	6.79	-515.31	0.00	418670.81	574050.47	32.15	-104.23
	3800.00	16.80	270.75	3725.70	-8.56	7.17	-544.21	0.00	418671.19	574021.57	32.15	-104.23
	3900.00	16.80	270.75	3821.43	-9.02	7.55	-573.11	0.00	418671.57	573992.67	32.15	-104.23
	4000.00	16.80	270.75	3917.17	-9.47	7.93	-602.01	0.00	418671.95	573963.77	32.15	-104.23
Brushy Canyon	4092.80	16.80	270.75	4006.00	-9.90	8.28	-628.83	0.00	418672.30	573936.96	32.15	-104.23
	4100.00	16.80	270.75	4012.90	-9.93	8.31	-630.91	0.00	418672.33	573934.88	32.15	-104.23
	4200.00	16.80	270.75	4108.63	-10.38	8.69	-659.81	0.00	418672.71	573905.98	32.15	-104.23
	4300.00	16.80	270.75	4204.36	-10.84	9.07	-688.71	0.00	418673.09	573877.08	32.15	-104.23
	4400.00	16.80	270.75	4300.09	-11.29	9.45	-717.61	0.00	418673.47	573848.18	32.15	-104.23
	4500.00	16.80	270.75	4395.83	-11.75	9.83	-746.51	0.00	418673.85	573819.28	32.15	-104.23
	4600.00	16.80	270.75	4491.56	-12.20	10.21	-775.42	0.00	418674.23	573790.39	32.15	-104.23
	4700.00	16.80	270.75	4587.29	-12.66	10.59	-804.32	0.00	418674.61	573761.49	32.15	-104.23
	4800.00	16.80	270.75	4683.02	-13.11	10.97	-833.22	0.00	418674.99	573732.59	32.15	-104.23
	4900.00	16.80	270.75	4778.75	-13.57	11.35	-862.12	0.00	418675.37	573703.69	32.15	-104.23
	5000.00	16.80	270.75	4874.48	-14.02	11.74	-891.02	0.00	418675.75	573674.79	32.15	-104.23
	5100.00	16.80	270.75	4970.22	-14.48	12.12	-919.92	0.00	418676.14	573645.90	32.15	-104.23
	5200.00	16.80	270.75	5065.95	-14.93	12.50	-948.82	0.00	418676.52	573617.00	32.15	-104.23
	5300.00	16.80	270.75	5161.68	-15.39	12.88	-977.72	0.00	418676.90	573588.10	32.15	-104.23
	5400.00	16.80	270.75	5257.41	-15.84	13.26	-1006.62	0.00	418677.28	573559.20	32.15	-104.23
	5500.00	16.80	270.75	5353.14	-16.30	13.64	-1035.52	0.00	418677.66	573530.30	32.15	-104.23
	5600.00	16.80	270.75	5448.88	-16.75	14.02	-1064.42	0.00	418678.04	573501.41	32.15	-104.23
	5700.00	16.80	270.75	5544.61	-17.21	14.40	-1093.32	0.00	418678.42	573472.51	32.15	-104.23
Top Bone Spring	5782.93	16.80	270.75	5624.00	-17.58	14.72	-1117.29	0.00	418678.73	573448.54	32.15	-104.23
	5800.00	16.80	270.75	5640.34	-17.66	14.78	-1122.22	0.00	418678.80	573443.61	32.15	-104.23
	5900.00	16.80	270.75	5736.07	-18.11	15.16	-1151.12	0.00	418679.18	573414.71	32.15	-104.23
	6000.00	16.80	270.75	5831.80	-18.57	15.54	-1180.02	0.00	418679.56	573385.81	32.15	-104.23
	6100.00	16.80	270.75	5927.54	-19.02	15.92	-1208.93	0.00	418679.94	573356.92	32.15	-104.23

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
Top 1st BSPG SS	6200.00	16.80	270.75	6023.27	-19.48	16.30	-1237.83	0.00	418680.32	573328.02	32.15	-104.23
	6300.00	16.80	270.75	6119.00	-19.93	16.68	-1266.73	0.00	418680.70	573299.12	32.15	-104.23
	6400.00	16.80	270.75	6214.73	-20.39	17.06	-1295.63	0.00	418681.08	573270.22	32.15	-104.23
	6500.00	16.80	270.75	6310.46	-20.84	17.45	-1324.53	0.00	418681.46	573241.32	32.15	-104.23
	6600.00	16.80	270.75	6406.20	-21.30	17.83	-1353.43	0.00	418681.84	573212.43	32.15	-104.23
	6700.00	16.80	270.75	6501.93	-21.75	18.21	-1382.33	0.00	418682.23	573183.53	32.15	-104.23
	6734.55	16.80	270.75	6535.00	-21.91	18.34	-1392.31	0.00	418682.36	573173.54	32.15	-104.23
	6800.00	16.80	270.75	6597.66	-22.21	18.59	-1411.23	0.00	418682.61	573154.63	32.15	-104.23
	6900.00	16.80	270.75	6693.39	-22.66	18.97	-1440.13	0.00	418682.99	573125.73	32.15	-104.23
	7000.00	16.80	270.75	6789.12	-23.12	19.35	-1469.03	0.00	418683.37	573096.83	32.15	-104.23
Top 2nd BSPG SS	7100.00	16.80	270.75	6884.86	-23.57	19.73	-1497.93	0.00	418683.75	573067.94	32.15	-104.23
	7200.00	16.80	270.75	6980.59	-24.03	20.11	-1526.83	0.00	418684.13	573039.04	32.15	-104.23
	7300.00	16.80	270.75	7076.32	-24.48	20.49	-1555.73	0.00	418684.51	573010.14	32.15	-104.23
	7334.14	16.80	270.75	7109.00	-24.64	20.62	-1565.60	0.00	418684.64	573000.27	32.15	-104.23
	7400.00	16.80	270.75	7172.05	-24.94	20.87	-1584.63	0.00	418684.89	572981.24	32.15	-104.23
	7500.00	16.80	270.75	7267.78	-25.39	21.25	-1613.53	0.00	418685.27	572952.34	32.15	-104.23
	7600.00	16.80	270.75	7363.52	-25.85	21.63	-1642.44	0.00	418685.65	572923.45	32.15	-104.23
	7700.00	16.80	270.75	7459.25	-26.30	22.01	-1671.34	0.00	418686.03	572894.55	32.15	-104.23
	7800.00	16.80	270.75	7554.98	-26.76	22.39	-1700.24	0.00	418686.41	572865.65	32.15	-104.23
	7900.00	16.80	270.75	7650.71	-27.21	22.77	-1729.14	0.00	418686.79	572836.75	32.15	-104.23
Top 3rd BSPS SS	8000.00	16.80	270.75	7746.44	-27.67	23.16	-1758.04	0.00	418687.17	572807.85	32.15	-104.23
	8100.00	16.80	270.75	7842.18	-28.12	23.54	-1786.94	0.00	418687.55	572778.95	32.15	-104.23
	8200.00	16.80	270.75	7937.91	-28.58	23.92	-1815.84	0.00	418687.93	572750.06	32.15	-104.23
	8300.00	16.80	270.75	8033.64	-29.03	24.30	-1844.74	0.00	418688.31	572721.16	32.15	-104.23
	8400.00	16.80	270.75	8129.37	-29.48	24.68	-1873.64	0.00	418688.70	572692.26	32.15	-104.23
	8500.00	16.80	270.75	8225.10	-29.94	25.06	-1902.54	0.00	418689.08	572663.36	32.15	-104.23
	8600.00	16.80	270.75	8320.84	-30.39	25.44	-1931.44	0.00	418689.46	572634.46	32.15	-104.23
	8659.71	16.80	270.75	8378.00	-30.67	25.67	-1948.70	0.00	418689.68	572617.21	32.15	-104.23
	8700.00	16.80	270.75	8416.57	-30.85	25.82	-1960.34	0.00	418689.84	572605.57	32.15	-104.23
	8800.00	16.80	270.75	8512.30	-31.30	26.20	-1989.24	0.00	418690.22	572576.67	32.15	-104.23
Top Wolfcamp	8900.00	16.80	270.75	8608.03	-31.76	26.58	-2018.14	0.00	418690.60	572547.77	32.15	-104.23
	9000.00	16.80	270.75	8703.76	-32.21	26.96	-2047.04	0.00	418690.98	572518.87	32.15	-104.23
	9033.67	16.80	270.75	8736.00	-32.37	27.09	-2056.78	0.00	418691.11	572509.14	32.15	-104.23
	9100.00	16.80	270.75	8799.49	-32.67	27.34	-2075.95	0.00	418691.36	572489.97	32.15	-104.23
	9200.00	16.80	270.75	8895.23	-33.12	27.72	-2104.85	0.00	418691.74	572461.08	32.15	-104.23
	9253.04	16.80	270.75	8946.00	-33.36	27.92	-2120.17	0.00	418691.94	572445.75	32.15	-104.23
	9289.20	16.80	270.75	8980.62	-33.53	28.06	-2130.63	0.00	418692.08	572435.30	32.15	-104.23
	9300.00	16.46	266.38	8990.97	-33.46	27.99	-2133.71	12.00	418692.00	572432.21	32.15	-104.23
	9400.00	17.91	225.23	9086.85	-21.76	16.22	-2158.86	12.00	418680.24	572407.07	32.15	-104.23
	9500.00	25.52	199.58	9179.89	9.43	-15.02	-2177.06	12.00	418649.00	572388.87	32.15	-104.23
Wolfcamp A2 Build & Turn 12°/100' DLS	9536.12	28.97	193.84	9212.00	25.25	-30.85	-2181.76	12.00	418633.17	572384.17	32.15	-104.23
Wolfcamp B	9595.09	35.00	186.82	9262.01	55.93	-61.55	-2187.19	12.00	418602.48	572378.74	32.15	-104.23
	9600.00	35.58	186.64	9266.02	58.75	-64.37	-2187.52	12.00	418599.66	572378.41	32.15	-104.23
	9700.00	47.43	183.75	9340.78	124.62	-130.25	-2193.32	12.00	418533.79	572372.61	32.15	-104.23
	9700.32	47.47	183.74	9341.00	124.85	-130.48	-2193.33	12.00	418533.55	572372.60	32.15	-104.23
	9800.00	59.33	181.80	9400.33	204.63	-210.27	-2197.09	12.00	418453.77	572368.84	32.15	-104.23
	9900.00	71.25	180.28	9442.07	295.29	-300.93	-2198.68	12.00	418363.12	572367.25	32.15	-104.23
	9931.45	75.00	179.85	9451.19	325.37	-331.01	-2198.71	12.00	418333.04	572367.22	32.15	-104.23
	10000.00	77.74	179.85	9467.34	391.99	-397.63	-2198.54	4.00	418266.43	572367.39	32.15	-104.23
	10100.00	81.74	179.85	9485.15	490.37	-496.01	-2198.29	4.00	418168.05	572367.64	32.15	-104.23
	10200.00	85.74	179.85	9496.05	589.75	-595.40	-2198.03	4.00	418068.68	572367.90	32.15	-104.23
Wolfcamp C	10252.92	87.86	179.85	9499.00	642.59	-648.23	-2197.90	4.00	418015.85	572368.03	32.15	-104.23
Landing Point	10300.00	89.74	179.85	9499.99	689.66	-695.30	-2197.78	4.00	417968.79	572368.15	32.15	-104.23
	10306.45	90.00	179.85	9500.00	696.10	-701.74	-2197.76	4.00	417962.34	572368.17	32.15	-104.23
	10400.00	90.00	179.85	9500.00	789.66	-795.30	-2197.52	0.00	417868.80	572368.41	32.15	-104.23
	10500.00	90.00	179.85	9500.00	889.66	-895.30	-2197.26	0.00	417768.81	572368.67	32.15	-104.23
	10600.00	90.00	179.85	9500.00	989.66	-995.30	-2197.01	0.00	417668.81	572368.92	32.15	-104.23
	10700.00	90.00	179.85	9500.00	1089.66	-1095.30	-2196.75	0.00	417568.82	572369.18	32.15	-104.23
	10800.00	90.00	179.85	9500.00	1189.66	-1195.30	-2196.49	0.00	417468.83	572369.44	32.15	-104.23
	10900.00	90.00	179.85	9500.00	1289.66	-1295.30	-2196.24	0.00	417368.84	572369.69	32.15	-104.23
	11000.00	90.00	179.85	9500.00	1389.66	-1395.30	-2195.98	0.00	417268.85	572369.95	32.15	-104.23
	11100.00	90.00	179.85	9500.00	1489.66	-1495.29	-2195.72	0.00	417168.86	572370.21	32.15	-104.23
	11200.00	90.00	179.85	9500.00	1589.66	-1595.29	-2195.47	0.00	417068.87	572370.46	32.15	-104.23
	11300.00	90.00	179.85	9500.00	1689.66	-1695.29	-2195.21	0.00	416968.88	572370.72	32.15	-104.23
	11400.00	90.00	179.85	9500.00	1789.66	-1795.29	-2194.95	0.00	416868.89	572370.98	32.15	-104.23
	11500.00	90.00	179.85	9500.00	1889.66	-1895.29	-2194.70	0.00	416768.90	572371.23	32.15	-104.23
	11600.00	90.00	179.85	9500.00	1989.66	-1995.29	-2194.44	0.00	416668.91	572371.49	32.15	-104.23
	11700.00	90.00	179.85	9500.00	2089.66	-2095.29	-2194.18	0.00	416568.92	572371.75	32.15	-104.23
	11800.00	90.00	179.85	9500.00	2189.66	-2195.29	-2193.93	0.00	416468.93	572372.00	32.14	-104.23
	11900.00	90.00	179.85	9500.00	2289.66	-2295.29	-2193.67	0.00	416368.94	572372.26	32.14	-104.23
	12000.00	90.00	179.85	9500.00	2389.66	-2395.29	-2193.42	0.00	416268.95	572372.52	32.14	-104.23
	12100.00											

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
	15000.00	90.00	179.85	9500.00	5389.66	-5395.28	-2185.72	0.00	413269.23	572380.21	32.14	-104.23
	15100.00	90.00	179.85	9500.00	5489.66	-5495.28	-2185.46	0.00	413169.24	572380.47	32.14	-104.23
	15200.00	90.00	179.85	9500.00	5589.66	-5595.28	-2185.21	0.00	413069.25	572380.73	32.14	-104.23
	15300.00	90.00	179.85	9500.00	5689.66	-5695.28	-2184.95	0.00	412969.26	572380.98	32.14	-104.23
	15400.00	90.00	179.85	9500.00	5789.66	-5795.28	-2184.69	0.00	412869.27	572381.24	32.14	-104.23
	15500.00	90.00	179.85	9500.00	5889.66	-5895.28	-2184.44	0.00	412769.28	572381.49	32.13	-104.23
	15600.00	90.00	179.85	9500.00	5989.66	-5995.28	-2184.18	0.00	412669.29	572381.75	32.13	-104.23
	15700.00	90.00	179.85	9500.00	6089.66	-6095.28	-2183.92	0.00	412569.30	572382.01	32.13	-104.23
	15800.00	90.00	179.85	9500.00	6189.66	-6195.28	-2183.67	0.00	412469.31	572382.26	32.13	-104.23
	15900.00	90.00	179.85	9500.00	6289.66	-6295.28	-2183.41	0.00	412369.32	572382.52	32.13	-104.23
	16000.00	90.00	179.85	9500.00	6389.66	-6395.28	-2183.15	0.00	412269.33	572382.78	32.13	-104.23
	16100.00	90.00	179.85	9500.00	6489.66	-6495.28	-2182.90	0.00	412169.34	572383.03	32.13	-104.23
	16200.00	90.00	179.85	9500.00	6589.66	-6595.28	-2182.64	0.00	412069.35	572383.29	32.13	-104.23
	16300.00	90.00	179.85	9500.00	6689.66	-6695.28	-2182.38	0.00	411969.36	572383.55	32.13	-104.23
	16400.00	90.00	179.85	9500.00	6789.66	-6795.28	-2182.13	0.00	411869.37	572383.80	32.13	-104.23
	16500.00	90.00	179.85	9500.00	6889.66	-6895.28	-2181.87	0.00	411769.38	572384.06	32.13	-104.23
	16600.00	90.00	179.85	9500.00	6989.66	-6995.28	-2181.61	0.00	411669.38	572384.32	32.13	-104.23
	16700.00	90.00	179.85	9500.00	7089.66	-7095.28	-2181.36	0.00	411569.39	572384.57	32.13	-104.23
	16800.00	90.00	179.85	9500.00	7189.66	-7195.28	-2181.10	0.00	411469.40	572384.83	32.13	-104.23
	16900.00	90.00	179.85	9500.00	7289.66	-7295.28	-2180.84	0.00	411369.41	572385.09	32.13	-104.23
	17000.00	90.00	179.85	9500.00	7389.66	-7395.28	-2180.59	0.00	411269.42	572385.34	32.13	-104.23
	17100.00	90.00	179.85	9500.00	7489.66	-7495.27	-2180.33	0.00	411169.43	572385.60	32.13	-104.23
	17200.00	90.00	179.85	9500.00	7589.66	-7595.27	-2180.07	0.00	411069.44	572385.86	32.13	-104.23
	17300.00	90.00	179.85	9500.00	7689.66	-7695.27	-2179.82	0.00	410969.45	572386.11	32.13	-104.23
	17400.00	90.00	179.85	9500.00	7789.66	-7795.27	-2179.56	0.00	410869.46	572386.37	32.13	-104.23
	17500.00	90.00	179.85	9500.00	7889.66	-7895.27	-2179.30	0.00	410769.47	572386.63	32.13	-104.23
	17600.00	90.00	179.85	9500.00	7989.66	-7995.27	-2179.05	0.00	410669.48	572386.88	32.13	-104.23
	17700.00	90.00	179.85	9500.00	8089.66	-8095.27	-2178.79	0.00	410569.49	572387.14	32.13	-104.23
	17800.00	90.00	179.85	9500.00	8189.66	-8195.27	-2178.53	0.00	410469.50	572387.40	32.13	-104.23
	17900.00	90.00	179.85	9500.00	8289.66	-8295.27	-2178.28	0.00	410369.51	572387.65	32.13	-104.23
	18000.00	90.00	179.85	9500.00	8389.66	-8395.27	-2178.02	0.00	410269.52	572387.91	32.13	-104.23
	18100.00	90.00	179.85	9500.00	8489.66	-8495.27	-2177.76	0.00	410169.53	572388.16	32.13	-104.23
	18200.00	90.00	179.85	9500.00	8589.66	-8595.27	-2177.51	0.00	410069.54	572388.42	32.13	-104.23
	18300.00	90.00	179.85	9500.00	8689.66	-8695.27	-2177.25	0.00	409969.55	572388.68	32.13	-104.23
	18400.00	90.00	179.85	9500.00	8789.66	-8795.27	-2177.00	0.00	409869.56	572388.93	32.13	-104.23
	18500.00	90.00	179.85	9500.00	8889.66	-8895.27	-2176.74	0.00	409769.56	572389.19	32.13	-104.23
	18600.00	90.00	179.85	9500.00	8989.66	-8995.27	-2176.48	0.00	409669.57	572389.45	32.13	-104.23
	18700.00	90.00	179.85	9500.00	9089.66	-9095.27	-2176.23	0.00	409569.58	572389.70	32.13	-104.23
	18800.00	90.00	179.85	9500.00	9189.66	-9195.27	-2175.97	0.00	409469.59	572389.96	32.13	-104.23
	18900.00	90.00	179.85	9500.00	9289.66	-9295.27	-2175.71	0.00	409369.60	572390.22	32.13	-104.23
	19000.00	90.00	179.85	9500.00	9389.66	-9395.27	-2175.46	0.00	409269.61	572390.47	32.13	-104.23
	19100.00	90.00	179.85	9500.00	9489.66	-9495.27	-2175.20	0.00	409169.62	572390.73	32.12	-104.23
	19200.00	90.00	179.85	9500.00	9589.66	-9595.27	-2174.94	0.00	409069.63	572390.99	32.12	-104.23
	19300.00	90.00	179.85	9500.00	9689.66	-9695.27	-2174.69	0.00	408969.64	572391.24	32.12	-104.23
	19400.00	90.00	179.85	9500.00	9789.66	-9795.27	-2174.43	0.00	408869.65	572391.50	32.12	-104.23
	19500.00	90.00	179.85	9500.00	9889.66	-9895.27	-2174.17	0.00	408769.66	572391.76	32.12	-104.23
	19600.00	90.00	179.85	9500.00	9989.66	-9995.27	-2173.92	0.00	408669.67	572392.01	32.12	-104.23
	19700.00	90.00	179.85	9500.00	10089.66	-10095.27	-2173.66	0.00	408569.68	572392.27	32.12	-104.23
Cimarex Davinci 7-18 Federal Com #35H - PBHL [100' FSL,1535FWL]	19797.74	90.00	179.85	9500.00	10187.39	-10193.00	-2173.41	0.00	408471.95	572392.52	32.12	-104.23

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	23.000	1/100.000	17.500	13.375		NAL_MWD_IFR1+MS-Depth Only	Davinci 7-18 Federal Com #35H / Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21
	1	23.000	19797.738	1/100.000	17.500	13.375		NAL_MWD_IFR1+MS	Davinci 7-18 Federal Com #35H / Cimarex Davinci 7-18 Federal



Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21 Proposal
Geodetic Report
(Non-Def Plan)



Report Date: May 24, 2021 - 05:27 PM
Client: Cimarex Energy
Field: NM Eddy County (NAD 83)
Structure / Slot: Davinci 7-18 Federal Pad / New Slot
Well: Davinci 7-18 Federal Com #35H
Borehole: Davinci 7-18 Federal Com #35H
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21
Survey Date: May 24, 2021
Tort / AHD / DDI / ERD Ratio: 108.870 ° / 12378.340 ft / 6.448 / 1.303
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 9' 3.38513", W 104° 13' 33.47447"
Location Grid N/E Y/X: N 418664.020 ftUS, E 574565.730 ftUS
CRS Grid Convergence Angle: 0.0571 °
Grid Scale Factor: 0.99991036
Version / Patch: 2.10.825.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.853 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3329.200 ft above MSL
Seabed / Ground Elevation: 3306.200 ft above MSL
Magnetic Declination: 7.030 °
Total Gravity Field Strength: 998.4349mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47629.679 nT
Magnetic Dip Angle: 59.768 °
Declination Date: May 24, 2021
Magnetic Declination Model: HDGM 2021
North Reference: Grid North
Grid Convergence Used: 0.0571 °
Total Corr Mag North->Grid North: 6.9731 °
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)
SHL [330' FNL, 1550' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	418664.02	574565.73	32.15	-104.23
Nudge 2"/100'	1500.00	0.00	270.75	1500.00	0.00	0.00	0.00	0.00	418664.02	574565.73	32.15	-104.23
DLS	2340.00	16.80	270.75	2328.02	-1.92	1.61	-122.26	2.00	418665.63	574443.48	32.15	-104.23
Hold Nudge	9289.20	16.80	270.75	8980.62	-33.53	28.06	-2130.63	0.00	418692.08	572435.30	32.15	-104.23
KOP - Build	9595.09	35.00	186.82	9262.01	55.93	-61.55	-2187.19	12.00	418602.48	572378.74	32.15	-104.23
12"/100' DLS	9931.45	75.00	179.85	9451.19	325.37	-331.01	-2198.71	12.00	418333.04	572367.22	32.15	-104.23
Build & Turn	10306.45	90.00	179.85	9500.00	696.10	-701.74	-2197.76	4.00	417962.34	572368.17	32.15	-104.23
12"/100' DLS												
Build 4"/100'												
DLS												
Landing Point												
Cimarex Davinci												
7-18 Federal												
Com #35H -	19797.74	90.00	179.85	9500.00	10187.39	-10193.00	-2173.41	0.00	408471.95	572392.52	32.12	-104.23
PBHL [100'												
FSL,1535'FWL]												

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Type	Borehole / Survey
	1	0.000	23.000	1/100.000	17.500	13.375		NAL_MWD_IFR1+MS-Depth Only	Davinci 7-18 Federal Com #35H / Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21
	1	23.000	19797.738	1/100.000	17.500	13.375		NAL_MWD_IFR1+MS	Davinci 7-18 Federal Com #35H / Cimarex Davinci 7-18 Federal



Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21 Anti-Collision Summary Report

Analysis Date-24hr Time: May 24, 2021 - 17:28

Client: Cimarex Energy

Field: NM Eddy County (NAD 83)

Structure: Davinci 7-18 Federal Pad

Slot: New Slot

Well: Davinci 7-18 Federal Com #35H

Borehole: Davinci 7-18 Federal Com #35H

Scan MD Range: 0.00ft ~ 19797.74ft

Analysis Method: 3D Least Distance

Reference Trajectory: Cimarex Davinci 7-18 Federal Com #35H Rev2 RM 24May21 (Non-Def Plan)

Depth Interval: Every 10.00 Measured Depth (ft)

Rule Set: NAL Procedure: D&M AntiCollision Standard S002

Min Pts: All local minima indicated.

Version / Patch: 2.10.825.0

Database | Project: us1455vsm3115/drilling-NM Eddy County 2.10

Trajectory Error Model: ISCSA0 3-D 95.000% Confidence 2.7955 sigma, for subject well. For offset wells, error model version is specified with each well respectively.

Offset Trajectories Summary

Offset Selection Criteria

Wellhead distance scan:

Selection filters: Definitive Surveys - Definitive Plans - Definitive surveys exclude definitive plans

- All Non-Def Surveys when no Def-Survey is set in a borehole - All Non-Def Plans when no Def-Plan is set in a borehole

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		

Results highlighted: Sep-Factor separation <= 1.50 ft

API 30-015-33496 Cimarex
Gadwell 18 Federal Com #1
(Offset) P Gas Inc Only Off-
12250ft (Def Survey)

Fail Major

6256.20	32.81	6254.92	6223.39	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
6255.79	32.81	6254.43	6222.98	85165.58	MAS = 10.00 (m)	23.00	23.00					MinPt-O-SF
6253.11	32.81	6241.24	6220.24	592.69	MAS = 10.00 (m)	430.00	430.00					MinPts
6256.86	32.81	6236.88	6224.05	334.68	MAS = 10.00 (m)	750.00	750.00					MINPT-O-EQU
6254.13	69.97	6207.06	6184.16	136.55	OSF1.50	1490.00	1490.00					MinPt-CtCt
1623.78	492.45	1293.13	1131.32	5.00	OSF1.50	13830.00	9500.00	OSF<5.00				Enter Alert
493.90	494.40	161.46	-0.50	1.50	OSF1.50	14960.00	9500.00		OSF<1.50			Enter Minor
323.95	494.62	-8.72	-170.88	0.97	OSF1.50	15130.00	9500.00			OSF<1.00		Enter Major
9.42	502.44	-328.02	-493.02	0.01	OSF1.50	15450.00	9500.00					MinPts
10.57	505.14	-326.62	-494.57	0.03	OSF1.50	15460.00	9500.00					MinPt-O-ADP
316.24	488.31	-9.72	-172.06	0.97	OSF1.50	15770.00	9500.00			OSF>1.00		Exit Major
486.19	488.27	160.24	-2.08	1.49	OSF1.50	15940.00	9500.00		OSF>1.50			Exit Minor
1626.05	488.86	1299.72	1137.20	5.00	OSF1.50	17080.00	9500.00	OSF>5.00				Exit Alert
4343.55	490.97	4015.80	3852.58	13.30	OSF1.50	19797.74	9500.00					TD

API 30-015-23094 Chevron
Mona Lisa #2 (Offset) P Gas
Inc Only Off-11970ft (Def
Survey)

Fail Major

3924.19	32.81	3922.90	3891.38	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
3923.76	32.81	3922.40	3890.95	54947.49	MAS = 10.00 (m)	23.00	23.00					MinPt-O-SF
3923.11	32.81	3918.94	3890.34	1352.40	MAS = 10.00 (m)	230.00	230.00					MinPts
3922.24	36.68	3897.35	3885.55	166.16	OSF1.50	820.00	820.00					MinPt-CtCt
3924.86	44.61	3894.70	3880.26	135.86	OSF1.50	1060.00	1060.00					MINPT-O-EQU
3920.92	69.92	3873.95	3851.07	85.67	OSF1.50	1460.00	1460.00					MinPt-CtCt
3921.63	71.20	3873.73	3850.42	84.11	OSF1.50	1560.00	1560.00					MINPT-O-EQU
3370.98	427.15	3085.74	2943.81	11.87	OSF1.50	8580.00	8301.69					MinPt-CtCt
1623.80	491.90	1294.68	1131.89	4.98	OSF1.50	11330.00	9500.00	OSF<5.00				Enter Alert
488.38	495.09	156.92	-6.72	1.48	OSF1.50	12480.00	9500.00		OSF<1.50			Enter Minor
329.14	496.05	-2.80	-166.90	0.99	OSF1.50	12650.00	9500.00			OSF<1.00		Enter Major
140.09	495.51	-190.68	-355.43	0.42	OSF1.50	12940.00	9500.00					MinPts
139.87	495.03	-190.58	-355.18	0.42	OSF1.50	12950.00	9500.00					MinPts
323.71	488.65	-2.49	-164.94	0.99	OSF1.50	13240.00	9500.00			OSF>1.00		Exit Major
482.61	489.15	156.08	-6.54	1.48	OSF1.50	13410.00	9500.00		OSF>1.50			Exit Minor
1627.57	491.73	1299.32	1135.84	4.97	OSF1.50	14570.00	9500.00	OSF>5.00				Exit Alert
6849.91	494.65	6519.72	6355.26	20.82	OSF1.50	19797.74	9500.00					TD

Cimarex Da Vinci 7 Federal
Com #4H MWD Off to 12076ft
(Def Survey)

Fail Minor

5191.85	32.81	5190.56	5159.04	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
5191.40	32.81	5190.03	5158.59	65799.72	MAS = 10.00 (m)	23.00	23.00					MinPt-O-SF
5184.72	32.81	5180.98	5151.99	2061.83	MAS = 10.00 (m)	580.00	580.00					MinPts
5172.59	32.81	5164.20	5139.78	728.34	MAS = 10.00 (m)	1780.00	1779.55					MinPt-O-SF
353.83	107.05	282.03	246.77	5.00	OSF1.50	7190.00	6971.01	OSF<5.00				Enter Alert
153.56	153.60	50.65	-0.04	1.50	OSF1.50	7440.00	7210.34		OSF<1.50			Enter Minor
132.15	189.33	5.50	-57.17	1.04	OSF1.50	7520.00	7286.93					MinPt-CtCt
132.67	191.71	4.43	-59.05	1.03	OSF1.50	7530.00	7296.50					MinPts
133.93	193.36	4.59	-59.43	1.04	OSF1.50	7540.00	7306.08					MinPt-O-ADP
179.70	180.77	58.75	-1.07	1.49	OSF1.50	7640.00	7401.81		OSF>1.50			Exit Minor
451.54	139.27	358.26	312.27	4.89	OSF1.50	7950.00	7698.58	OSF>5.00				Exit Alert
2271.07	95.48	2206.92	2175.53	36.15	OSF1.50	10710.00	9500.00					MinPts
2264.19	90.64	2203.34	2173.53	37.99	OSF1.50	10980.00	9500.00					MinPt-O-ADP
2263.98	90.34	2203.32	2173.64	38.11	OSF1.50	10990.00	9500.00					MINPT-O-EQU
2258.04	87.50	2199.23	2170.54	39.27	OSF1.50	11230.00	9500.00					MinPt-O-ADP
2257.89	87.33	2199.25	2170.56	39.34	OSF1.50	11250.00	9500.00					MINPT-O-EQU
2234.24	81.65	2179.38	2152.60	41.68	OSF1.50	11810.00	9500.00					MinPt-CtCt
2234.27	81.68	2179.39	2152.58	41.66	OSF1.50	11820.00	9500.00					MinPts
2239.46	82.39	2184.10	2157.07	41.49	OSF1.50	12000.00	9500.00					MinPt-O-SF
2240.14	79.67	2186.60	2160.47	42.85	OSF1.50	12320.00	9500.00					MinPt-CtCt
2240.16	79.71	2186.58	2160.43	42.81	OSF1.50	12330.00	9500.00					MINPT-O-EQU
2240.21	79.79	2186.59	2160.42	42.78	OSF1.50	12340.00	9500.00					MinPt-O-ADP
2246.09	80.97	2191.68	2165.12	42.24	OSF1.50	12550.00	9500.00					MinPt-O-SF
2245.15	80.37	2191.14	2164.78	42.56	OSF1.50	12680.00	9500.00					MinPt-CtCt
2245.24	80.64	2191.05	2164.60	42.42	OSF1.50	12710.00	9500.00					MINPT-O-EQU
2245.31	80.73	2191.06	2164.58	42.37	OSF1.50	12720.00	9500.00					MinPt-O-ADP
2246.27	81.28	2191.66	2164.99	42.19	OSF1.50	12780.00	9500.00					MinPt-O-SF
2245.91	81.57	2191.11	2164.35	41.94	OSF1.50	12890.00	9500.00					MinPt-CtCt

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
2246.04	81.93	2191.00	2164.12	41.76		OSF1.50	12930.00	9500.00				MINPT-O-EQU	
2246.11	82.01	2191.01	2164.10	41.71		OSF1.50	12940.00	9500.00				MinPt-O-ADP	
2246.56	82.76	2190.98	2163.80	41.34		OSF1.50	13040.00	9500.00				MINPT-O-EQU	
2246.73	82.97	2190.99	2163.78	41.24		OSF1.50	13060.00	9500.00				MinPt-O-ADP	
2257.02	85.85	2199.36	2171.17	40.01		OSF1.50	13330.00	9500.00				MinPt-O-SF	
2269.27	95.06	2205.47	2174.21	36.28		OSF1.50	14060.00	9500.00				MinPt-CtCt	
2269.43	95.41	2205.38	2173.96	36.12		OSF1.50	14090.00	9500.00				MINPT-O-EQU	
2269.54	95.60	2205.38	2173.94	36.07		OSF1.50	14100.00	9500.00				MinPt-O-ADP	
2339.63	102.42	2270.92	2237.21	34.68		OSF1.50	14710.00	9500.00				MinPt-O-SF	
5813.99	103.65	5744.46	5710.34	85.18		OSF1.50	19797.74	9500.00				TD	
Cimarex Davinci 7-18 Federal Com #34H Rev1 RM 24May21 (Non-Def Plan)													
													Warning Alert
19.95	16.22	18.67	3.73	N/A		MAS = 4.94 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert	
19.95	16.22	18.67	3.73	16803.44		MAS = 4.94 (m)	23.00	23.00				WRP	
19.95	16.22	9.63	3.73	2.06		MAS = 4.94 (m)	1500.00	1500.00				MinPts	
19.97	16.22	9.60	3.75	2.06		MAS = 4.94 (m)	1510.00	1510.00				MINPT-O-EQU	
20.11	16.22	9.64	3.89	2.05		MAS = 4.94 (m)	1530.00	1530.00				MinPt-O-SF	
55.22	17.60	43.06	37.62	4.96		OSF1.50	1950.00	1948.15	OSF>5.00			Exit Alert	
531.71	66.02	487.27	465.74	12.23		OSF1.50	7090.00	6875.28				MinPt-O-SF	
1164.57	82.32	1109.26	1082.25	21.53		OSF1.50	10880.00	9500.00				MinPt-CtCt	
1164.90	330.23	944.32	834.67	5.31		OSF1.50	19790.00	9500.00				MinPts	
1164.93	329.98	944.52	834.96	5.31		OSF1.50	19797.74	9500.00				TD	
Cimarex Davinci 7-18 Federal Com #33H Rev2 RM 24May21 (Non-Def Plan)													
													Warning Alert
40.02	32.27	38.73	7.75	N/A		MAS = 9.84 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert	
40.02	32.27	38.73	7.75	15846.87		MAS = 9.84 (m)	23.00	23.00				WRP	
40.02	32.27	29.69	7.75	4.28		MAS = 9.84 (m)	1500.00	1500.00				MinPts	
40.03	32.27	29.66	7.76	4.26		MAS = 9.84 (m)	1510.00	1510.00				MINPT-O-EQU	
40.64	32.27	30.03	8.37	4.22		MAS = 9.84 (m)	1560.00	1560.00				MinPt-O-SF	
50.92	32.27	39.57	18.64	4.93		MAS = 9.84 (m)	1750.00	1749.68	OSF>5.00			Exit Alert	
2276.79	89.01	2217.02	2187.78	38.91		OSF1.50	9990.00	9465.19				MinPt-O-SF	
2277.58	330.22	2057.00	1947.35	10.38		OSF1.50	19790.00	9500.00				MinPts	
2277.62	330.22	2057.05	1947.40	10.38		OSF1.50	19797.74	9500.00				TD	
Cimarex Davinci 7-18 Federal Com #38H Rev0 RM 24May21 (Non-Def Plan)													
													Warning Alert
116.69	32.81	115.40	83.88	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
116.69	32.81	115.39	83.88	17313.17		MAS = 10.00 (m)	23.00	23.00				WRP	
111.21	32.81	99.36	78.40	10.41		MAS = 10.00 (m)	2310.00	2299.25				MinPts	
111.26	32.81	99.33	78.45	10.33		MAS = 10.00 (m)	2330.00	2318.44				MINPT-O-EQU	
134.54	41.30	106.57	93.23	4.99		OSF1.50	4700.00	4587.29	OSF<5.00			Enter Alert	
153.57	60.88	112.58	92.69	3.83		OSF1.50	6320.00	6138.15				MinPt-O-ADP	
179.53	87.77	120.66	91.83	3.09		OSF1.50	8490.00	8215.53				MinPt-CtCt	
179.77	88.26	120.53	91.50	3.08		OSF1.50	8520.00	8244.25				MINPT-O-EQU	
179.93	88.43	120.55	91.51	3.08		OSF1.50	8530.00	8253.82				MinPt-O-SF	
180.49	88.76	120.89	91.73	3.07		OSF1.50	8550.00	8272.97				Exit Alert	
258.78	80.52	204.67	178.26	4.87		OSF1.50	8840.00	8550.59	OSF>5.00			MinPt-O-SF	
973.59	293.03	777.81	680.56	5.00		OSF1.50	19290.00	9500.00	OSF<5.00			Enter Alert	
973.53	308.51	767.49	665.08	4.75		OSF1.50	19790.00	9500.00				MinPt-CtCt	
973.59	308.63	767.41	664.98	4.74		OSF1.50	19797.74	9500.00				MinPts	
Cimarex Davinci 7-18 Federal Com #6H Off-18854ft (Def Survey)													
													Warning Alert
2614.37	32.81	2612.39	2581.56	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	
2614.30	32.81	2612.32	2581.58	290759.78		MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
2614.28	32.81	2612.33	2581.47	910518.80		MAS = 10.00 (m)	20.00	20.00				MINPT-O-EQU	
2614.28	32.81	2612.30	2581.47	N/A		MAS = 10.00 (m)	23.00	23.00				WRP	
2614.28	32.81	2612.29	2581.47	69161.27		MAS = 10.00 (m)	40.00	40.00				MinPts	
2614.32	32.81	2612.23	2581.51	18673.75		MAS = 10.00 (m)	80.00	80.00				MINPT-O-EQU	
2614.44	32.81	2612.21	2581.63	10707.30		MAS = 10.00 (m)	110.00	110.00				MINPT-O-EQU	
2620.97	32.81	2615.77	2588.16	813.25		MAS = 10.00 (m)	780.00	780.00				MinPts	
2621.09	32.81	2615.67	2588.28	761.21		MAS = 10.00 (m)	830.00	830.00				MINPT-O-EQU	
1228.29	78.29	1174.84	1150.00	24.65		OSF1.50	9140.00	8837.79				MinPt-CtCt	
1228.35	78.53	1174.74	1149.82	24.58		OSF1.50	9160.00	8856.93				MINPT-O-EQU	
1228.52	78.74	1174.77	1149.78	24.50		OSF1.50	9180.00	8876.08				MinPt-O-ADP	
1232.77	79.79	1178.36	1152.98	24.23		OSF1.50	9300.00	8990.97				MinPt-O-SF	
1361.08	111.14	1286.06	1249.92	18.79		OSF1.50	10610.00	9500.00				MinPt-CtCt	
1360.23	136.93	1268.03	1223.30	15.17		OSF1.50	11220.00	9500.00				MinPt-CtCt	
1356.33	174.46	1239.11	1181.88	11.82		OSF1.50	12050.00	9500.00				MinPt-CtCt	
1357.98	179.31	1237.52	1178.67	11.51		OSF1.50	12160.00	9500.00				MINPT-O-EQU	
1358.91	180.68	1237.53	1178.21	11.43		OSF1.50	12190.00	9500.00				MINPT-O-EQU	
1362.16	192.99	1232.59	1169.17	10.72		OSF1.50	12450.00	9500.00				MinPt-CtCt	
1364.08	212.80	1221.31	1151.29	9.72		OSF1.50	12880.00	9500.00				MinPt-CtCt	
1369.60	264.96	1192.06	1104.64	7.82		OSF1.50	13990.00	9500.00				MinPt-CtCt	
1369.57	270.79	1188.14	1098.78	7.65		OSF1.50	14110.00	9500.00				MinPt-CtCt	
1371.13	275.33	1186.67	1095.79	7.53		OSF1.50	14210.00	9500.00				MINPT-O-EQU	
1377.81	296.20	1179.44	1081.61	7.03		OSF1.50	14640.00	9500.00				MINPT-O-EQU	
1380.09	298.95	1179.89	1081.14	6.97		OSF1.50	14700.00	9500.00				MinPt-O-ADP	
1379.74	329.60	1159.15	1050.19	6.32		OSF1.50	15300.00	9500.00				MinPt-CtCt	
1375.82	354.76	1138.40	1021.07	5.85		OSF1.50	15800.00	9500.00				MinPt-CtCt	
1375.42	371.30	1126.96	1004.12	5.59		OSF1.50	16130.00	9500.00				MinPt-CtCt	
1363.98	403.44	1094.11	960.55	5.10		OSF1.50	16810.00	9500.00				MinPt-CtCt	
1363.03	410.90	1088.18	952.13	5.00		OSF1.50	16960.00	9500.00	OSF<5.00			Enter Alert	
1362.92	412.84	1086.78	950.08	4.98		OSF1.50	17000.00	9500.00				MinPt-CtCt	
1360.90	420.95	1079.34	939.95	4.87		OSF1.50	17170.00	9500.00				MinPt-CtCt	
1365.38	442.70	1069.33	922.68	4.65		OSF1.50	17610.00	9500.00				MinPt-CtCt	
1367.41	476.87	1048.58	890.54	4.32		OSF1.50	18290.00	9500.00				MinPt-CtCt	
1349.72	518.52	1003.09	831.20	3.92		OSF1.50	19060.00	9500.00				MinPt-CtCt	
1349.97	539.04	989.65	810.93	3.77		OSF1.50	19430.00	9500.00				MinPt-CtCt	
1351.62	548.56	984.95	803.06	3.71		OSF1.50	19610.00	9500.00				MINPT-O-EQU	
1351.91	548.91	985.01	803.00	3.71		OSF1.50	19620.00	9500.00				MinPt-O-ADP	
1353.25	549.80	985.76	803.46	3.70		OSF1.50	19650.00	9500.00				MinPt-O-SF	
1369.44	560.32	1001.62	819.12	3.74		OSF1.50	19797.74	9500.00				TD	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
Cimarex Davinci 7-18 Federal Com #32H Rev1 RM 24May21 (Non-Def Plan)													
													Pass
	60.00	32.81	58.71	27.19	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
	60.00	32.81	58.71	27.19	15544.68	MAS = 10.00 (m)	23.00	23.00					WRP
	60.00	32.81	49.67	27.19	6.49	MAS = 10.00 (m)	1500.00	1500.00					MinPts
	60.02	32.81	49.64	27.21	6.46	MAS = 10.00 (m)	1510.00	1510.00					MINPT-O-EOU
	61.41	32.81	50.65	28.61	6.35	MAS = 10.00 (m)	1590.00	1589.99					MinPt-O-SF
	2039.92	48.84	2006.93	1991.08	64.30	OSF1.50	6030.00	5860.52					MinPt-O-SF
	2435.05	60.87	2394.04	2374.18	61.27	OSF1.50	7390.00	7162.48					MinPt-O-SF
	3622.71	58.81	3583.07	3563.90	94.44	OSF1.50	10350.00	9500.00					MinPt-CtCt
	3623.12	321.14	3408.58	3301.96	16.98	OSF1.50	19797.74	9500.00					MinPts
Final Surveys - Cimarex DaVinci 7-18 Federal Com #30H Off to 17841ft (Surcon Corrected) (Def Survey)													
													Pass
	134.24	32.81	132.95	101.43	280100.98	MAS = 10.00 (m)	0.00	0.00					Surface
	134.20	32.81	132.90	101.39	7501.42	MAS = 10.00 (m)	23.00	23.00					WRP
	133.43	32.81	131.79	100.62	375.77	MAS = 10.00 (m)	130.00	130.00					MinPts
	133.45	32.81	131.78	100.64	342.24	MAS = 10.00 (m)	140.00	140.00					MINPT-O-EOU
	104.50	32.81	96.71	71.69	15.53	MAS = 10.00 (m)	1510.00	1510.00					MinPts
	104.50	32.81	96.69	71.69	15.48	MAS = 10.00 (m)	1520.00	1520.00					MINPT-O-EOU
	105.77	32.81	97.81	72.96	15.33	MAS = 10.00 (m)	1600.00	1599.98					MinPt-O-SF
	329.60	32.81	317.65	296.79	30.05	MAS = 10.00 (m)	3010.00	2969.42					MinPt-O-SF
	694.28	37.83	668.72	656.45	28.25	OSF1.50	5500.00	5353.14					MinPt-O-SF
	1323.62	57.08	1285.23	1266.54	35.39	OSF1.50	7940.00	7689.00					MinPt-O-SF
	2379.25	37.31	2354.04	2341.94	98.28	OSF1.50	10360.00	9500.00					MinPt-O-SF
	2349.57	51.49	2314.91	2298.08	69.80	OSF1.50	11500.00	9500.00					MinPt-CtCt
	2345.37	67.34	2300.14	2278.04	53.02	OSF1.50	12170.00	9500.00					MinPt-CtCt
	2345.47	67.66	2300.03	2277.82	52.77	OSF1.50	12200.00	9500.00					MINPT-O-EOU
	2345.64	67.88	2300.05	2277.77	52.60	OSF1.50	12220.00	9500.00					MinPt-O-ADP
	2357.24	73.81	2307.69	2283.42	48.55	OSF1.50	12530.00	9500.00					MinPt-O-ADP
	2359.77	82.92	2304.15	2276.85	43.20	OSF1.50	12760.00	9500.00					MinPt-CtCt
	2358.12	91.47	2296.81	2266.66	39.09	OSF1.50	13080.00	9500.00					MinPt-CtCt
	2361.12	108.28	2288.59	2252.84	33.01	OSF1.50	13680.00	9500.00					MinPt-CtCt
	2359.53	141.90	2264.59	2217.63	25.11	OSF1.50	14840.00	9500.00					MinPt-CtCt
	2366.28	161.45	2258.28	2204.79	22.11	OSF1.50	15540.00	9500.00					MINPT-O-EOU
	2366.96	162.40	2258.35	2204.58	21.99	OSF1.50	15580.00	9500.00					MinPt-O-ADP
	2375.86	191.86	2247.62	2184.01	18.67	OSF1.50	16530.00	9500.00					MinPt-CtCt
	2376.22	195.96	2245.24	2180.26	18.28	OSF1.50	16670.00	9500.00					MinPt-CtCt
	2373.42	211.85	2231.85	2161.57	16.88	OSF1.50	17200.00	9500.00					MinPt-CtCt
	2376.60	221.69	2228.47	2154.91	16.15	OSF1.50	17570.00	9500.00					MINPT-O-EOU
	2380.39	226.84	2228.82	2153.55	15.81	OSF1.50	17750.00	9500.00					MINPT-O-EOU
	2389.01	242.13	2227.25	2146.88	14.86	OSF1.50	18250.00	9500.00					MINPT-O-EOU
	2370.90	289.27	2177.71	2081.63	12.33	OSF1.50	19780.00	9500.00					MinPt-CtCt
	2370.90	289.27	2177.71	2081.63	12.33	OSF1.50	19790.00	9500.00					MinPts
	2370.93	289.28	2177.74	2081.66	12.33	OSF1.50	19797.74	9500.00					TD
Cimarex Davinci 7-18 Federal Com #37H Rev0 RM 24May21 (Non-Def Plan)													
													Pass
	134.23	32.81	132.94	101.42	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
	134.23	32.81	132.93	101.42	16171.13	MAS = 10.00 (m)	23.00	23.00					WRP
	134.23	32.81	123.89	101.42	14.69	MAS = 10.00 (m)	1500.00	1500.00					MinPts
	134.29	32.81	123.85	101.48	14.54	MAS = 10.00 (m)	1520.00	1520.00					MINPT-O-EOU
	138.19	32.81	127.16	105.38	14.06	MAS = 10.00 (m)	1660.00	1659.92					MinPt-O-SF
	473.68	35.58	449.53	438.10	20.66	OSF1.50	4430.00	4328.81					MinPt-O-SF
	2098.97	311.91	1890.60	1787.06	10.13	OSF1.50	19790.00	9500.00					MinPts
	2099.01	311.87	1890.66	1787.14	10.13	OSF1.50	19797.74	9500.00					TD
Final Surveys - Cimarex DaVinci 7-18 Federal Com #29H Off to 19312ft (Surcon Corrected) (Def Survey)													
													Pass
	152.33	32.81	151.05	119.53	659692.75	MAS = 10.00 (m)	0.00	0.00					Surface
	152.32	32.81	151.02	119.51	14226.62	MAS = 10.00 (m)	23.00	23.00					WRP
	147.97	32.81	145.33	115.16	108.75	MAS = 10.00 (m)	360.00	360.00					MinPts
	147.99	32.81	145.31	115.18	105.45	MAS = 10.00 (m)	370.00	370.00					MINPT-O-EOU
	151.14	32.81	143.90	118.33	24.56	MAS = 10.00 (m)	1380.00	1380.00					MinPts
	151.18	32.81	143.85	118.37	24.22	MAS = 10.00 (m)	1400.00	1400.00					MINPT-O-EOU
	155.59	32.81	147.74	122.79	22.93	MAS = 10.00 (m)	1570.00	1569.99					MinPt-O-SF
	1245.83	32.81	1227.28	1213.03	71.01	MAS = 10.00 (m)	4490.00	4386.25					MinPt-O-SF
	2060.92	43.45	2031.62	2017.47	72.82	OSF1.50	6410.00	6224.31					MinPt-O-SF
	2237.16	46.96	2205.52	2190.21	73.02	OSF1.50	6840.00	6635.95					MinPt-O-SF
	2466.03	52.10	2430.96	2413.93	72.33	OSF1.50	7400.00	7172.05					MinPt-O-SF
	2812.75	58.46	2773.44	2754.29	73.43	OSF1.50	8220.00	7957.05					MinPt-O-SF
	2891.04	60.08	2850.64	2830.96	73.40	OSF1.50	8410.00	8138.94					MinPt-O-SF
	3082.03	63.77	3039.18	3018.26	73.65	OSF1.50	8850.00	8560.17					MinPt-O-SF
	3165.28	65.47	3121.29	3099.81	73.64	OSF1.50	9050.00	8751.63					MinPt-O-SF
	3262.70	70.53	3215.34	3192.17	70.38	OSF1.50	9289.20	8980.62					MinPt-O-SF
	3304.12	70.37	3256.86	3233.75	71.44	OSF1.50	9460.00	9143.28					MinPt-O-SF
	3402.62	78.62	3349.88	3324.00	65.72	OSF1.50	10770.00	9500.00					MinPt-CtCt
	3402.76	78.95	3349.80	3323.81	65.45	OSF1.50	10810.00	9500.00					MINPT-O-EOU
	3402.83	79.03	3349.81	3323.73	65.38	OSF1.50	10820.00	9500.00					MinPt-O-ADP
	3409.35	87.42	3350.74	3321.93	59.15	OSF1.50	11340.00	9500.00					MinPt-CtCt
	3409.52	87.97	3350.55	3321.55	58.78	OSF1.50	11390.00	9500.00					MINPT-O-EOU
	3409.70	88.19	3350.53	3321.51	58.63	OSF1.50	11410.00	9500.00					MinPt-O-ADP
	3426.23	95.78	3362.05	3330.45	54.20	OSF1.50	11800.00	9500.00					MINPT-O-EOU
	3426.89	96.58	3362.18	3330.32	53.76	OSF1.50	11850.00	9500.00					MinPt-O-ADP
	3423.03	117.23	3344.55	3305.80	44.16	OSF1.50	12720.00	9500.00					MinPt-CtCt
	3425.52	123.02	3343.18	3302.50	42.09	OSF1.50	12990.00	9500.00					MINPT-O-EOU
	3426.33	128.92	3340.06	3297.41	40.16	OSF1.50	13190.00	9500.00					MinPt-CtCt
	3425.50	134.76	3335.33	3290.74	38.40	OSF1.50	13420.00	9500.00					MinPt-CtCt
	3424.03	140.17	3330.25	3283.86	36.89	OSF1.50	13630.00	9500.00					MinPt-CtCt
	3424.71	142.03	3329.69	3282.68	36.41	OSF1.50	13730.00	9500.00					MINPT-O-EOU
	3425.48	142.97	3329.84	3282.53	36.18	OSF1.50	13780.00	9500.00					MinPt-O-ADP
	3427.18	147.80	3328.32	3279.38	35.01	OSF1.50	13950.00	9500.00					MINPT-O-EOU
	3428.16	148.99	3328.51	3279.13	34.73	OSF1.50	14010.00	9500.00					MinPt-O-ADP
	3420.20	166.95	3308.57	3253.25	30.90	OSF1.50	14630.00	9500.00					MinPt-CtCt

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	3421.85	176.49	3303.86	3245.36	29.24	OSF1.50	14980.00	9500.00				MinPt-CtCt	
	3420.14	185.08	3296.42	3235.06	27.86	OSF1.50	15290.00	9500.00				MinPt-CtCt	
	3421.36	192.85	3292.47	3228.51	26.74	OSF1.50	15600.00	9500.00				MINPT-O-EQU	
	3422.17	193.81	3292.64	3228.39	26.61	OSF1.50	15650.00	9500.00				MinPt-O-ADP	
	3420.94	200.24	3287.14	3220.72	25.75	OSF1.50	15830.00	9500.00				MinPt-CtCt	
	3421.22	200.94	3286.93	3220.27	25.66	OSF1.50	15880.00	9500.00				MINPT-O-EQU	
	3421.47	201.23	3286.94	3220.24	25.62	OSF1.50	15900.00	9500.00				MinPt-O-ADP	
	3412.27	220.77	3264.77	3191.51	23.28	OSF1.50	16550.00	9500.00				MinPt-CtCt	
	3412.57	221.75	3264.41	3190.82	23.18	OSF1.50	16610.00	9500.00				MINPT-O-EQU	
	3412.96	222.23	3264.48	3190.73	23.13	OSF1.50	16640.00	9500.00				MinPt-O-ADP	
	3417.29	230.04	3263.60	3187.25	22.37	OSF1.50	16900.00	9500.00				MINPT-O-EQU	
	3418.06	230.97	3263.75	3187.09	22.29	OSF1.50	16950.00	9500.00				MinPt-O-ADP	
	3403.07	247.85	3237.51	3155.22	20.67	OSF1.50	17480.00	9500.00				MinPt-CtCt	
	3403.21	248.38	3237.23	3154.82	20.63	OSF1.50	17520.00	9500.00				MINPT-O-EQU	
	3403.41	248.64	3237.33	3154.77	20.61	OSF1.50	17540.00	9500.00				MinPt-O-ADP	
	3403.73	251.91	3235.43	3151.78	20.34	OSF1.50	17620.00	9500.00				MinPt-CtCt	
	3404.38	254.14	3234.62	3150.24	20.17	OSF1.50	17730.00	9500.00				MINPT-O-EQU	
	3405.37	255.36	3234.83	3150.01	20.07	OSF1.50	17790.00	9500.00				MinPt-O-ADP	
	3415.39	269.00	3235.73	3146.39	19.11	OSF1.50	18240.00	9500.00				MINPT-O-EQU	
	3416.02	269.74	3235.87	3146.29	19.06	OSF1.50	18280.00	9500.00				MinPt-O-ADP	
	3424.08	276.91	3239.14	3147.16	18.61	OSF1.50	18550.00	9500.00				MinPt-O-ADP	
	3430.84	283.69	3241.33	3147.15	18.20	OSF1.50	18780.00	9500.00				MinPt-O-ADP	
	3427.61	308.35	3221.72	3119.27	16.72	OSF1.50	19540.00	9500.00				MinPt-CtCt	
	3427.66	308.51	3221.69	3119.15	16.71	OSF1.50	19560.00	9500.00				MINPT-O-EQU	
	3427.73	308.59	3221.69	3119.14	16.71	OSF1.50	19570.00	9500.00				MinPt-O-ADP	
	3431.76	309.44	3225.13	3122.31	16.68	OSF1.50	19710.00	9500.00				MinPt-O-SF	
	3437.18	309.73	3230.37	3127.46	16.69	OSF1.50	19797.74	9500.00				TD	
Cimarex Davinci 7-18 Federal Com #36H Rev0 RM 24May21 (Non-Def Plan)													Pass
	152.37	32.81	151.08	119.56	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	152.37	32.81	151.07	119.56	15813.85	MAS = 10.00 (m)	23.00	23.00				WRP	
	152.37	32.81	142.03	119.56	16.69	MAS = 10.00 (m)	1500.00	1500.00				MinPts	
	152.43	32.81	142.00	119.62	16.52	MAS = 10.00 (m)	1520.00	1520.00				MINPT-O-EQU	
	157.53	32.81	146.43	124.72	15.92	MAS = 10.00 (m)	1680.00	1679.88				MinPt-O-SF	
	2982.03	68.04	2936.23	2913.98	66.94	OSF1.50	8010.00	7756.02				MinPt-O-SF	
	3537.41	76.50	3485.99	3460.91	70.52	OSF1.50	10770.00	9500.00				MinPt-CtCt	
	3537.83	329.91	3317.42	3207.86	16.14	OSF1.50	19790.00	9500.00				MINPT-O-EQU	
	3537.88	330.04	3317.42	3207.84	16.14	OSF1.50	19797.74	9500.00				MinPts	
Cimarex Da Vinci 7 Federal Com #9H MWD Off to 11750ft (Def Survey)													Pass
	5791.66	32.81	5789.68	5758.85	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	5791.30	32.81	5789.26	5758.43	93249.97	MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
	5790.78	32.81	5788.61	5757.95	33834.79	MAS = 10.00 (m)	100.00	100.00				MinPts	
	5791.18	32.81	5788.13	5758.37	5703.30	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EQU	
	5810.72	32.81	5801.89	5777.91	848.21	MAS = 10.00 (m)	1600.00	1599.98				MinPt-O-SF	
	1123.45	293.75	925.96	829.70	5.81	OSF1.50	7710.00	7468.82				MinPt-O-SF	
	1114.66	289.85	919.80	824.81	5.84	OSF1.50	7800.00	7554.98				MinPt-O-ADP	
	1113.69	288.75	919.57	824.94	5.86	OSF1.50	7820.00	7574.13				MINPT-O-EQU	
	1112.82	286.31	920.35	826.51	5.90	OSF1.50	7860.00	7612.42				MinPt-CtCt	
	2327.98	107.83	2255.41	2220.12	32.96	OSF1.50	12010.00	9500.00				MinPt-CtCt	
	2328.15	108.28	2255.23	2219.85	32.82	OSF1.50	12070.00	9500.00				MINPT-O-EQU	
	2328.37	108.60	2255.31	2219.77	32.73	OSF1.50	12100.00	9500.00				MINPT-O-EQU	
	2328.60	108.87	2255.39	2219.73	32.65	OSF1.50	12120.00	9500.00				MinPt-O-ADP	
	2352.79	115.55	2275.10	2237.24	31.05	OSF1.50	12620.00	9500.00				MinPt-O-SF	
	2354.63	115.01	2277.36	2239.68	31.22	OSF1.50	12860.00	9500.00				MinPt-CtCt	
	2355.14	116.22	2277.01	2238.83	30.90	OSF1.50	12930.00	9500.00				MINPT-O-EQU	
	2355.58	116.74	2277.03	2238.84	30.76	OSF1.50	12960.00	9500.00				MinPt-O-ADP	
	2366.71	123.40	2283.73	2243.31	29.21	OSF1.50	13450.00	9500.00				MINPT-O-EQU	
	2368.27	125.26	2284.11	2243.01	28.79	OSF1.50	13550.00	9500.00				MinPt-O-ADP	
	2497.03	147.31	2398.17	2349.73	25.73	OSF1.50	14620.00	9500.00				MinPt-O-SF	
	6136.75	147.21	6037.95	5989.54	63.36	OSF1.50	19797.74	9500.00				TD	
Cimarex DaVinci 7-18 Federal Com #9H Surcon Corrected Off-19984ft (Def Survey)													Pass
	2764.75	32.81	2762.77	2731.94	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2764.68	32.81	2762.69	2731.87	274446.29	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
	2764.65	32.81	2762.65	2731.84	471902.43	MAS = 10.00 (m)	20.00	20.00				MINPT-O-EQU	
	2764.64	32.81	2762.66	2731.84	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	2745.51	32.81	2739.37	2712.63	661.46	MAS = 10.00 (m)	980.00	980.00				MinPts	
	2745.55	32.81	2739.23	2712.74	642.23	MAS = 10.00 (m)	1010.00	1010.00				MINPT-O-EQU	
	2747.28	32.81	2738.95	2714.45	436.22	MAS = 10.00 (m)	1470.00	1470.00				MinPts	
	2747.30	32.81	2738.94	2714.49	430.33	MAS = 10.00 (m)	1490.00	1490.00				MINPT-O-EQU	
	1215.13	74.71	1163.97	1140.48	25.77	OSF1.50	9450.00	9133.98				MinPts	
	1215.54	74.75	1164.30	1140.79	25.77	OSF1.50	9470.00	9152.52				MinPt-O-SF	
	1149.44	74.07	1098.67	1075.37	24.57	OSF1.50	10470.00	9500.00				MinPt-CtCt	
	1151.39	79.51	1096.85	1071.81	22.82	OSF1.50	10880.00	9500.00				MINPT-O-EQU	
	1153.73	85.92	1095.03	1067.81	21.09	OSF1.50	11260.00	9500.00				MINPT-O-EQU	
	1155.17	89.55	1094.09	1065.61	20.21	OSF1.50	11470.00	9500.00				MinPt-CtCt	
	1157.23	102.01	1087.91	1055.28	17.67	OSF1.50	12070.00	9500.00				MinPt-CtCt	
	1157.84	117.27	1078.28	1040.57	15.29	OSF1.50	12720.00	9500.00				MinPt-CtCt	
	1157.98	121.23	1075.76	1036.73	14.78	OSF1.50	12880.00	9500.00				MinPt-CtCt	
	1162.38	141.36	1066.75	1021.00	12.66	OSF1.50	13660.00	9500.00				MinPt-CtCt	
	1162.62	147.59	1062.85	1015.02	12.11	OSF1.50	13890.00	9500.00				MinPt-CtCt	
	1162.98	157.66	1056.50	1005.32	11.32	OSF1.50	14260.00	9500.00				MinPt-CtCt	
	1163.45	165.45	1051.79	998.01	10.78	OSF1.50	14540.00	9500.00				MinPt-CtCt	
	1163.51	173.51	1046.47	990.00	10.27	OSF1.50	14830.00	9500.00				MinPt-CtCt	
	1163.48	177.21	1043.98	986.28	10.05	OSF1.50	14960.00	9500.00				MinPt-CtCt	
	1164.67	180.74	1042.80	983.93	9.86	OSF1.50	15060.00	9500.00				MINPT-O-EQU	
	1165.48	181.76	1042.93	983.73	9.81	OSF1.50	15090.00	9500.00				MinPt-O-ADP	
	1177.17	200.65	1042.04	976.52	8.95	OSF1.50	15790.00	9500.00				MinPt-CtCt	
	1179.46	210.34	1037.88	969.12	8.55	OSF1.50	16110.00	9500.00				MINPT-O-EQU	
	1179.67	210.66	1037.87	969.03	8.54	OSF1.50	16120.00	9500.00				MinPt-O-ADP	
	1178.51	222.49	1028.82	956.02	8.07	OSF1.50	16540.00	9500.00				MinPt-CtCt	
	1158.13	252.54	988.40	905.59	6.97	OSF1.50	17560.00	9500.00				MinPt-CtCt	
	1159.08	255.63	987.23	903.45	6.89	OSF1.50	17640.00	9500.00				MINPT-O-EQU	
	1164.94	262.58	988.50	902.38	6.74	OSF1.50	17860.00	9500.00				MinPt-O-ADP	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	1172.71	273.89	988.75	898.82	6.50	OSF1.50	18270.00	9500.00				MinPt-CtCt	
	1169.78	280.37	981.47	889.39	6.33	OSF1.50	18500.00	9500.00				MinPt-CtCt	
	1170.65	283.05	980.55	887.56	6.27	OSF1.50	18570.00	9500.00				MINPT-O-EQU	
	1171.54	284.20	980.69	887.34	6.25	OSF1.50	18600.00	9500.00				MinPt-O-ADP	
	1177.53	289.72	983.01	887.81	6.16	OSF1.50	18810.00	9500.00				MINPT-O-EQU	
	1181.73	295.71	983.22	886.03	6.06	OSF1.50	19020.00	9500.00				MINPT-O-EQU	
	1187.23	302.18	984.41	885.02	5.95	OSF1.50	19240.00	9500.00				MinPt-O-ADP	
	1189.12	311.30	980.23	877.81	5.79	OSF1.50	19580.00	9500.00				MinPt-CtCt	
	1189.93	313.41	979.63	876.53	5.75	OSF1.50	19620.00	9500.00				MINPT-O-EQU	
	1190.34	313.88	979.72	876.47	5.74	OSF1.50	19630.00	9500.00				MinPt-O-ADP	
	1196.66	316.89	984.01	879.77	5.72	OSF1.50	19710.00	9500.00				MinPt-O-SF	
	1209.64	318.62	995.83	891.02	5.75	OSF1.50	19797.74	9500.00				TD	
Cimarex Da Vinci 7 Federal Com #3H MWD Off-11916ft (Def Survey)													Pass
	4959.93	32.81	4957.95	4927.12	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	4959.56	32.81	4957.52	4926.75	81200.23	MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
	1416.31	251.52	1247.97	1164.79	8.50	OSF1.50	7200.00	6980.59				MinPt-CtCt	
	1416.70	252.80	1247.51	1163.90	8.46	OSF1.50	7230.00	7009.31				MINPT-O-EQU	
	1417.32	253.60	1247.59	1163.72	8.44	OSF1.50	7250.00	7028.45				MinPt-O-ADP	
	1429.47	257.99	1256.81	1171.47	8.36	OSF1.50	7390.00	7162.48				MinPt-O-SF	
	3248.26	92.84	3185.70	3155.42	53.53	OSF1.50	14710.00	9500.00				MinPt-O-SF	
	6387.85	96.89	6322.60	6290.96	100.93	OSF1.50	19797.74	9500.00				TD	
Cimarex Gadowall 18 Federal 3H Gyro + MWD Off to 12138ft (Def Survey)													Pass
	6066.87	32.81	6064.90	6034.07	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	6066.50	32.81	6064.45	6033.69	91883.03	MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
	6065.83	32.81	6063.65	6033.05	28136.10	MAS = 10.00 (m)	110.00	110.00				MinPts	
	6066.37	32.81	6063.05	6033.56	4563.38	MAS = 10.00 (m)	340.00	340.00				MINPT-O-EQU	
	6075.88	32.81	6067.70	6043.07	979.72	MAS = 10.00 (m)	1230.00	1230.00				MinPt-O-SF	
	6074.12	32.81	6065.69	6041.31	941.52	MAS = 10.00 (m)	1360.00	1360.00				MinPt-O-SF	
	5546.02	59.58	5505.65	5486.47	144.51	OSF1.50	7530.00	7296.50				MinPt-CtCt	
	5539.76	65.34	5495.46	5474.42	131.58	OSF1.50	8110.00	7851.75				MinPt-CtCt	
	5539.85	65.56	5495.40	5474.27	131.06	OSF1.50	8140.00	7880.47				MINPT-O-EQU	
	5540.00	65.74	5495.44	5474.28	130.72	OSF1.50	8160.00	7899.61				MinPt-O-ADP	
	5655.79	73.84	5605.90	5581.95	118.02	OSF1.50	9289.20	8980.62				MinPt-O-SF	
	1784.52	166.34	1672.98	1618.20	16.27	OSF1.50	15460.00	9500.00				MinPt-CtCt	
	1784.73	172.71	1668.98	1612.07	15.66	OSF1.50	15720.00	9500.00				MinPt-CtCt	
	1786.45	178.07	1667.03	1608.38	15.20	OSF1.50	15930.00	9500.00				MINPT-O-EQU	
	1789.30	182.45	1667.01	1606.85	14.83	OSF1.50	16110.00	9500.00				MinPt-O-SF	
	1733.12	220.37	1585.55	1512.75	11.89	OSF1.50	17540.00	9500.00				MinPt-CtCt	
	1726.94	241.28	1565.42	1485.65	10.81	OSF1.50	18240.00	9500.00				MinPt-CtCt	
	1727.54	243.10	1564.82	1484.45	10.73	OSF1.50	18300.00	9500.00				MINPT-O-EQU	
	1728.26	243.98	1564.95	1484.23	10.70	OSF1.50	18330.00	9500.00				MinPt-O-ADP	
	1738.52	253.88	1568.61	1484.65	10.34	OSF1.50	18630.00	9500.00				MinPt-CtCt	
	1738.92	255.25	1568.03	1483.67	10.29	OSF1.50	18680.00	9500.00				MINPT-O-EQU	
	1739.34	255.78	1568.13	1483.53	10.27	OSF1.50	18700.00	9500.00				MinPt-O-ADP	
	1743.65	277.41	1558.02	1466.21	9.48	OSF1.50	19510.00	9500.00				MinPt-CtCt	
	1743.89	278.15	1557.80	1465.74	9.46	OSF1.50	19540.00	9500.00				MINPT-O-EQU	
	1744.10	278.38	1557.85	1465.72	9.45	OSF1.50	19550.00	9500.00				MinPt-O-ADP	
	1750.11	280.34	1562.56	1469.78	9.42	OSF1.50	19660.00	9500.00				MinPt-O-SF	
	1767.30	281.37	1579.06	1485.93	9.48	OSF1.50	19797.74	9500.00				TD	
Cimarex Gadowall 18 Federal Com #2H Gyro+MWD Off to 12379ft MD (Offset) (Def Survey)													Pass
	5321.56	32.81	5319.58	5288.75	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	5321.12	32.81	5319.06	5288.31	68362.75	MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
	5320.34	32.81	5318.10	5287.53	20458.74	MAS = 10.00 (m)	120.00	120.00				MinPts	
	5320.76	32.81	5317.74	5287.95	5123.59	MAS = 10.00 (m)	280.00	280.00				MINPT-O-EQU	
	5323.64	32.81	5317.04	5290.85	1150.47	MAS = 10.00 (m)	1080.00	1080.00				MinPts	
	5163.74	42.54	5134.72	5121.20	190.88	OSF1.50	5670.00	5515.89				MinPt-CtCt	
	5154.95	48.36	5122.05	5106.59	166.66	OSF1.50	6330.00	6147.72				MinPt-CtCt	
	5155.09	48.75	5121.93	5106.30	165.11	OSF1.50	6380.00	6195.59				MINPT-O-EQU	
	5155.32	49.06	5121.95	5106.23	164.17	OSF1.50	6410.00	6224.31				MinPt-O-ADP	
	5453.07	73.59	5403.35	5379.48	114.13	OSF1.50	9289.20	8980.62				MinPt-O-SF	
	1806.47	133.41	1716.88	1673.07	20.60	OSF1.50	15850.00	9500.00				MinPt-CtCt	
	1754.03	210.40	1613.10	1543.63	12.61	OSF1.50	18310.00	9500.00				MinPt-CtCt	
	1734.40	247.70	1568.60	1486.70	10.58	OSF1.50	19450.00	9500.00				MinPt-CtCt	
	1734.65	250.68	1566.87	1483.97	10.45	OSF1.50	19550.00	9500.00				MinPts	
	1734.89	250.73	1567.08	1484.18	10.45	OSF1.50	19570.00	9500.00				MinPt-O-SF	
	1753.85	249.25	1587.02	1504.60	10.63	OSF1.50	19797.74	9500.00				TD	
Gadowall 18 Federal 5H MWD Off to 12016ft (Def Survey)													Pass
	5335.52	32.81	5333.54	5302.71	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	5335.14	32.81	5333.09	5302.33	80767.73	MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
	5334.57	32.81	5332.42	5301.76	31169.85	MAS = 10.00 (m)	100.00	100.00				MinPts	
	5318.16	32.81	5308.87	5285.35	728.10	MAS = 10.00 (m)	1790.00	1789.50				MinPt-O-SF	
	5238.53	33.39	5215.67	5205.20	250.17	OSF1.50	4820.00	4702.17				MinPt-CtCt	
	5239.01	35.64	5214.54	5203.32	233.05	OSF1.50	5070.00	4941.50				MINPT-O-EQU	
	5239.46	36.23	5214.65	5203.22	229.37	OSF1.50	5130.00	4998.94				MinPt-O-ADP	
	5254.23	44.24	5224.05	5209.55	186.44	OSF1.50	6000.00	5831.80				MinPt-O-ADP	
	5255.79	45.85	5224.54	5209.90	179.48	OSF1.50	6190.00	6013.70				MINPT-O-EQU	
	5256.23	46.42	5224.62	5209.80	177.33	OSF1.50	6250.00	6071.13				MinPt-O-ADP	
	5277.62	53.64	5241.20	5223.98	153.19	OSF1.50	6990.00	6779.55				MINPT-O-EQU	
	5277.88	53.94	5241.24	5223.94	152.30	OSF1.50	7020.00	6808.27				MinPt-O-ADP	
	5278.77	57.18	5239.99	5221.59	143.39	OSF1.50	7160.00	6942.30				MinPt-CtCt	
	5278.91	57.54	5239.85	5221.32	142.33	OSF1.50	7200.00	6980.59				MINPT-O-EQU	
	5279.08	57.80	5239.89	5221.23	141.81	OSF1.50	7220.00	6999.73				MinPt-O-ADP	
	5666.82	73.56	5617.13	5593.27	118.71	OSF1.50	9289.20	8980.62				MinPt-O-SF	
	5689.52	72.43	5640.58	5617.04	121.13	OSF1.50	9600.00	9266.02				MinPt-O-SF	
	2274.03	131.54	2185.72	2142.54	26.31	OSF1.50	15320.00	9500.00				MinPt-CtCt	
	2278.91	152.82	2176.36	2126.08	22.64	OSF1.50	16160.00	9500.00				MinPt-CtCt	
	2279.04	158.80	2172.52	2120.24	21.78	OSF1.50	16380.00	9500.00				MinPt-CtCt	
	2278.38	164.30	2168.19	2114.09	21.04	OSF1.50	16580.00	9500.00				MinPt-CtCt	
	2158.05	251.88	1989.47	1906.17	12.94	OSF1.50	19560.00	9500.00				MinPt-CtCt	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
2158.10	252.06	1989.38	1906.01	12.93		OSF1.50	19580.00	9500.00				MINPT-O-EQU	
2158.20	252.19	1989.41	1906.01	12.93		OSF1.50	19590.00	9500.00				MinPt-O-ADP	
2160.61	252.79	1991.43	1907.82	12.91		OSF1.50	19670.00	9500.00				MinPt-O-SF	
2170.59	253.14	2001.17	1917.45	12.95		OSF1.50	19797.74	9500.00				TD	
Cimarex Gadowall 18 Federal 4H MWD Off to 11719ft (Def Survey)													
5993.59	32.81	5991.61	5960.79	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	Pass
5993.25	32.81	5991.21	5960.44	102190.53		MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
5992.73	32.81	5990.60	5959.94	35017.13		MAS = 10.00 (m)	100.00	100.00				MinPts	
5993.10	32.81	5990.28	5960.30	6924.77		MAS = 10.00 (m)	250.00	250.00				MINPT-O-EQU	
5994.05	32.81	5990.23	5961.24	3303.04		MAS = 10.00 (m)	450.00	450.00				MINPT-O-EQU	
6010.91	32.81	6002.02	5978.10	869.23		MAS = 10.00 (m)	1670.00	1669.90				MinPt-O-SF	
5458.31	57.34	5419.31	5400.97	148.77		OSF1.50	7460.00	7229.49				MinPt-CtCt	
5458.44	57.64	5419.21	5400.76	147.81		OSF1.50	7500.00	7267.78				MINPT-O-EQU	
5458.51	57.77	5419.23	5400.74	147.58		OSF1.50	7510.00	7277.36				MinPt-O-ADP	
5735.10	70.14	5687.67	5664.95	126.18		OSF1.50	9289.20	8980.62				MinPt-O-SF	
2375.12	163.92	2265.18	2211.20	21.98		OSF1.50	15410.00	9500.00				MinPt-CtCt	
2376.24	167.27	2254.05	2208.96	21.55		OSF1.50	15540.00	9500.00				MINPT-O-EQU	
2370.91	186.96	2245.67	2184.01	19.21		OSF1.50	16330.00	9500.00				MinPt-CtCt	
2372.42	191.16	2244.33	2181.27	18.80		OSF1.50	16490.00	9500.00				MINPT-O-EQU	
2376.65	196.27	2245.14	2180.38	18.33		OSF1.50	16680.00	9500.00				MinPt-O-ADP	
2319.68	252.30	2150.82	2067.39	13.89		OSF1.50	18570.00	9500.00				MinPt-CtCt	
2323.85	266.91	2145.25	2056.95	13.15		OSF1.50	19030.00	9500.00				MINPT-O-EQU	
2315.97	291.96	2120.67	2024.01	11.97		OSF1.50	19570.00	9500.00				MinPt-CtCt	
2316.25	292.89	2120.33	2023.36	11.93		OSF1.50	19610.00	9500.00				MINPT-O-EQU	
2316.43	293.11	2120.36	2023.31	11.92		OSF1.50	19620.00	9500.00				MinPt-O-ADP	
2326.76	296.21	2128.63	2030.55	11.85		OSF1.50	19797.74	9500.00				MinPt-O-SF	
Cimarex Da Vinci 7 Federal Com #2H Gyro+MWD Off to 11690ft MD (Def Survey)													
4731.37	32.81	4730.09	4698.56	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	Pass
4731.04	32.81	4729.70	4698.23	86172.51		MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
4730.63	32.81	4729.29	4697.83	37343.95		MAS = 10.00 (m)	80.00	80.00				MinPts	
4731.60	32.81	4728.53	4698.80	2607.76		MAS = 10.00 (m)	400.00	400.00				MINPT-O-EQU	
4733.42	32.81	4725.17	4700.61	664.68		MAS = 10.00 (m)	1580.00	1579.99				MinPts	
4733.44	32.81	4725.13	4700.63	659.20		MAS = 10.00 (m)	1600.00	1599.98				MINPT-O-EQU	
2668.57	177.08	2550.19	2491.49	22.72		OSF1.50	6790.00	6588.09				MinPt-CtCt	
2668.73	177.56	2550.02	2491.16	22.66		OSF1.50	6820.00	6616.81				MINPT-O-EQU	
2668.85	177.72	2550.05	2491.14	22.64		OSF1.50	6830.00	6626.38				MinPt-O-ADP	
2695.35	181.98	2573.70	2513.37	22.33		OSF1.50	7170.00	6951.87				MinPt-O-SF	
3912.92	106.46	3841.62	3806.49	55.63		OSF1.50	11320.00	9500.00				MinPts	
3894.52	98.76	3828.32	3795.73	59.73		OSF1.50	11630.00	9500.00				MinPt-O-ADP	
3879.70	92.71	3817.55	3786.93	63.43		OSF1.50	12050.00	9500.00				MinPts	
3839.31	84.93	3782.35	3754.37	68.59		OSF1.50	13710.00	9500.00				MinPt-CtCt	
3839.38	85.16	3782.28	3754.23	68.40		OSF1.50	13740.00	9500.00				MINPT-O-EQU	
3839.45	85.23	3782.30	3754.22	68.34		OSF1.50	13750.00	9500.00				MinPt-O-ADP	
3995.76	93.50	3933.10	3902.27	64.77		OSF1.50	14950.00	9500.00				MinPt-O-SF	
6883.26	98.76	6817.10	6784.50	105.58		OSF1.50	19797.74	9500.00				TD	
Chevron Hayhurst 18 Fed 1H (Offset) MWD Off-7500ft (Def Survey)													
5329.43	32.81	5328.14	5296.62	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	Pass
5329.07	32.81	5327.72	5296.29	86622.47		MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
5328.53	32.81	5327.12	5295.77	31138.39		MAS = 10.00 (m)	100.00	100.00				MinPts	
5328.79	32.81	5326.92	5295.98	9171.67		MAS = 10.00 (m)	190.00	190.00				MINPT-O-EQU	
5308.56	32.81	5299.99	5275.75	729.63		MAS = 10.00 (m)	1740.00	1739.72				MinPts	
5308.56	32.81	5299.99	5275.75	729.01		MAS = 10.00 (m)	1750.00	1749.68				MINPT-O-EQU	
6164.99	69.93	6117.94	6095.06	134.63		OSF1.50	9289.20	8980.62				MinPt-O-SF	
6182.18	68.58	6136.03	6113.60	137.77		OSF1.50	9600.00	9266.02				MinPt-O-SF	
3393.66	107.49	3321.51	3286.11	47.91		OSF1.50	14920.00	9500.00				MinPt-CtCt	
3393.64	107.61	3321.47	3286.03	47.86		OSF1.50	14940.00	9500.00				MinPts	
3417.87	109.58	3344.39	3308.29	47.32		OSF1.50	15330.00	9500.00				MinPt-O-SF	
5939.33	95.61	5875.16	5843.72	94.43		OSF1.50	19797.74	9500.00				TD	
Chevron Hayhurst 18 Fed 1H (Offset) ST01 MWD Off-11800ft (Def Survey)													
5329.43	32.81	5328.14	5296.62	N/A		MAS = 10.00 (m)	0.00	0.00				Surface	Pass
5329.07	32.81	5327.72	5296.29	86622.47		MAS = 10.00 (m)	23.00	23.00				MinPt-O-SF	
5328.53	32.81	5327.12	5295.77	31138.39		MAS = 10.00 (m)	100.00	100.00				MinPts	
5328.79	32.81	5326.92	5295.98	9171.67		MAS = 10.00 (m)	190.00	190.00				MINPT-O-EQU	
5308.56	32.81	5299.99	5275.75	729.63		MAS = 10.00 (m)	1740.00	1739.72				MinPts	
5308.56	32.81	5299.99	5275.75	729.01		MAS = 10.00 (m)	1750.00	1749.68				MINPT-O-EQU	
6321.61	67.69	6276.06	6253.92	142.77		OSF1.50	9289.20	8980.62				MinPt-O-SF	
3504.36	119.03	3424.58	3385.33	44.63		OSF1.50	15420.00	9500.00				MinPt-CtCt	
3504.53	119.53	3424.42	3385.01	44.44		OSF1.50	15460.00	9500.00				MINPT-O-EQU	
3505.01	120.31	3424.37	3384.70	44.16		OSF1.50	15500.00	9500.00				MINPT-O-EQU	
3506.55	122.71	3424.32	3383.84	43.30		OSF1.50	15590.00	9500.00				MINPT-O-EQU	
3508.22	124.80	3424.59	3383.42	42.59		OSF1.50	15670.00	9500.00				MinPt-O-ADP	
3514.47	132.95	3425.41	3381.53	40.03		OSF1.50	15910.00	9500.00				MINPT-O-EQU	
3515.58	134.21	3425.69	3381.39	39.66		OSF1.50	15960.00	9500.00				MinPt-O-ADP	
3520.41	139.81	3426.75	3380.56	38.10		OSF1.50	16120.00	9500.00				MINPT-O-EQU	
3523.12	142.81	3427.49	3380.31	37.33		OSF1.50	16220.00	9500.00				MinPt-O-ADP	
3532.54	150.61	3431.71	3381.94	35.47		OSF1.50	16450.00	9500.00				MinPts	
3541.60	161.26	3433.64	3380.30	33.19		OSF1.50	16690.00	9500.00				MINPT-O-EQU	
3542.12	161.87	3433.78	3380.25	33.07		OSF1.50	16710.00	9500.00				MinPt-O-ADP	
3546.44	185.65	3422.24	3360.79	28.84		OSF1.50	17210.00	9500.00				MinPt-CtCt	
3522.07	219.14	3375.54	3302.92	24.24		OSF1.50	18000.00	9500.00				MinPt-CtCt	
3521.22	232.61	3365.72	3288.61	22.82		OSF1.50	18310.00	9500.00				MinPt-CtCt	
3524.32	240.14	3363.79	3284.17	22.12		OSF1.50	18550.00	9500.00				MINPT-O-EQU	
3530.04	247.67	3364.49	3282.33	21.48		OSF1.50	18750.00	9500.00				MinPt-O-ADP	
3536.80	254.14	3366.94	3282.63	20.97		OSF1.50	18920.00	9500.00				MinPt-O-ADP	
3545.28	267.71	3366.33	3277.58	19.95		OSF1.50	19160.00	9500.00				MINPT-O-EQU	
3545.80	268.26	3366.53	3277.54	19.91		OSF1.50	19180.00	9500.00				MinPt-O-ADP	
3555.57	276.56	3370.77	3279.02	19.37		OSF1.50	19420.00	9500.00				MinPt-O-ADP	
3578.06	289.39	3384.71	3288.68	18.62		OSF1.50	19797.74	9500.00				MinPt-O-SF	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status	
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major			
Oxy Peaches 19 Federal #2 (Offset) MWD Off-12641ft (Def Survey)														Pass
10215.90	32.81	10214.62	10183.09	N/A		MAS = 10.00 (m)	0.00	0.00					Surface	
10215.56	32.81	10214.22	10182.76	166315.21		MAS = 10.00 (m)	23.00	23.00					MinPt-O-SF	
10213.21	32.81	10208.74	10180.33	3213.53		MAS = 10.00 (m)	760.00	760.00					MinPts	
10213.40	32.81	10208.52	10180.59	2845.67		MAS = 10.00 (m)	860.00	860.00					MINPT-O-EOU	
10212.64	32.81	10205.58	10179.83	1763.66		MAS = 10.00 (m)	1360.00	1360.00					MinPts	
10212.93	32.81	10205.23	10180.12	1591.70		MAS = 10.00 (m)	1500.00	1500.00					MINPT-O-EOU	
10215.42	32.81	10207.35	10182.61	1506.57		MAS = 10.00 (m)	1740.00	1739.72					MinPt-O-SF	
10890.11	72.19	10841.55	10817.92	230.38		OSF1.50	9300.00	8990.97					MinPt-O-SF	
3544.93	224.33	3394.95	3320.60	23.83		OSF1.50	19797.74	9500.00					MinPts	

Cimarex Da Vinci 7 Federal Com #2H Gyro+MWD Offt to 11690ft MD

SHL [330' FNL, 1550' FWL]
0 MD 0 TVD
0.00 ° incl 0.00 ° az
N=0 E=0

Nudge 2' /100' DLS
1500 MD 1500 TVD
0.00 ° incl 270.75 ° az
N=0 E=0

Hold Nudge
2340 MD 2328 TVD
16.80 ° incl 270.75 ° az
N=2 E=-122

Cimarex Da Vinci 7 Federal Com #3H MWD Offt-11916ft

Leaseline

100' Hardline

Gas Int Only Offt-11970ft

KOP - Build 12' /100' DLS
9289 MD 8981 TVD
16.80 ° incl 270.75 ° az
N=28 E=-2131

Build & Turn 12' /100' DLS
9595 MD 9262 TVD
35.00 ° incl 186.82 ° az
N=-62 E=-2187

Build 4' /100' DLS
9931 MD 9451 TVD
75.00 ° incl 179.85 ° az
N=-331 E=-2199

Landing Point
10306 MD 9500 TVD
90.00 ° incl 179.85 ° az
N=-702 E=-2198

280' Hardline

Leaseline

Chevron Hayhurst 18 Fed 1H (Offset) MWD Offt-12250ft

API 30-015-33496 Cimarex Gadwell 18 Federal Com #1 (Offset) P Gas Inc Only Offt-12250ft

100' Hardline

Leaseline

Cimarex Davinci 7-18 Federal Com #35H - PEHL (1)
19798 MD 9500 TVD
90.00 ° incl 179.85 ° az
N=-10193 E=-2173

Cimarex Davinci 7-18 Federal Com #35H Rev1 RM 24May21

Cimarex Davinci 7-18 Federal Com #30H Offt to 17841ft (Surcon Corrected)

Cimarex Davinci 7-18 Federal Com #37H Rev0 RM 24May21

Cimarex Davinci 7-18 Federal Com #33H Rev2 RM 24May21

Chevron Hayhurst 18 Fed 1H (Offset) ST01 MWD Offt-11800ft

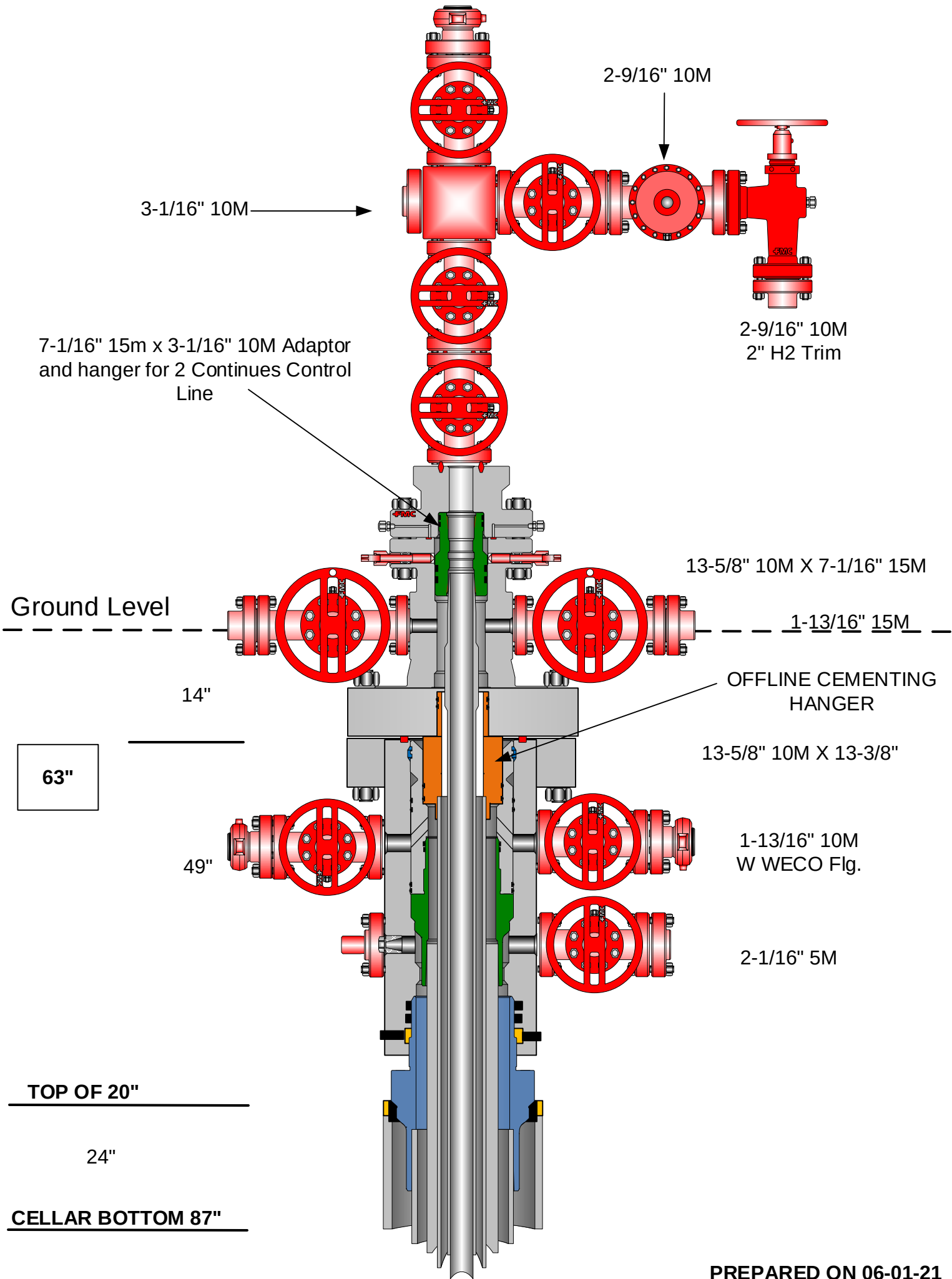
Cimarex Davinci 7-18 Federal Com #32H Rev1 RM 24May21

EW (ft) Scale = 1/563.81(ft)



CACTUS FOR SERVICE
WEARBUSHING
IN CASING HEAD &
CASING SPOOL

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	450	450	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.59	8.40	14.91
12 1/4	0	2068	2068	9-5/8"	36.00	J-55	LT&C	1.84	3.21	6.08
8 3/4	0	8389	8389	7"	26.00	L-80	LT&C	1.38	1.85	2.08
8 3/4	8389	9931	9451	7"	26.00	N-80	BT&C	1.22	1.64	21.87
6	8289	19797	9500	4-1/2"	11.60	P-110	BT&C	1.18	1.67	26.13
BLM Minimum Safety Factor								1.125	1	1.6 Dry 1.8 Wet



PREPARED ON 06-01-21

2000# (2M)
BOP

Annular Preventer

Pipe Rams

Blind Rams

Drilling Spool

13-5/8" 3000 psi x 13 3/8 SOW Slip-on Casing Head

Flowline

Fill Line

2" Minimum Choke Line

1 Kill Line Valve (Minimum)

1 Choke Line Valve (Minimum)

SRR & A

Exhibit E-1 – 2000# BOP
Davinci 7-18 Federal Com 35H
 Cimarex Energy Co.
 7-25S-27E
 Eddy County, NM

Drilling 8 3/4" hole
below 9 5/8" Casing

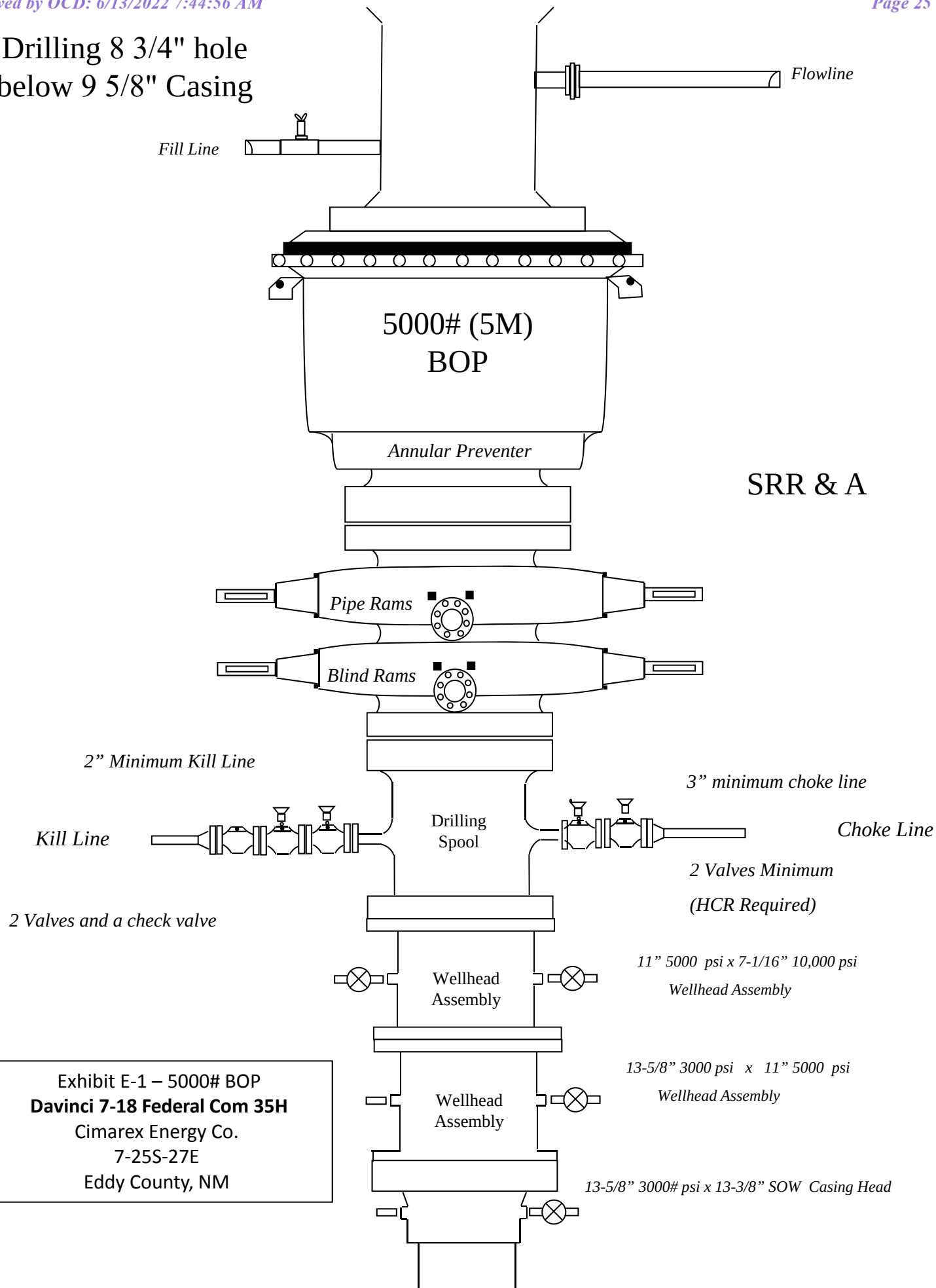


Exhibit E-1 – 5000# BOP
Davinci 7-18 Federal Com 35H
Cimarex Energy Co.
7-25S-27E
Eddy County, NM

Drilling 6" hole below 7"
Casing

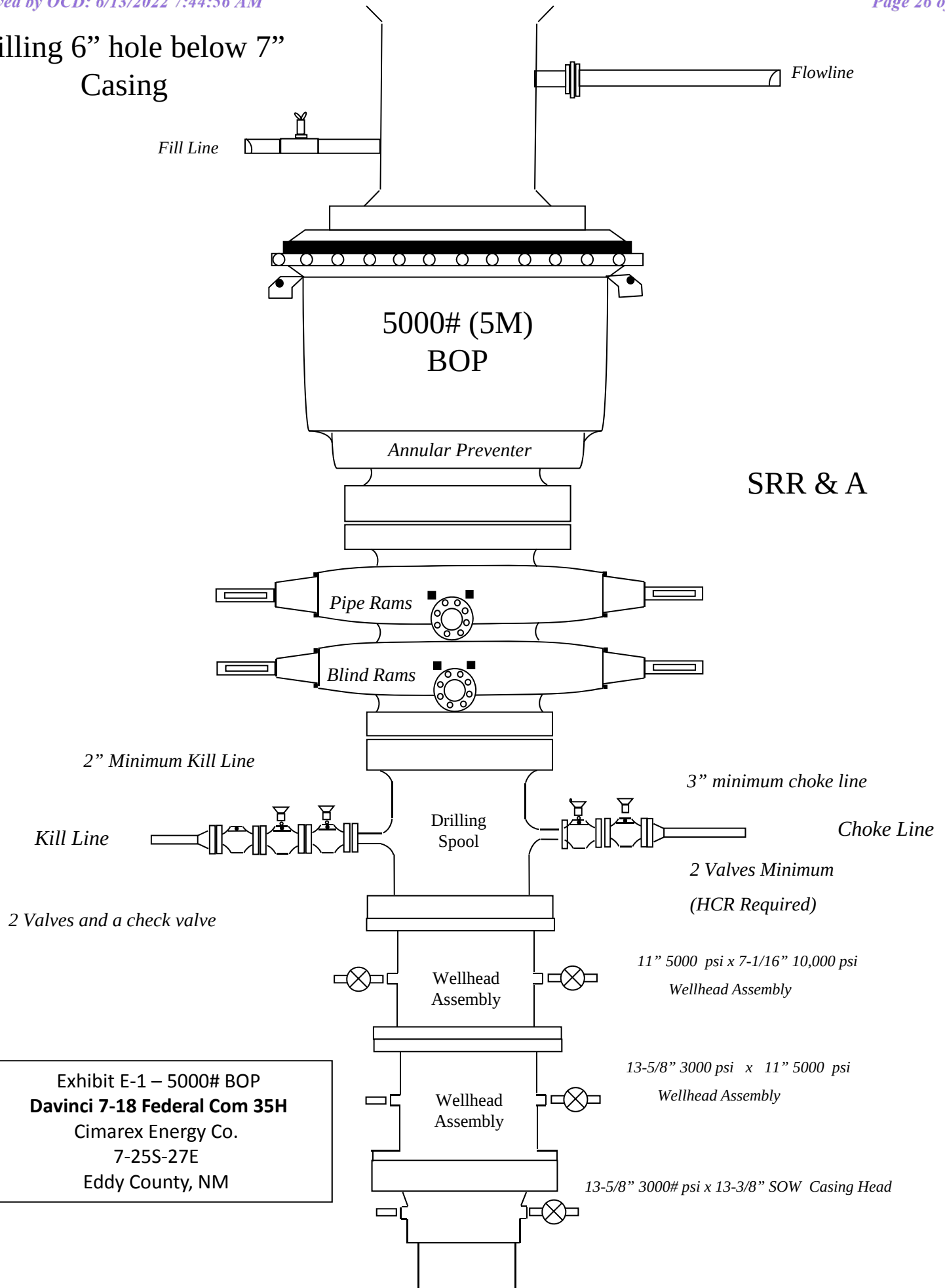
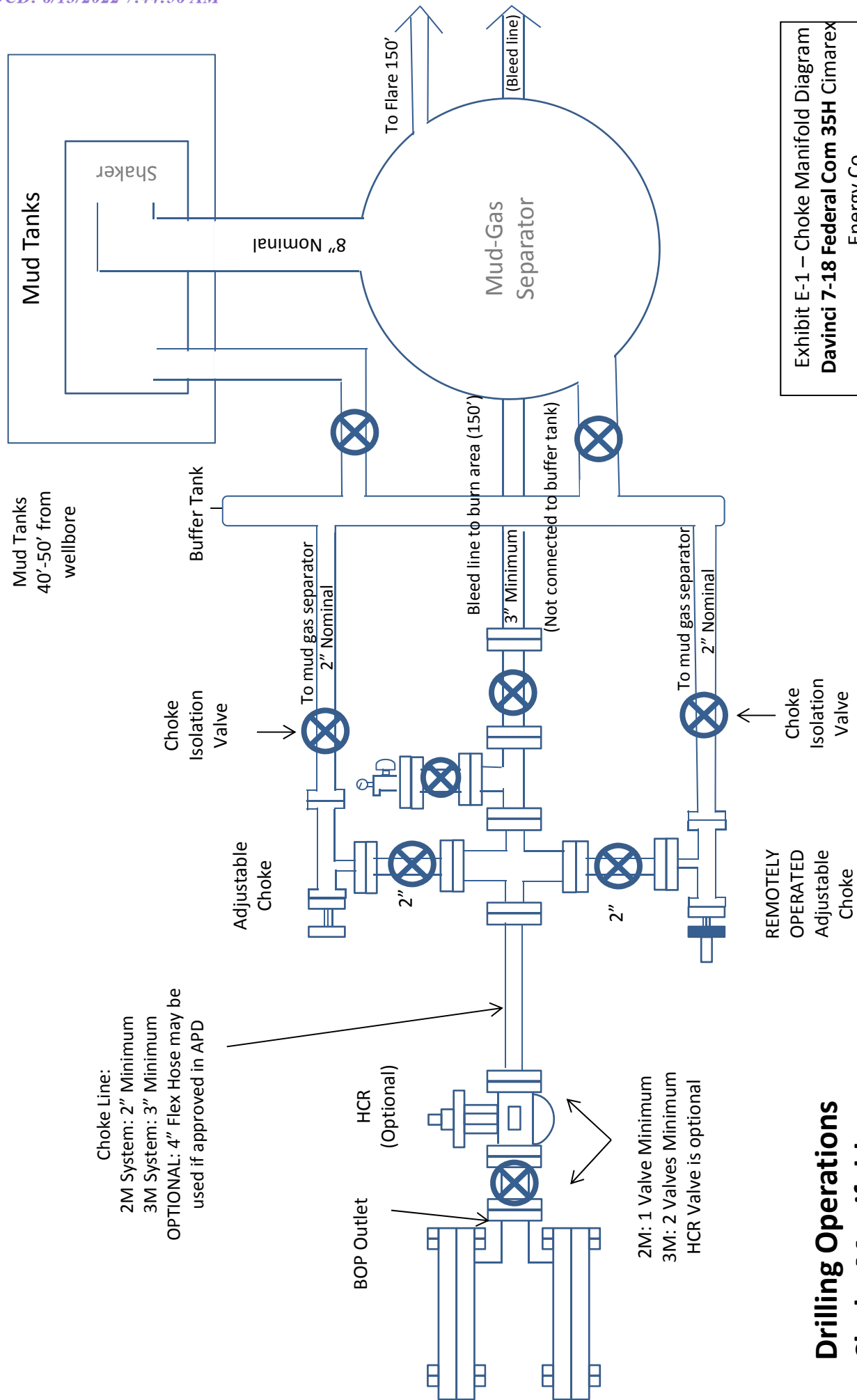
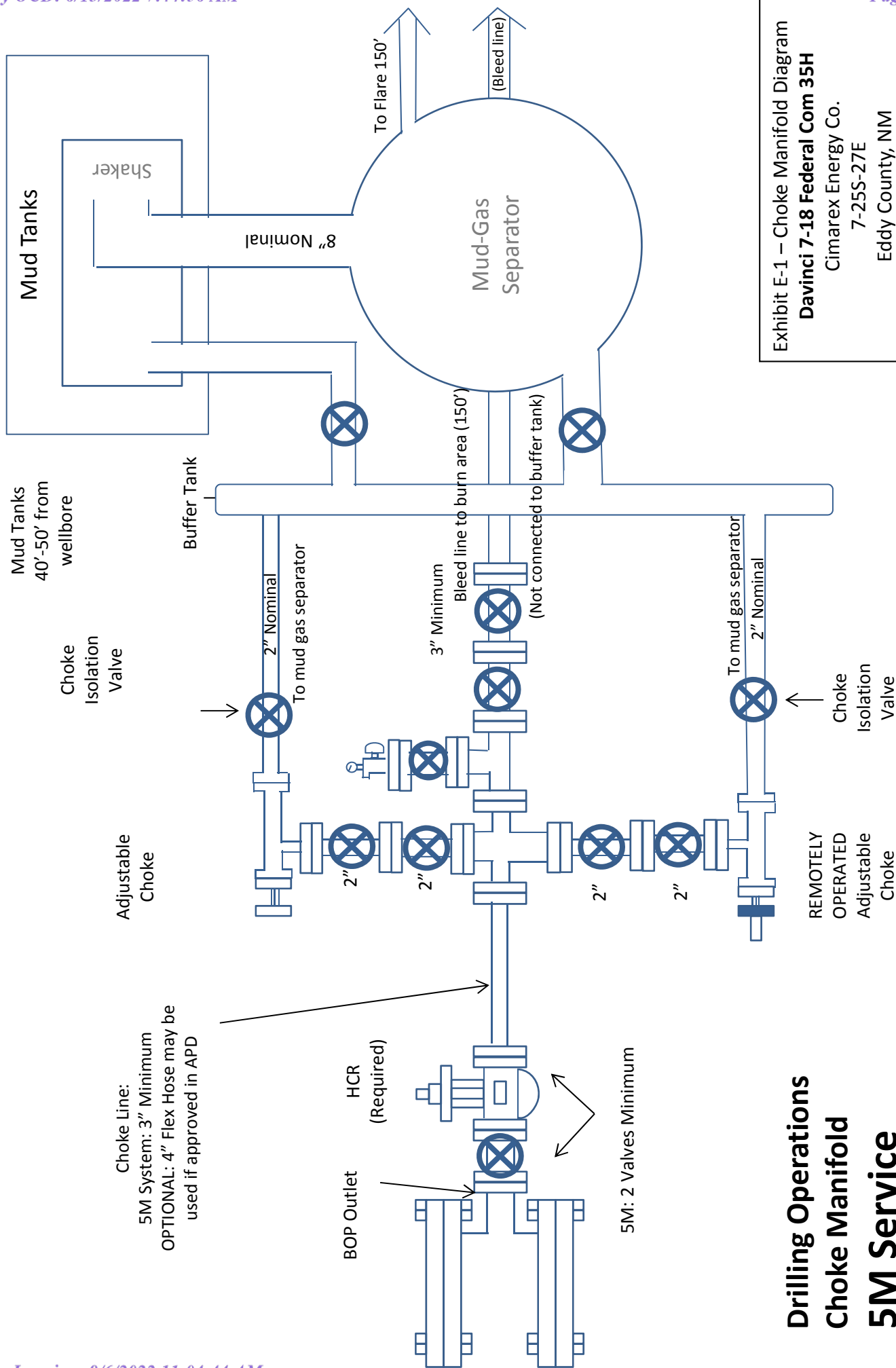


Exhibit E-1 – 5000# BOP
Davinci 7-18 Federal Com 35H
Cimarex Energy Co.
7-25S-27E
Eddy County, NM





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

COMMENTS

Action 116098

COMMENTS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 116098
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
jagarcia	Approved, John Garcia, Petroleum Engineer	9/6/2022

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 116098

CONDITIONS

Operator: CIMAREX ENERGY CO. 600 N. Marienfeld Street Midland, TX 79701	OGRID: 215099
	Action Number: 116098
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
jagarcia	None	9/6/2022