

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

Form C-101

August 1, 2011

Permit 289539

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address CIMAREX ENERGY CO. OF COLORADO 600 N. Marienfeld Street Midland, TX 79701		2. OGRID Number 162683
		3. API Number 30-025-48094
4. Property Code 329861	5. Property Name RED HILLS 32 5 STATE COM	6. Well No. 197H

7. Surface Location

UL - Lot A	Section 32	Township 25S	Range 33E	Lot Idn A	Feet From 467	N/S Line N	Feet From 370	E/W Line E	County Lea
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8. Proposed Bottom Hole Location

UL - Lot P	Section 5	Township 26S	Range 33E	Lot Idn P	Feet From 100	N/S Line S	Feet From 604	E/W Line E	County Lea
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9. Pool Information

WC-025 G-09 S253236A;UPR WOLFCAMP	98158
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3391
16. Multiple N	17. Proposed Depth 22265	18. Formation Wolfcamp	19. Contractor	20. Spud Date 2/1/2021
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.75	10.75	40.5	984	488	0
Int1	9.875	7.625	29.7	12623	1587	0
Prod	6.75	5.5	20	11769	1330	12400
Prod	6.75	5	18	22264	1330	12400

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	Cameran
Annular	10000	10000	Cameran

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Terri Stathem	Approved By: Paul F Kautz	
Title: Coord. Regulatory Compl	Title: Geologist	
Email Address: tstathem@cimarex.com	Approved Date: 12/3/2020	Expiration Date: 12/3/2022
Date: 11/30/2020	Phone: 918-295-1763	Conditions of Approval Attached

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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	² Pool Code 98158	³ Pool Name WC-025 G09 S253236A; UPR Wolfcamp
⁴ Property Code	⁵ Property Name RED HILLS 32-5 State Com	⁶ Well Number 197H
⁷ OGRID No. 162683	⁸ Operator Name CIMAREX ENERGY CO. of Colorado	⁹ Elevation 3391.1'

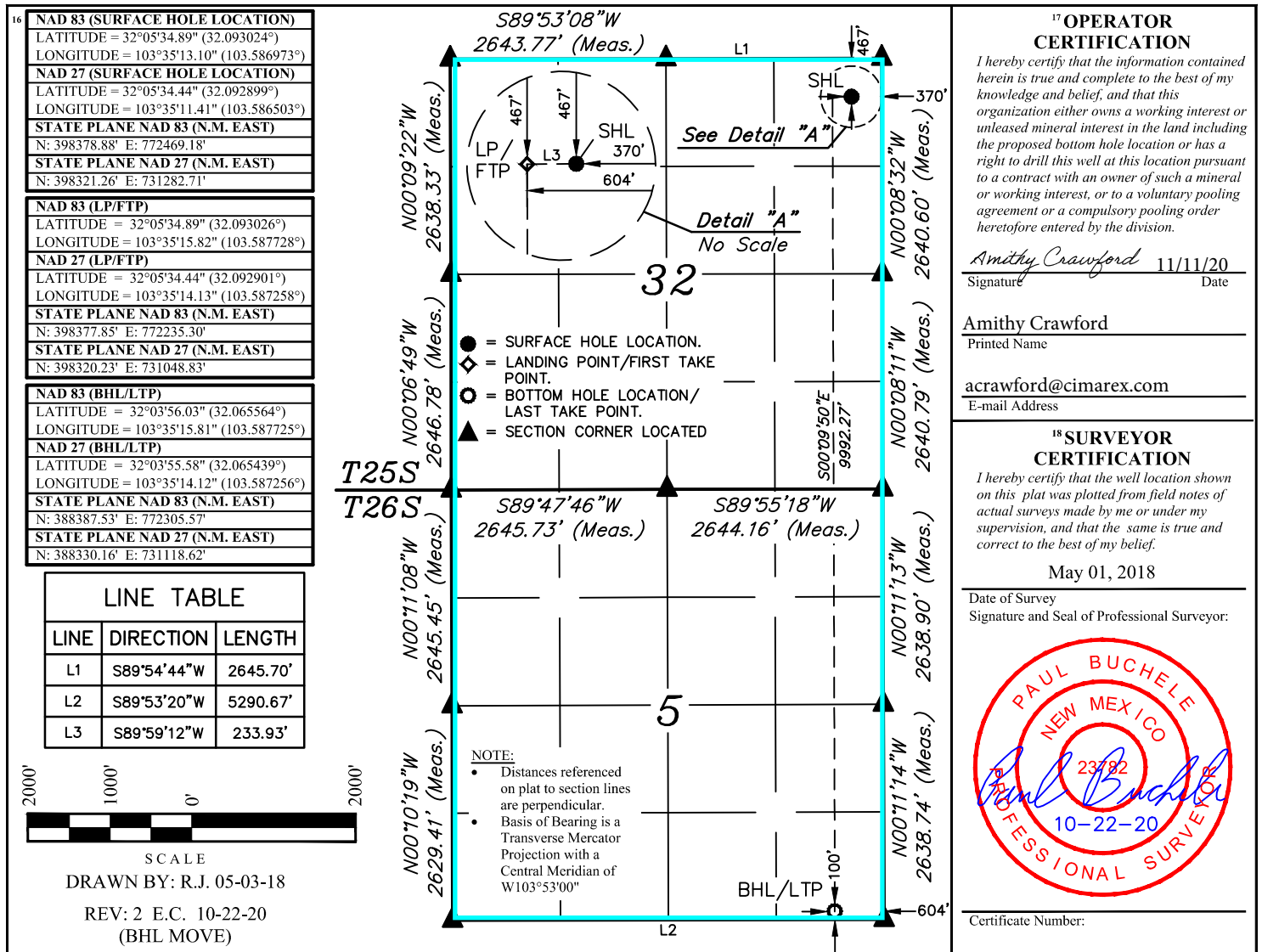
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	32	25S	33E		467	NORTH	370	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
P	5	26S	33E		100	SOUTH	604	EAST	LEA
¹² Dedicated Acres 1280	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.



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Oil Conservation Division
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Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 12/3/2020

☒ Original

Operator & OGRID No.: [162683] CIMAREX ENERGY CO. OF COLORADO

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
RED HILLS 32 5 STATE COM #197H	30-025-48094	A-32-25S-33E	0467N 0370E	3600	None	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to DUKE ENERGY TRANSPORT & TRADING CO and will be connected to DUKE ENERGY TRANSPORT & TRADING CO High/Low Pressure gathering system located in Eddy County, New Mexico. It will require 7555' of pipeline to connect the facility to High/Low Pressure gathering system. CIMAREX ENERGY CO. OF COLORADO provides (periodically) to DUKE ENERGY TRANSPORT & TRADING CO a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, CIMAREX ENERGY CO. OF COLORADO and DUKE ENERGY TRANSPORT & TRADING CO have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at DUKE ENERGY TRANSPORT & TRADING CO Processing Plant located in Sec. 26, Twn. 20S, Rng. 31E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on DUKE ENERGY TRANSPORT & TRADING CO system at that time. Based on current information, it is CIMAREX ENERGY CO. OF COLORADO's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Form APD Comments

Permit 289539

PERMIT COMMENTS

Operator Name and Address: CIMAREX ENERGY CO. OF COLORADO [162683] 600 N. Marienfeld Street Midland, TX 79701		API Number: 30-025-48094
		Well: RED HILLS 32 5 STATE COM #197H

Created By	Comment	Comment Date
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Santa Fe, NM 87505

Form APD Conditions

Permit 289539

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: CIMAREX ENERGY CO. OF COLORADO [162683] 600 N. Marienfeld Street Midland, TX 79701	API Number: 30-025-48094
	Well: RED HILLS 32 5 STATE COM #197H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required.
pkautz	Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

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

First Take Point (FTP)

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

Last Take Point (LTP)

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

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

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018



Cimarex Red Hills 32-5 State Com #197H Rev2 RM 11Nov20 Proposal Geodetic Report (Def Plan)



Report Date: November 11, 2020 - 03:56 PM
Client: Cimarex Energy
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Red Hills 32-5 State Com #197H / New Slot
Well: Red Hills 32-5 State Com #197H
Borehole: Red Hills 32-5 State Com #197H
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Red Hills 32-5 State Com #197H Rev2 RM 11Nov20
Survey Date: September 04, 2019
Tort / AHD / DDI / ERD Ratio: 99.034 ° / 10224.181 ft / 6.256 / 0.818
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 5' 34.88732", W 103° 35' 13.10384"
Location Grid N/E Y/X: N 398378.880 ftUS, E 772469.180 ftUS
CRS Grid Convergence Angle: 0.3966 °
Grid Scale Factor: 0.99997028
Version / Patch: 2.10.821.3

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.598 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3417.100 ft above MSL
Seabed / Ground Elevation: 3391.100 ft above MSL
Magnetic Declination: 6.481 °
Total Gravity Field Strength: 998.4312mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47604.579 nT
Magnetic Dip Angle: 59.664 °
Declination Date: November 11, 2020
Magnetic Declination Model: HDGM 2020
North Reference: Grid North
Grid Convergence Used: 0.3966 °
Total Corr Mag North->Grid North: 6.0849 °
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 (N/S ° ' ")	Longitude (E/W ° ' ")
SHL (467' FNL, 370' FEL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	398378.88	772469.18	N 32 5 34.89	W 103 35 13.10
Nudge 2"/100'	3000.00	0.00	269.65	3000.00	0.00	0.00	0.00	0.00	398378.88	772469.18	N 32 5 34.89	W 103 35 13.10
DLS	3222.75	4.46	269.65	3222.53	-0.01	-0.05	-8.66	2.00	398378.83	772460.52	N 32 5 34.89	W 103 35 13.20
Hold Nudge	6008.64	4.46	269.65	6000.00	-0.19	-1.39	-225.05	0.00	398377.49	772244.14	N 32 5 34.89	W 103 35 15.72
Drop to Vertical	6231.39	0.00	269.65	6222.53	-0.20	-1.44	-233.70	2.00	398377.44	772235.48	N 32 5 34.89	W 103 35 15.82
2"/100' DLS	11998.87	0.00	269.65	11990.00	-0.20	-1.44	-233.70	0.00	398377.44	772235.48	N 32 5 34.89	W 103 35 15.82
Hold Vertical	12623.87	75.00	179.60	12451.20	353.69	-355.32	-231.22	12.00	398023.57	772237.97	N 32 5 31.39	W 103 35 15.82
KOP - Build	13001.96	90.12	179.60	12500.00	727.51	-729.13	-228.60	4.00	397649.77	772240.59	N 32 5 27.69	W 103 35 15.82
12"/100' DLS	22264.74	90.12	179.60	12480.00	9990.27	-9991.67	-163.62	0.00	388387.53	772305.57	N 32 3 56.03	W 103 35 15.81
Build 4"/100'												
DLS												
Landing Point												
Cimarex Red Hills 32-5 State Com #197H - PBHL (100' FSL, 604' FEL)												

Survey Type: Def Plan

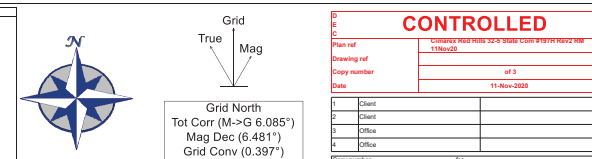
Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

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	26.000	1/100.000	17.500	13.375		NAL_MWD_IFR1+MS-Depth Only	Red Hills 32-5 State Com #197H / Cimarex Red Hills 32-5 State Com #197H Rev2 RM 11Nov20
	1	26.000	22264.742	1/100.000	17.500	13.375		NAL_MWD_IFR1+MS	Red Hills 32-5 State Com #197H / Cimarex Red Hills 32-5 State Com

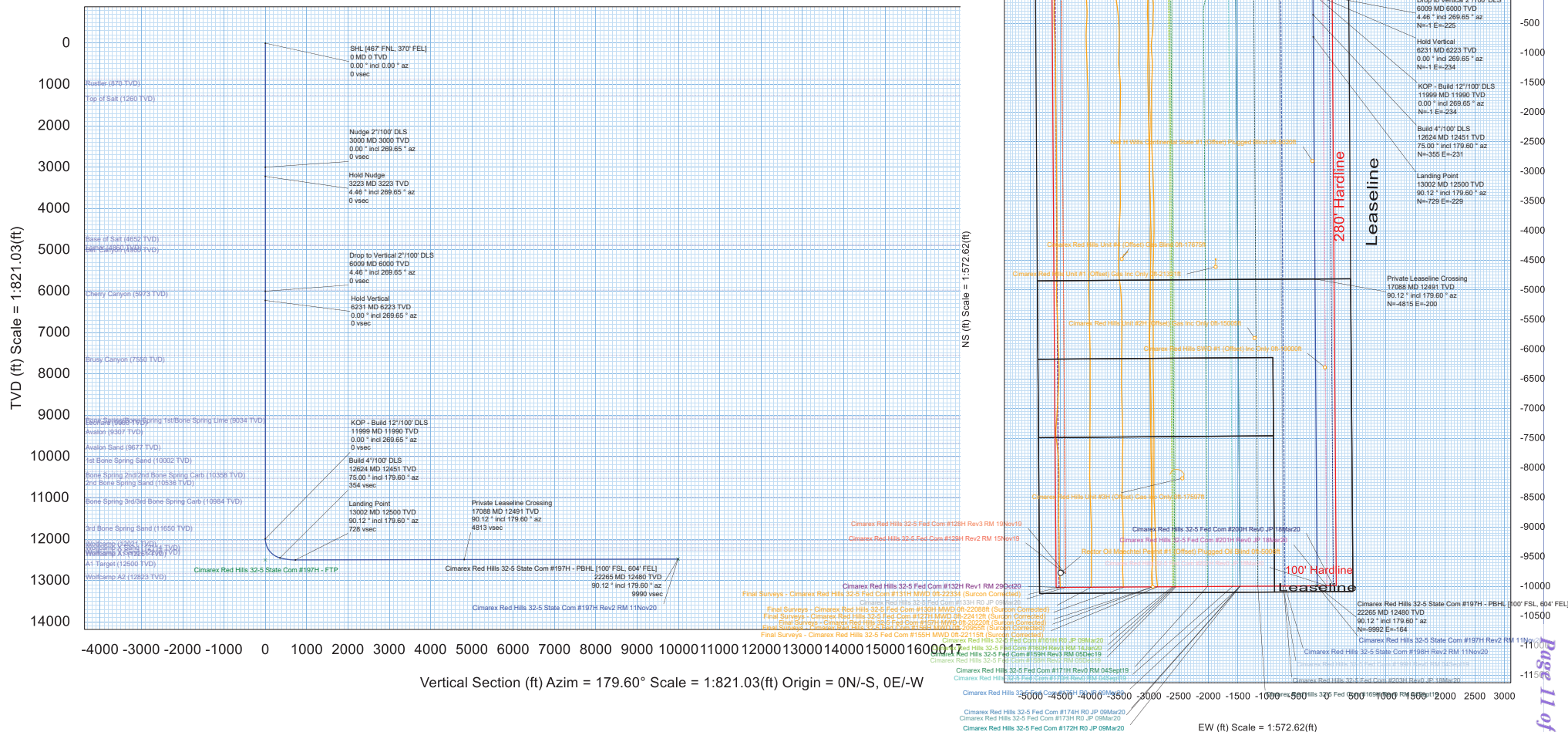
Borehole:	Red Hills 32-5 State Com #197H	Well:	Red Hills 32-5 State Com #197H	Field:	NM Lea County (NAD 83)	Structure:	Cimarex Red Hills 32-5 State Com #197H
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Gravity & Magnetic Parameters	Dip:	59.864°	Date:	11-Nov-2020	Surface Location	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Grid Conv:	0.3965°	Miscellaneous	Slot:	New Slot	TVD Ref:	RKB(3417.1ft above MSL)
Model:	HDGM 2020	FS:	47604.579nT	Gravity FS:	998.431mg (9.80665 Based)	Lat:	N 32 5 34.89	Scale Fact:	0.99997028	Plan:	Cimarex Red Hills 32-5 State Com #197H Rev2 RM 11Nov20		
MagDec:	6.481°					Long:	W 103 35 13.10						
						North:	398378.88NUS						
						Easting:	772469.18NUS						

Critical Point	MD	INCL	AZIM	Critical Points	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL (467° FNL, 370° FEL)	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00
Routlet	870.00	0.00	269.65		870.00	0.00	0.00	0.00	0.00
Top of Salt	1260.00	0.00	269.65		1260.00	0.00	0.00	0.00	0.00
Nudge 2°/100' DLS	3000.00	0.00	269.65		3000.00	0.00	0.00	0.00	0.00
Hold Nudge	3222.75	4.46	269.65		3222.53	-0.01	-0.05	-8.66	2.00
Base of Salt	4656.56	4.46	269.65		4652.00	-0.10	-0.74	-120.03	0.00
Lamar	4865.19	4.46	269.65		4860.00	-0.12	-0.84	-136.23	0.00
Bell Canyon	4905.31	4.46	269.65		4900.00	-0.12	-0.86	-139.35	0.00
Cherry Canyon	5981.56	4.46	269.65		5973.00	-0.19	-1.37	-222.94	0.00
Drop to Vertical 2°/100' DLS	6008.64	4.46	269.65		6000.00	-0.19	-1.39	-225.05	0.00
Hold Vertical	6231.39	0.00	269.65		6222.53	-0.20	-1.44	-233.70	2.00
Brusy Canyon	7558.87	0.00	269.65		7550.00	-0.20	-1.44	-233.70	0.00
Bone Spring/Bone Spring 1st/Bone Spring Lime	9042.87	0.00	269.65		9034.00	-0.20	-1.44	-233.70	0.00
Leonard	9089.87	0.00	269.65		9080.00	-0.20	-1.44	-233.70	0.00
Avaton	9315.87	0.00	269.65		9307.00	-0.20	-1.44	-233.70	0.00
Avaton Sand	9685.87	0.00	269.65		9677.00	-0.20	-1.44	-233.70	0.00
1st Bone Spring Sand	10010.87	0.00	269.65		10002.00	-0.20	-1.44	-233.70	0.00
Bone Spring 2nd/2nd Bone Spring Carb	10366.87	0.00	269.65		10358.00	-0.20	-1.44	-233.70	0.00
2nd Bone Spring Sand	10544.87	0.00	269.65		10536.00	-0.20	-1.44	-233.70	0.00
Bone Spring 3rd/3rd Bone Spring Carb	10992.87	0.00	269.65		10984.00	-0.20	-1.44	-233.70	0.00
3rd Bone Spring Sand	11658.87	0.00	269.65		11650.00	-0.20	-1.44	-233.70	0.00
KOP - Build 12°/100' DLS	11968.87	0.00	269.65		11960.00	-0.20	-1.44	-233.70	0.00
Wolfcamp	12020.89	3.72	179.60		12021.00	0.81	-2.45	-233.70	12.00
Wolfcamp X Sand	12124.39	15.05	179.60		12114.00	16.18	-17.82	-233.59	12.00
Wolfcamp Y Sand	12236.56	28.52	179.60		12218.00	57.75	-59.39	-233.30	12.00
Wolfcamp A1	12287.05	34.58	179.60		12281.00	84.16	-85.80	-233.11	12.00
Build 4°/100' DLS	12923.87	75.00	179.60		12915.00	363.69	-365.32	-231.22	12.00
A1 Target	12995.78	89.88	179.60		12950.00	721.31	-722.93	-228.64	4.00
Landing Point	13001.96	90.12	179.60		12950.00	727.51	-729.13	-228.60	4.00
A1 Target	13001.97	90.12	179.60		12950.00	727.53	-729.15	-228.60	0.00
Cimarex Red Hills 32-5 State Com #197H - PBHL [100' FSL, 604° FEL]	17087.50	90.12	179.60		12491.18	4813.04	-4814.56	-199.94	0.00
Wolfcamp A2	22264.74	90.12	179.60		12480.00	8999.27	-9001.67	-163.82	0.00
Wolfcamp A2	NaN	NaN	NaN		12823.00				0.00



CONTROLLED	
Plan ref	CIMAREX RED HILLS 32-5 STATE COM #197H REV2 RM 11Nov20
Drawing ref	
Copy number	of 3
Date	11-Nov-2020
1 Client	
2 Client	
3 Office	
4 Office	
Copy number	for





Cimarex Red Hills 32-5 State Com #197H Rev2 RM 11Nov20 Anti-Collision Summary Report

Analysis Date-24hr Time: November 11, 2020 - 15:56

Client: Cimarex Energy

Field: NM Lea County (NAD 83)

Structure: Cimarex Red Hills 32-5 State Com #197H

Slot: New Slot

Well: Red Hills 32-5 State Com #197H

Borehole: Red Hills 32-5 State Com #197H

Scan MD Range: 0.00ft ~ 22264.74ft

Analysis Method: 3D Least Distance

Reference Trajectory: Cimarex Red Hills 32-5 State Com #197H Rev2 RM 11Nov20 (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: 2.10.821.3

Database \ Project: US1153APP452.dir.slb.com\drilling-NM Lea County 2.10

Trajectory Error Model: ISCWSA0 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: Not performed!

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

Cimarex Red Hills SWD #1

(Offset) Inc Only Off-19000ft

(Def Survey)

Fail Major

6313.66	32.81	6311.68	6280.85	N/A	MAS = 10.00 (m)	0.00	0.00						Surface
6313.48	32.81	6311.48	6280.67	285911.28	MAS = 10.00 (m)	26.00	26.00						MinPt-O-SF
6313.40	32.81	6301.96	6280.59	667.36	MAS = 10.00 (m)	360.00	360.00						MinPts
6315.88	92.82	6253.34	6223.06	104.26	OSF1.50	1840.00	1840.00						MinPt-CtCt
6314.05	181.25	6192.55	6132.80	52.82	OSF1.50	3540.00	3538.82						MinPt-CtCt
6320.68	201.46	6185.72	6119.22	47.51	OSF1.50	4060.00	4057.25						MINPT-O-EQU
6293.29	271.38	6111.71	6021.92	35.03	OSF1.50	5220.00	5213.74						MinPt-CtCt
6297.13	282.28	6108.27	6014.85	33.69	OSF1.50	5570.00	5562.68						MINPT-O-EQU
6300.64	286.47	6109.04	6014.18	33.21	OSF1.50	5710.00	5702.26						MinPt-O-ADP
6302.28	352.98	6066.31	5949.32	26.93	OSF1.50	6850.00	6841.13						MinPt-CtCt
6309.90	376.48	6058.24	5933.41	25.26	OSF1.50	7470.00	7461.13						MINPT-O-EQU
6306.08	437.09	6014.04	5869.00	21.73	OSF1.50	8480.00	8471.13						MinPt-CtCt
6304.70	519.94	5957.41	5784.76	18.25	OSF1.50	10070.00	10061.13						MinPt-CtCt
6312.27	543.26	5949.44	5769.01	17.49	OSF1.50	10680.00	10671.13						MINPT-O-EQU
6295.89	604.09	5892.49	5691.80	15.68	OSF1.50	11670.00	11661.13						MinPt-CtCt
6297.80	609.84	5890.57	5687.96	15.54	OSF1.50	11890.00	11881.13						MINPT-O-EQU
2151.39	653.75	1712.44	1497.64	4.99	OSF1.50	16440.00	12492.58		OSF<5.00				Enter Alert
648.28	656.49	206.80	-8.21	1.48	OSF1.50	17960.00	12489.29			OSF<1.50			Enter Minor
440.43	657.46	-1.65	-217.03	1.00	OSF1.50	18180.00	12488.82				OSF<1.00		Enter Major
175.25	658.28	-264.48	-493.03	0.39	OSF1.50	18570.00	12487.98						MinPts
174.72	657.66	-264.38	-492.94	0.40	OSF1.50	18580.00	12487.96						MinPt-CtCt
423.38	647.04	-8.64	-223.66	0.98	OSF1.50	18970.00	12487.11				OSF>1.00		Exit Major
639.97	645.98	208.65	-6.01	1.49	OSF1.50	19200.00	12486.62						Exit Minor
2142.78	645.09	1712.07	1497.69	4.99	OSF1.50	20720.00	12483.34		OSF>5.00				Exit Alert
3684.52	644.81	3253.99	3039.71	8.59	OSF1.50	22264.74	12480.00						TD

Cimarex Red Hills 32-5 State

Com #198H Rev2 RM 11Nov20

(Def Plan)

Fail Minor

20.04	16.25	18.75	3.79	N/A	MAS = 4.95 (m)	0.00	0.00	CtCt<=15m<15.00					Enter Alert
19.99	16.25	18.70	3.74	N/A	MAS = 4.95 (m)	26.00	26.00						WRP
19.99	20.01	6.22	-0.02	1.50	OSF1.50	2050.00	2050.00		OSF<1.50				Enter Minor
19.99	24.25	3.39	-4.26	1.22	OSF1.50	2500.00	2500.00						MinPt-CtCt
20.05	24.40	3.35	-4.35	1.22	OSF1.50	2520.00	2520.00						MinPts
24.85	25.38	7.50	-0.53	1.47	OSF1.50	2670.00	2670.00			OSF>1.50			Exit Minor
87.93	27.57	69.12	60.36	4.95	OSF1.50	3160.00	3159.92		OSF>5.00				Exit Alert
545.92	84.14	489.40	461.78	9.88	OSF1.50	12030.00	12021.11						MinPt-O-SF
544.95	83.86	488.61	461.09	9.88	OSF1.50	12080.00	12070.74						MinPts
544.95	83.79	488.65	461.15	9.88	OSF1.50	12090.00	12080.58						MinPt-CtCt
603.24	182.16	481.37	421.08	4.99	OSF1.50	17740.00	12489.77		OSF<5.00				Enter Alert
603.17	320.18	389.23	292.93	2.83	OSF1.50	22264.74	12480.00						MinPts

Cimarex Red Hills 32-5 Fed

Com #199H Rev0 RM

04Sept19 (Non-Def Plan)

Warning Alert

40.02	32.39	38.04	7.63	N/A	MAS = 9.87 (m)	0.00	0.00	CtCt<=15m<15.00					Enter Alert
39.99	32.39	38.01	7.60	N/A	MAS = 9.87 (m)	26.00	26.00						WRP
39.99	32.39	22.70	7.60	2.48	MAS = 9.87 (m)	2500.00	2500.00						MinPts
40.05	32.39	22.66	7.66	2.47	MAS = 9.87 (m)	2520.00	2520.00						MINPT-O-EQU
40.13	32.39	22.70	7.74	2.47	MAS = 9.87 (m)	2530.00	2530.00						MinPt-O-SF
87.54	32.39	68.37	55.15	4.98	MAS = 9.87 (m)	3050.00	3050.00		OSF>5.00				Exit Alert
575.92	82.39	520.34	493.54	10.71	OSF1.50	11810.00	11801.13						MinPt-CtCt
575.95	82.61	520.21	493.33	10.68	OSF1.50	11860.00	11851.13						MinPts
576.56	82.78	520.72	493.78	10.67	OSF1.50	11950.00	11941.13						MinPt-O-SF
614.19	185.73	489.71	428.46	5.00	OSF1.50	17830.00	12489.58		OSF<5.00				Enter Alert
614.18	321.43	399.24	292.76	2.87	OSF1.50	22260.00	12480.01						MinPt-CtCt
614.18	321.58	399.14	292.61	2.87	OSF1.50	22264.74	12480.00						MinPts

Cimarex Red Hills 32-5 Fed

Com #200H Rev0 JP 18Mar20

(Non-Def Plan)

Warning Alert

99.98	32.81	98.00	67.17	N/A	MAS = 10.00 (m)	0.00	0.00						Surface
99.98	32.81	98.00	67.17	N/A	MAS = 10.00 (m)	26.00	26.00						WRP
70.81	32.81	55.05	38.00	5.00	MAS = 10.00 (m)	2500.00	2500.00		OSF<5.00				Enter Alert
60.00	32.81	41.72	27.19	3.56	MAS = 10.00 (m)	3030.00	3030.00						MinPts
60.05	32.81	41.67	27.24	3.54	MAS = 10.00 (m)	3060.00	3060.00						MINPT-O-EQU
60.34	32.81	41.82	27.54	3.53	MAS = 10.00 (m)	3100.00	3099.98						MinPt-O-SF
88.04	32.81	68.66	55.23	4.95	MAS = 10.00 (m)	3510.00	3508.91		OSF>5.00				Exit Alert
273.81	64.48	230.16	209.32	6.52	OSF1.50	9060.00	9051.13						MinPts
3190.98	308.67	2984.54	2882.31	15.60	OSF1.50	22264.74	12480.00						MinPts

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
Neil H Wells Continental State #1 (Offset) Plugged Blind Off-5020ft (Def Survey)	4765.14	528.93	4411.83	4236.21	13.56	OSF1.50	10190.00	10181.13				MinPt-CtCt	
	4766.51	591.78	4371.30	4174.73	12.12	OSF1.50	11400.00	11391.13				MinPt-CtCt	
	2163.75	654.77	1725.31	1508.97	4.99	OSF1.50	15370.00	12494.89	OSF-5.00			Enter Alert	
	1675.70	655.78	1237.77	1019.93	3.84	OSF1.50	16740.00	12491.93				MinPts	
	1675.74	655.77	1237.82	1019.97	3.84	OSF1.50	16750.00	12491.91				MinPt-O-SF	
	2184.29	657.31	1745.42	1526.98	5.00	OSF1.50	18140.00	12488.91	OSF-5.00			Exit Alert	
	5773.90	643.15	5344.47	5130.74	13.50	OSF1.50	22264.74	12480.00				TD	
													Warning Alert
	2833.45	32.81	2831.47	2800.64	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2833.37	32.81	2831.38	2800.56	253843.09	MAS = 10.00 (m)	10.00	10.00				MinPt-O-SF	
Cimarex Red Hills 32-5 Fed Com #203H Rev0 JP 18Mar20 (Non-Def Plan)	2833.31	32.81	2831.33	2800.50	841460.60	MAS = 10.00 (m)	26.00	26.00				WRP	
	2833.31	851.62	2264.90	1981.69	5.00	OSF1.50	2780.00	2780.00	OSF-5.00			Enter Alert	
	2823.38	1567.61	1777.64	1255.77	2.70	OSF1.50	5070.00	5064.19				MinPts	
	3832.00	1154.90	3061.40	2677.10	4.98	OSF1.50	7660.00	7651.13	OSF-5.00			Exit Alert	
	7583.55	306.45	7378.58	7277.10	37.35	OSF1.50	13630.00	12498.64				MinPt-O-ADP	
	7501.91	208.07	7362.54	7293.84	54.59	OSF1.50	14130.00	12497.56				MINPT-O-EOU	
	7437.42	66.16	7392.65	7371.26	173.77	OSF1.50	15110.00	12495.45				MinPt-CtCt	
	7502.81	228.45	7349.85	7274.37	49.68	OSF1.50	16100.00	12493.31				MINPT-O-EOU	
	7582.94	325.12	7365.53	7257.82	35.19	OSF1.50	16990.00	12492.25				MinPt-O-ADP	
	10319.06	1102.64	9583.31	9216.42	14.08	OSF1.50	22264.74	12480.00				MinPt-O-SF	
													Pass
	152.29	32.81	150.31	119.48	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	152.29	32.81	150.31	119.48	338255.68	MAS = 10.00 (m)	26.00	26.00				WRP	
	152.29	32.81	139.46	119.48	13.85	MAS = 10.00 (m)	1790.00	1790.00				MinPts	
	152.35	32.81	139.36	119.54	13.66	MAS = 10.00 (m)	1820.00	1820.00				MINPT-O-EOU	
Cimarex Red Hills 32-5 Fed Com #172H R0 JP 09Mar20 (Non-Def Plan)	155.30	32.81	141.80	122.49	13.31	MAS = 10.00 (m)	1940.00	1940.00				MinPt-O-SF	
	414.86	44.56	384.49	370.29	14.54	OSF1.50	6020.00	6011.33				MinPt-O-SF	
	568.21	72.03	519.53	496.18	12.12	OSF1.50	10660.00	10651.13				MinPt-CtCt	
	568.21	72.06	519.51	496.15	12.12	OSF1.50	10670.00	10661.13				MinPts	
	568.72	72.18	519.93	496.53	12.11	OSF1.50	10710.00	10701.13				MinPt-O-SF	
	1679.56	318.24	1466.70	1361.29	7.96	OSF1.50	22264.74	12480.00				MinPts	
													Pass
	1959.54	32.81	1957.56	1926.73	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1959.54	32.81	1957.52	1926.73	47883.44	MAS = 10.00 (m)	26.00	26.00				WRP	
	1333.57	77.62	1280.94	1255.94	28.62	OSF1.50	10430.00	10421.13				MinPt-O-SF	
Cimarex Red Hills 32-5 Fed Com #173H R0 JP 09Mar20 (Non-Def Plan)	1301.92	77.13	1249.60	1224.78	26.17	OSF1.50	10850.00	10841.13				MinPts	
	1301.94	77.16	1249.61	1224.78	26.17	OSF1.50	10860.00	10851.13				MinPt-O-ADP	
	1302.39	77.20	1250.03	1225.19	26.18	OSF1.50	10890.00	10881.13				MinPt-O-SF	
	2062.10	312.22	1853.25	1749.88	9.96	OSF1.50	22264.74	12480.00				MinPts	
													Pass
	1979.49	32.81	1977.51	1946.68	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1979.49	32.81	1977.47	1946.68	49446.42	MAS = 10.00 (m)	26.00	26.00				WRP	
	1335.85	46.97	1303.63	1288.88	45.18	OSF1.50	6170.00	6161.14				MinPt-O-SF	
	1323.33	70.85	1275.19	1252.48	29.08	OSF1.50	9840.00	9831.13				MinPt-O-SF	
	1302.29	70.84	1254.14	1231.45	28.64	OSF1.50	10230.00	10221.13				MinPts	
Cimarex Red Hills 32-5 Fed Com #174H R0 JP 09Mar20 (Non-Def Plan)	1302.86	70.89	1254.68	1231.97	28.62	OSF1.50	10270.00	10261.13				MinPt-O-SF	
	2555.10	311.13	2347.03	2243.98	12.39	OSF1.50	22264.74	12480.00				MinPts	
													Pass
	1999.44	32.81	1997.46	1966.63	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1999.44	32.81	1997.42	1966.63	49945.33	MAS = 10.00 (m)	26.00	26.00				WRP	
	1337.11	45.16	1306.08	1291.95	47.24	OSF1.50	6100.00	6091.18				MinPt-O-SF	
	1315.97	67.15	1270.27	1248.82	30.61	OSF1.50	9550.00	9541.13				MinPt-O-SF	
	1302.60	67.19	1256.87	1235.41	30.29	OSF1.50	9890.00	9881.13				MinPt-CtCt	
	1302.60	67.21	1256.86	1235.40	30.28	OSF1.50	9900.00	9891.13				MinPts	
	1303.39	67.26	1257.60	1236.11	30.28	OSF1.50	9950.00	9941.13				MinPt-O-SF	
Cimarex Red Hills 32-5 Fed Com #175H R0 JP 09Mar20 (Non-Def Plan)	2817.33	310.80	2609.47	2506.53	13.67	OSF1.50	22264.74	12480.00				MinPts	
													Pass
	2019.39	32.81	2017.41	1986.58	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	2019.39	32.81	2017.37	1986.58	50444.03	MAS = 10.00 (m)	26.00	26.00				WRP	
	1331.53	43.88	1301.34	1287.65	48.52	OSF1.50	6100.00	6091.18				MinPt-O-SF	
	1317.28	43.26	1287.49	1274.02	48.78	OSF1.50	6250.00	6241.13				MinPt-O-SF	
	1310.15	60.59	1268.81	1249.56	33.96	OSF1.50	8850.00	8841.13				MinPt-O-SF	
	1302.95	60.71	1261.53	1242.25	33.71	OSF1.50	9150.00	9141.13				MinPts	
	1302.97	60.73	1261.54	1242.25	33.70	OSF1.50	9160.00	9151.13				MinPt-O-ADP	
	1303.97	60.82	1262.48	1243.16	33.67	OSF1.50	9220.00	9211.13				MinPt-O-SF	
Cimarex Red Hills 32-5 Fed Com #171H Rev0 RM 04Sept19 (Non-Def Plan)	3453.28	310.37	3245.62	3142.83	16.79	OSF1.50	22264.74	12480.00				MinPts	
													Pass
	1896.31	32.81	1895.02	1863.50	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1896.31	32.81	1894.98	1863.50	45610.08	MAS = 10.00 (m)	26.00	26.00				WRP	
	1427.99	87.61	1368.97	1340.38	24.94	OSF1.50	11780.00	11771.13				MinPt-O-SF	
	1425.89	87.46	1366.97	1338.43	24.95	OSF1.50	11998.87	11990.00				MinPt-O-SF	
	1425.88	87.46	1366.96	1338.42	24.95	OSF1.50	12000.00	11991.13				MinPts	
	1425.80	87.19	1367.06	1338.60	25.02	OSF1.50	12030.00	12021.11				MinPt-CtCt	
	1444.83	311.81	1236.38	1133.02	6.98	OSF1.50	22260.00	12480.01				MinPt-CtCt	
	1444.83	311.95	1236.29	1132.88	6.98	OSF1.50	22264.74	12480.00				MinPts	
Cimarex Red Hills 32-5 Fed Com #171H Rev0 RM 04Sept19 (Non-Def Plan)													Pass
	1916.29	32.81	1914.31	1883.48	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1916.29	32.81	1914.27	1883.48	46572.51	MAS = 10.00 (m)	26.00	26.00				WRP	
	1682.80	99.60	1615.65	1583.21	25.90	OSF1.50	11680.00	11671.13				MinPt-CtCt	
	1682.81	99.68	1615.60	1583.13	25.88	OSF1.50	11690.00	11681.13				MINPT-O-EOU	
	1682.84	99.71	1615.60	1583.12	25.87	OSF1.50	11700.00	11691.13				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		
3274.55	246.35	3109.43	3028.20	20.14		OSF1.50	20510.00	12483.79				MINPT-O-EQU	
3275.25	247.20	3109.57	3028.05	20.07		OSF1.50	20550.00	12483.70				MinPt-O-ADP	
3268.23	266.82	3089.45	3001.40	18.54		OSF1.50	21180.00	12482.34				MinPt-CtCt	
3267.27	271.50	3085.38	2995.77	18.22		OSF1.50	21340.00	12482.00				MinPt-CtCt	
3268.41	274.30	3084.65	2994.11	18.03		OSF1.50	21460.00	12481.74				MINPT-O-EQU	
3270.08	276.27	3085.00	2993.80	17.91		OSF1.50	21540.00	12481.56				MinPt-O-ADP	
3275.50	282.62	3086.20	2992.88	17.54		OSF1.50	21740.00	12481.13				MINPT-O-EQU	
3277.38	284.86	3086.59	2992.52	17.41		OSF1.50	21830.00	12480.94				MinPt-O-ADP	
3271.13	299.10	3070.84	2972.02	16.54		OSF1.50	22264.74	12480.00				MinPts	

Final Surveys - Cimarex Red Hills 32-5 Fed Com #130H MWD Off-22088ft (Surcon Corrected) (Def Survey)

Pass

4429.40	32.81	4428.12	4396.60	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
4429.38	32.81	4428.05	4396.57	124804.85	MAS = 10.00 (m)	26.00	26.00	WRP
4429.04	32.81	4427.45	4396.23	14778.79	MAS = 10.00 (m)	100.00	100.00	MINPT-O-EQU
4428.78	32.81	4427.07	4395.98	8275.52	MAS = 10.00 (m)	170.00	170.00	MinPts
4428.85	32.81	4427.02	4396.04	6766.13	MAS = 10.00 (m)	200.00	200.00	MINPT-O-EQU
4430.44	32.81	4424.95	4397.63	1037.34	MAS = 10.00 (m)	980.00	980.00	MINPT-O-EQU
4425.65	32.81	4417.62	4392.84	633.66	MAS = 10.00 (m)	1600.00	1600.00	MinPts
4425.77	32.81	4417.52	4392.86	614.91	MAS = 10.00 (m)	1650.00	1650.00	MINPT-O-EQU
4426.91	32.81	4415.22	4394.11	415.58	MAS = 10.00 (m)	2420.00	2420.00	MinPts
4427.02	32.81	4415.10	4394.21	407.12	MAS = 10.00 (m)	2470.00	2470.00	MINPT-O-EQU
3866.94	32.81	3845.80	3834.13	198.60	MAS = 10.00 (m)	6100.00	6091.18	MinPt-O-SF
3800.12	44.95	3769.54	3755.17	132.15	OSF1.50	8920.00	8911.13	MinPt-CtCt
3800.50	45.85	3769.32	3754.65	129.47	OSF1.50	9070.00	9061.13	MINPT-O-EQU
3800.94	46.40	3769.39	3754.53	127.87	OSF1.50	9160.00	9151.13	MinPt-O-ADP
3803.68	48.85	3770.48	3754.79	121.20	OSF1.50	9590.00	9581.13	MINPT-O-EQU
3803.78	49.00	3770.50	3754.77	120.90	OSF1.50	9610.00	9601.13	MinPt-O-ADP
3804.07	57.97	3764.81	3746.10	101.60	OSF1.50	11080.00	11071.13	MinPt-CtCt
3804.13	58.16	3764.75	3745.97	101.25	OSF1.50	11110.00	11101.13	MINPT-O-EQU
3804.24	58.29	3764.77	3745.95	101.02	OSF1.50	11130.00	11121.13	MinPt-O-ADP
3820.78	62.93	3778.23	3757.84	93.68	OSF1.50	11880.00	11871.13	MinPt-CtCt
3820.83	63.00	3778.15	3757.77	93.48	OSF1.50	11900.00	11891.13	MINPT-O-EQU
3820.87	63.12	3778.20	3757.75	93.39	OSF1.50	11910.00	11901.13	MinPt-O-ADP
3821.88	63.68	3778.84	3758.20	92.57	OSF1.50	11998.87	11990.00	MinPt-O-SF
3823.42	63.52	3780.49	3759.90	92.81	OSF1.50	12070.00	12060.87	MinPt-O-SF
3820.77	62.54	3778.46	3758.22	94.24	OSF1.50	12240.00	12221.01	MinPt-O-ADP
3820.72	62.48	3778.47	3758.23	94.33	OSF1.50	12250.00	12229.71	MINPT-O-EQU
3820.63	62.25	3778.55	3758.39	94.70	OSF1.50	12290.00	12263.43	MinPt-CtCt
3812.70	74.00	3762.80	3738.70	79.06	OSF1.50	14070.00	12497.69	MinPt-CtCt
3813.04	78.99	3759.82	3734.05	73.97	OSF1.50	14340.00	12497.11	MinPt-CtCt
3813.18	84.13	3756.51	3729.03	69.35	OSF1.50	14600.00	12496.55	MinPt-CtCt
3814.19	97.66	3748.51	3716.52	59.59	OSF1.50	15200.00	12495.25	MinPt-CtCt
3814.24	110.28	3740.15	3703.95	52.66	OSF1.50	15710.00	12494.15	MinPt-CtCt
3814.17	113.64	3737.84	3700.52	51.08	OSF1.50	15840.00	12493.87	MinPt-CtCt
3814.95	116.13	3736.97	3698.82	49.98	OSF1.50	15960.00	12493.61	MINPT-O-EQU
3817.78	122.96	3735.24	3694.81	47.20	OSF1.50	16220.00	12493.05	MINPT-O-EQU
3821.52	132.85	3732.41	3688.69	43.69	OSF1.50	16590.00	12492.25	MINPT-O-EQU
3822.78	134.38	3732.64	3688.40	43.19	OSF1.50	16660.00	12492.10	MinPt-O-ADP
3827.88	145.28	3730.46	3682.59	39.96	OSF1.50	17050.00	12491.26	MINPT-O-EQU
3828.58	146.11	3730.61	3682.46	39.74	OSF1.50	17090.00	12491.17	MinPt-O-ADP
3811.02	182.15	3689.02	3628.87	31.66	OSF1.50	18330.00	12488.50	MinPt-CtCt
3811.67	184.10	3688.37	3627.57	31.33	OSF1.50	18420.00	12488.30	MINPT-O-EQU
3814.44	192.35	3695.65	3622.09	30.00	OSF1.50	18710.00	12487.68	MINPT-O-EQU
3815.78	200.94	3691.24	3614.82	28.71	OSF1.50	18980.00	12487.09	MinPt-CtCt
3817.25	205.98	3679.41	3611.32	28.02	OSF1.50	19180.00	12486.66	MINPT-O-EQU
3823.86	220.10	3676.57	3603.76	26.25	OSF1.50	19670.00	12485.60	MINPT-O-EQU
3830.33	237.85	3671.15	3592.44	24.31	OSF1.50	20270.00	12484.31	MINPT-O-EQU
3831.26	238.99	3671.38	3592.27	24.20	OSF1.50	20320.00	12484.20	MinPt-O-ADP
3810.03	271.21	3628.66	3538.82	21.20	OSF1.50	21370.00	12481.93	MinPt-CtCt
3814.06	279.90	3626.90	3534.16	20.55	OSF1.50	21690.00	12481.24	MINPT-O-EQU
3815.42	281.56	3627.15	3533.86	20.44	OSF1.50	21760.00	12481.09	MinPt-O-ADP
3817.82	288.69	3624.80	3529.14	19.94	OSF1.50	21960.00	12480.66	MinPt-CtCt
3819.27	294.39	3622.45	3524.89	19.56	OSF1.50	22180.00	12480.18	MINPT-O-EQU
3820.68	297.55	3621.75	3523.13	19.36	OSF1.50	22264.74	12480.00	MinPts

Cimarex Red Hills 32-5 Fed Com #133H R0 JP 09Mar20 (Non-Def Plan)

Pass

4550.80	32.81	4548.82	4517.99	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
4550.80	32.81	4548.81	4517.99	426526.95	MAS = 10.00 (m)	26.00	26.00	WRP
4247.16	75.43	4196.10	4171.73	87.10	OSF1.50	9880.00	9871.13	MinPt-O-SF
4244.95	75.07	4194.13	4169.88	87.49	OSF1.50	10170.00	10161.13	MinPts
4280.72	76.20	4229.22	4204.52	86.61	OSF1.50	10800.00	10791.13	MinPt-O-SF
4775.18	313.94	4565.23	4461.24	22.95	OSF1.50	22264.74	12480.00	MinPts

Cimarex Red Hills 32-5 Fed Com #128H Rev3 RM 19Nov19 (Def Plan)

Pass

4490.84	32.81	4489.55	4458.03	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
4490.84	32.81	4489.54	4458.03	396206.30	MAS = 10.00 (m)	26.00	26.00	WRP
4411.72	35.03	4387.92	4376.70	196.59	OSF1.50	4090.00	4087.16	MinPt-O-SF
4254.32	84.59	4197.40	4169.73	76.84	OSF1.50	10390.00	10381.13	MinPt-O-SF
4254.31	84.58	4197.40	4169.73	76.85	OSF1.50	10400.00	10391.13	MinPts
4245.08	83.38	4188.96	4161.69	77.81	OSF1.50	10830.00	10821.13	MinPt-CtCt
4245.09	83.41	4188.96	4161.68	77.79	OSF1.50	10840.00	10831.13	MinPts
4266.80	84.29	4210.13	4182.51	77.21	OSF1.50	11280.00	11271.13	MinPt-O-SF
4532.48	307.08	4327.33	4225.40	22.23	OSF1.50	22030.00	12480.51	MinPt-CtCt
4532.82	308.18	4326.94	4224.64	22.15	OSF1.50	22090.00	12480.38	MINPT-O-EQU
4533.11	308.54	4326.99	4224.58	22.12	OSF1.50	22110.00	12480.33	MinPt-O-ADP
4538.33	311.08	4330.52	4227.29	21.97	OSF1.50	22264.74	12480.00	MinPt-O-SF

Cimarex Red Hills 32-5 Fed Com #129H Rev2 RM 15Nov19 (Def Plan)

Pass

4510.83	32.81	4509.54	4478.02	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
4510.83	32.81	4509.53	4478.02	405929.97	MAS = 10.00 (m)	26.00	26.00	WRP
4277.23	80.76	4222.87	4196.48	81.09	OSF1.50	9680.00	9671.13	MinPts
4248.26	80.65	4193.95	4167.61	80.61	OSF1.50	10220.00	10211.13	MinPt-CtCt
4248.26	80.68	4193.94	4167.58	80.58	OSF1.50	10230.00	10221.13	MINPT-O-EQU
4248.29	80.71	4193.94	4167.58	80.54	OSF1.50	10240.00	10231.13	MinPt-O-ADP
4272.37	81.73	4217.39	4190.64	79.82	OSF1.50	10690.00	10681.13	MinPt-O-SF

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Cl-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	4775.53	306.56	4570.73	4468.97	23.46	OSF1.50	22040.00	12480.49				MinPt-CtCt	
	4775.84	307.46	4570.43	4468.37	23.39	OSF1.50	22090.00	12480.38				MINPT-O-EOU	
	4776.27	307.99	4570.52	4468.28	23.35	OSF1.50	22120.00	12480.31				MinPt-O-ADP	
	4781.02	310.39	4573.66	4470.63	23.19	OSF1.50	22264.74	12480.00				MinPt-O-SF	

Final Surveys - Cimarex Red Hills 32-5 Fed Com #131H MWD Off-22334 (Surcon Corrected) (Def Survey)

Pass

4449.40	32.81	4448.22	4416.59	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
4449.37	32.81	4448.16	4416.56	118780.57	MAS = 10.00 (m)	26.00	26.00	WRP
4448.65	32.81	4446.83	4415.84	6966.57	MAS = 10.00 (m)	190.00	190.00	MinPts
4448.77	32.81	4446.74	4415.96	5229.76	MAS = 10.00 (m)	240.00	240.00	MINPT-O-EOU
4449.78	32.81	4446.00	4416.97	1708.28	MAS = 10.00 (m)	640.00	640.00	MINPT-O-EOU
4518.17	32.81	4503.33	4485.36	327.51	MAS = 10.00 (m)	3150.00	3149.93	MinPt-O-SF
4508.59	32.81	4493.51	4475.78	321.24	MAS = 10.00 (m)	3610.00	3608.61	MinPts
4508.60	32.81	4493.50	4475.79	320.96	MAS = 10.00 (m)	3620.00	3618.58	MINPT-O-EOU
4514.67	32.81	4499.04	4481.86	309.46	MAS = 10.00 (m)	3940.00	3937.61	MinPt-O-SF
4497.81	32.81	4481.98	4465.00	304.29	MAS = 10.00 (m)	4200.00	4196.82	MinPt-O-SF
4489.05	32.81	4473.24	4456.24	303.95	MAS = 10.00 (m)	4300.00	4296.52	MinPt-O-SF
4363.86	32.81	4343.29	4331.05	225.43	MAS = 10.00 (m)	6100.00	6091.18	MinPt-O-SF
4351.48	33.80	4328.54	4317.68	200.36	OSF1.50	7190.00	7181.13	MinPt-CtCt
4351.74	34.56	4328.25	4317.19	195.84	OSF1.50	7320.00	7311.13	MINPT-O-EOU
4348.76	39.04	4322.32	4309.72	172.52	OSF1.50	8150.00	8141.13	MinPt-CtCt
4345.94	43.87	4316.27	4302.06	152.89	OSF1.50	9000.00	8991.13	MinPt-CtCt
4344.86	46.22	4313.62	4298.63	144.87	OSF1.50	9400.00	9391.13	MinPt-CtCt
4344.99	46.58	4313.52	4298.40	143.70	OSF1.50	9460.00	9451.13	MINPT-O-EOU
4345.15	46.78	4313.55	4298.38	143.12	OSF1.50	9490.00	9481.13	MinPt-O-ADP
4336.22	54.53	4299.45	4281.70	122.10	OSF1.50	10760.00	10751.13	MinPt-CtCt
4336.18	55.59	4298.68	4280.57	119.72	OSF1.50	10930.00	10921.13	MinPt-CtCt
4336.30	56.02	4298.53	4280.28	118.78	OSF1.50	11000.00	10991.13	MINPT-O-EOU
4337.05	56.82	4298.75	4280.23	117.09	OSF1.50	11130.00	11121.13	MinPt-O-ADP
4349.08	62.27	4307.15	4286.81	106.69	OSF1.50	11998.87	11990.00	MinPt-O-SF
4369.17	59.81	4328.87	4309.31	111.62	OSF1.50	12400.00	12345.58	MinPts
4352.74	63.44	4310.07	4289.30	104.76	OSF1.50	13450.00	12499.03	MinPt-CtCt
4352.84	66.55	4308.10	4286.29	99.78	OSF1.50	13890.00	12498.51	MinPt-CtCt
4353.16	67.57	4307.74	4285.59	98.26	OSF1.50	13780.00	12498.32	MINPT-O-EOU
4350.51	84.03	4294.11	4266.48	78.70	OSF1.50	14660.00	12496.42	MinPt-CtCt
4349.03	92.73	4286.83	4256.30	71.21	OSF1.50	15040.00	12495.60	MinPt-CtCt
4348.05	101.26	4280.17	4246.79	65.13	OSF1.50	15400.00	12494.82	MinPt-CtCt
4349.81	105.81	4278.89	4244.00	62.32	OSF1.50	15610.00	12494.37	MINPT-O-EOU
4348.84	111.65	4274.03	4237.19	59.01	OSF1.50	15810.00	12493.94	MinPt-CtCt
4350.46	115.88	4272.83	4234.58	56.86	OSF1.50	16000.00	12493.53	MINPT-O-EOU
4350.64	121.51	4269.25	4229.12	54.20	OSF1.50	16190.00	12493.12	MinPt-CtCt
4353.40	132.86	4264.43	4220.54	49.56	OSF1.50	16640.00	12492.14	MINPT-O-EOU
4357.31	142.53	4261.91	4214.77	46.21	OSF1.50	16990.00	12491.39	MINPT-O-EOU
4358.61	144.10	4262.17	4214.52	45.72	OSF1.50	17060.00	12491.24	MinPt-O-ADP
4363.66	150.22	4263.14	4213.44	43.89	OSF1.50	17270.00	12490.78	MINPT-O-EOU
4331.45	189.34	4204.84	4142.11	34.52	OSF1.50	18610.00	12487.89	MinPt-CtCt
4332.08	191.22	4204.21	4140.86	34.18	OSF1.50	18700.00	12487.70	MINPT-O-EOU
4332.77	192.05	4204.35	4140.72	34.04	OSF1.50	18740.00	12487.61	MinPt-O-ADP
4344.95	241.00	4183.90	4103.95	27.16	OSF1.50	20380.00	12484.07	MinPt-CtCt
4347.48	248.68	4181.30	4098.79	26.34	OSF1.50	20670.00	12483.44	MINPT-O-EOU
4349.32	250.94	4181.65	4098.39	26.11	OSF1.50	20760.00	12483.25	MinPt-O-ADP
4351.85	258.10	4179.41	4093.76	25.40	OSF1.50	20960.00	12482.82	MinPt-CtCt
4353.16	261.74	4178.30	4091.43	25.05	OSF1.50	21110.00	12482.49	MINPT-O-EOU
4350.59	269.72	4170.40	4080.87	24.29	OSF1.50	21350.00	12481.98	MinPt-CtCt
4335.37	296.86	4137.08	4038.51	21.99	OSF1.50	22260.00	12480.01	MinPt-CtCt
4335.38	296.95	4137.03	4038.43	21.98	OSF1.50	22264.74	12480.00	MinPts

Cimarex Red Hills 32-5 Fed Com #132H Rev1 RM 29Oct20 (Def Plan)

Pass

4530.82	32.81	4529.53	4498.01	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
4530.82	32.81	4529.52	4498.01	416050.56	MAS = 10.00 (m)	26.00	26.00	WRP
4530.82	32.81	4519.29	4498.01	442.34	MAS = 10.00 (m)	1690.00	1690.00	MinPts
4530.87	32.81	4519.20	4498.06	436.17	MAS = 10.00 (m)	1730.00	1730.00	MINPT-O-EOU
4354.94	76.23	4303.61	4278.71	87.43	OSF1.50	10500.00	10491.13	MinPts
4354.92	76.18	4303.62	4278.74	87.48	OSF1.50	10580.00	10571.13	MinPt-CtCt
4404.09	77.75	4351.82	4326.33	86.37	OSF1.50	11510.00	11501.13	MinPt-O-SF
4618.55	314.02	4408.77	4304.53	22.15	OSF1.50	22264.74	12480.00	MinPts

Rector Oil Maechtel Permit #1 (Offset) Plugged Oil Blind Off-5006ft (Def Survey)

Pass

10755.56	32.81	10754.27	10722.75	N/A	MAS = 10.00 (m)	0.00	0.00	Surface
10755.29	32.81	10753.96	10722.48	262386.54	MAS = 10.00 (m)	26.00	26.00	MinPt-O-SF
10685.10	1559.26	9645.15	9125.85	10.29	OSF1.50	5310.00	5303.47	MinPt-O-SF
10683.91	1558.88	9644.20	9125.03	10.29	OSF1.50	5430.00	5423.11	MinPt-O-ADP
10683.84	1558.80	9644.19	9125.04	10.29	OSF1.50	5450.00	5443.05	MINPT-O-EOU
10683.81	1558.66	9644.25	9125.14	10.29	OSF1.50	5480.00	5472.96	MinPt-CtCt
10338.07	1097.29	9606.11	9240.78	14.13	OSF1.50	16190.00	12493.12	MinPt-O-SF
8530.35	820.60	7982.86	7709.75	15.62	OSF1.50	22030.00	12480.51	MinPt-CtCt
8530.49	820.98	7982.75	7709.52	15.61	OSF1.50	22080.00	12480.40	MINPT-O-EOU
8530.72	821.24	7982.80	7709.48	15.60	OSF1.50	22110.00	12480.33	MinPt-O-ADP
8533.57	823.02	7984.46	7710.55	15.57	OSF1.50	22264.74	12480.00	MinPt-O-SF

1. Geological Formations

TVD of target 12,480

Pilot Hole TD N/A

MD at TD 22,037

Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	934	N/A	
Top Salt	1349	N/A	
Base Salt	4651	N/A	
Lamar	4892	N/A	
Bell Canyon	4929	N/A	
Cherry Canyon	6001	N/A	
Brushy Canyon	7537	N/A	
Bone Spring	9039	N/A	
Leonard Shale	9094	N/A	
Avalon shale	9356	N/A	
1st Bone Spring Sand	10036	N/A	
2nd BSPG Carb	10223	N/A	
2nd BSPG Sand	10564	N/A	
3rd BSPG Carb	11017	N/A	
3rd BSPG Sand	11682	N/A	
Top Wolfcamp	12125	N/A	
Wolfcamp Y Sand	12225	N/A	
Wolfcamp A1	12301	N/A	

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
14 3/4	0	984	984	10-3/4"	40.50	J-55	BT&C	3.51	6.95	15.78
9 7/8	0	12623	12451	7-5/8"	29.70	L-80	BT&C	2.46	1.18	1.80
6 3/4	0	11769	11769	5-1/2"	20.00	L-80	LT&C	1.15	1.20	1.85
6 3/4	11769	22264	12480	5"	18.00	P-110	BT&C	1.66	1.68	45.32
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

Request Variance for 5-1/2" x 7-5/8" annular clearance. The portion that does not meet clearance will not be cemented

Cimarex Energy Co., Red Hills 32-5 State Com 197H

	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	332	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	156	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate Stage 1	596	10.30	3.64	22.18		Lead: Tuned Light + LCM
	198	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Intermediate Stage 2	793	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
Production	1330	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

DV tool with possible annular casing packer as needed is proposed at a depth of +/- 4,892'.

Casing String	TOC	% Excess
Surface	0	42
Intermediate Stage 1	4892	47
Intermediate Stage 2	0	40
Production	12400	25

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
9 7/8	13 5/8	5M	Annular	X	50% of working pressure
			Blind Ram		5M
			Pipe Ram	X	
			Double Ram	X	
			Other		
6 3/4	13 5/8	10M	Annular	X	50% of working pressure
			Blind Ram		10M
			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 984'	FW Spud Mud	8.30 - 8.80	30-32	N/C
984' to 12623'	Brine Diesel Emulsion	8.50 - 9.00	30-35	N/C
12623' to 22264'	Oil Based Mud	12.00 - 12.50	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.

The Brine Emulsion is completely saturated brine fluid that ties diesel into itself to lower the weight of the fluid. The drilling fluid is completely salt saturated.

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	8112 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 10-3/4" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 10000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10000 psi test. Annular will be tested to 50% 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 10000 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 Energy Co., Red Hills 32-5 State Com 197H

Drilling 9 7/8" hole
below 10 3/4" Casing

Fill Line

Flowline

5000# (5M)
BOP

Annular Preventer

SRR & A

Pipe Rams

Blind Rams

2" Minimum Kill Line

Kill Line

Drilling
Spool

3" minimum choke line

Choke Line

2 Valves Minimum
(HCR Required)

2 Valves and a check valve

Wellhead
Assembly

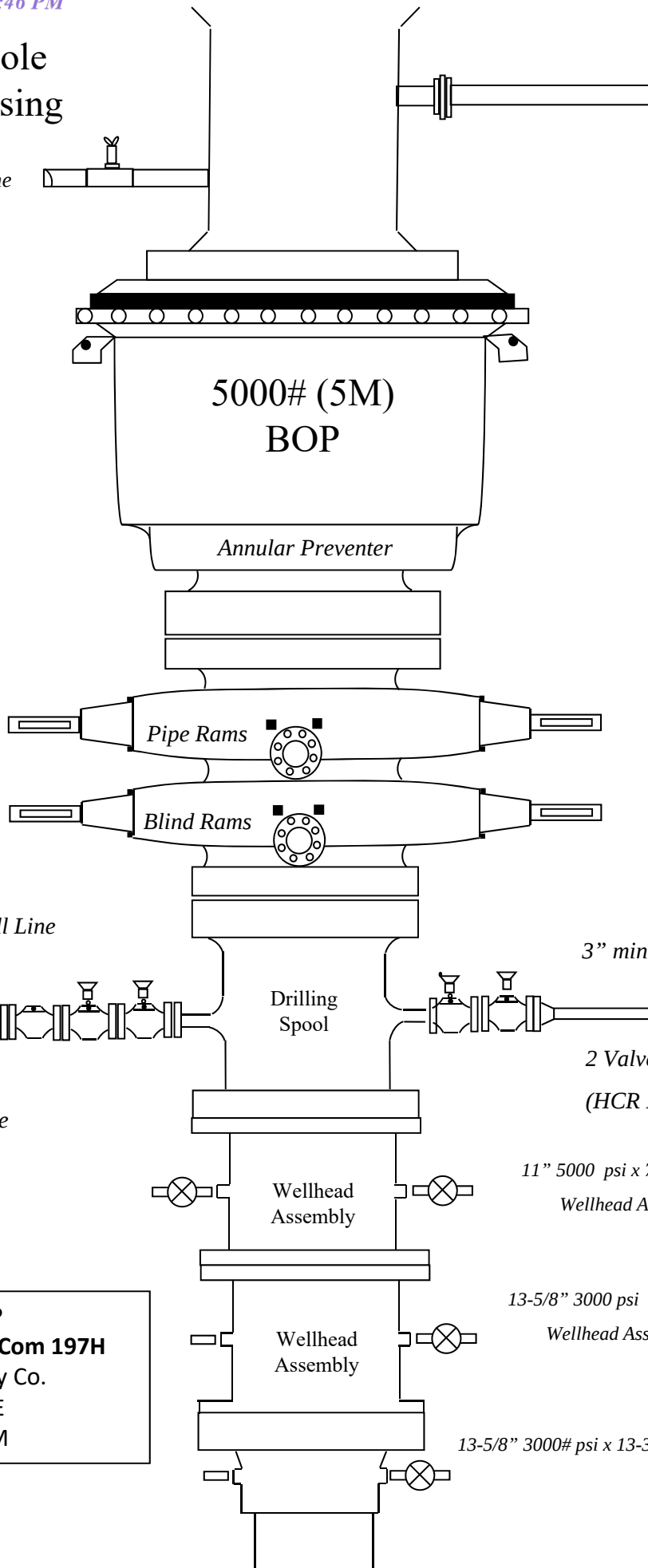
11" 5000 psi x 7-1/16" 10,000 psi
Wellhead Assembly

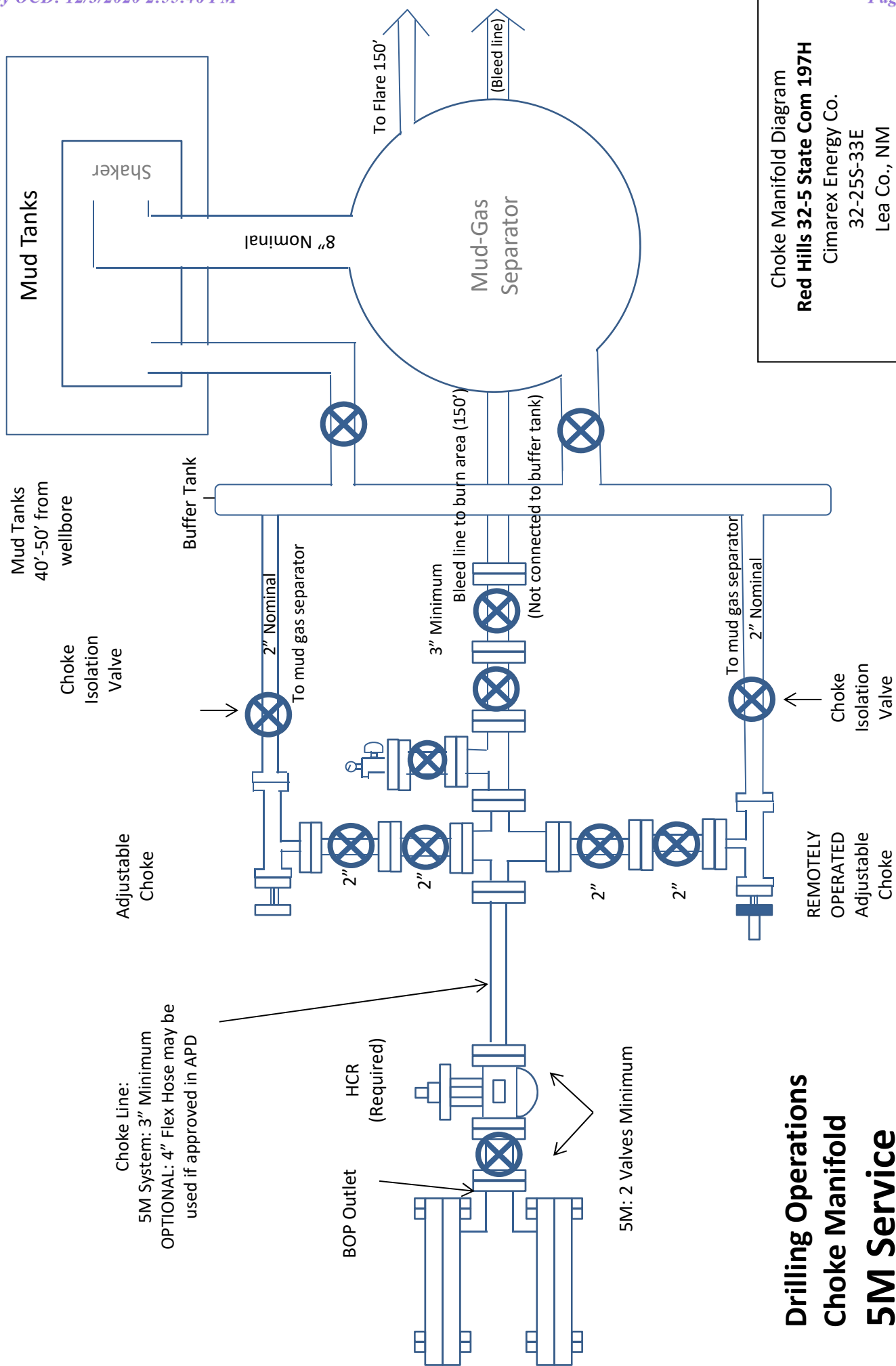
Wellhead
Assembly

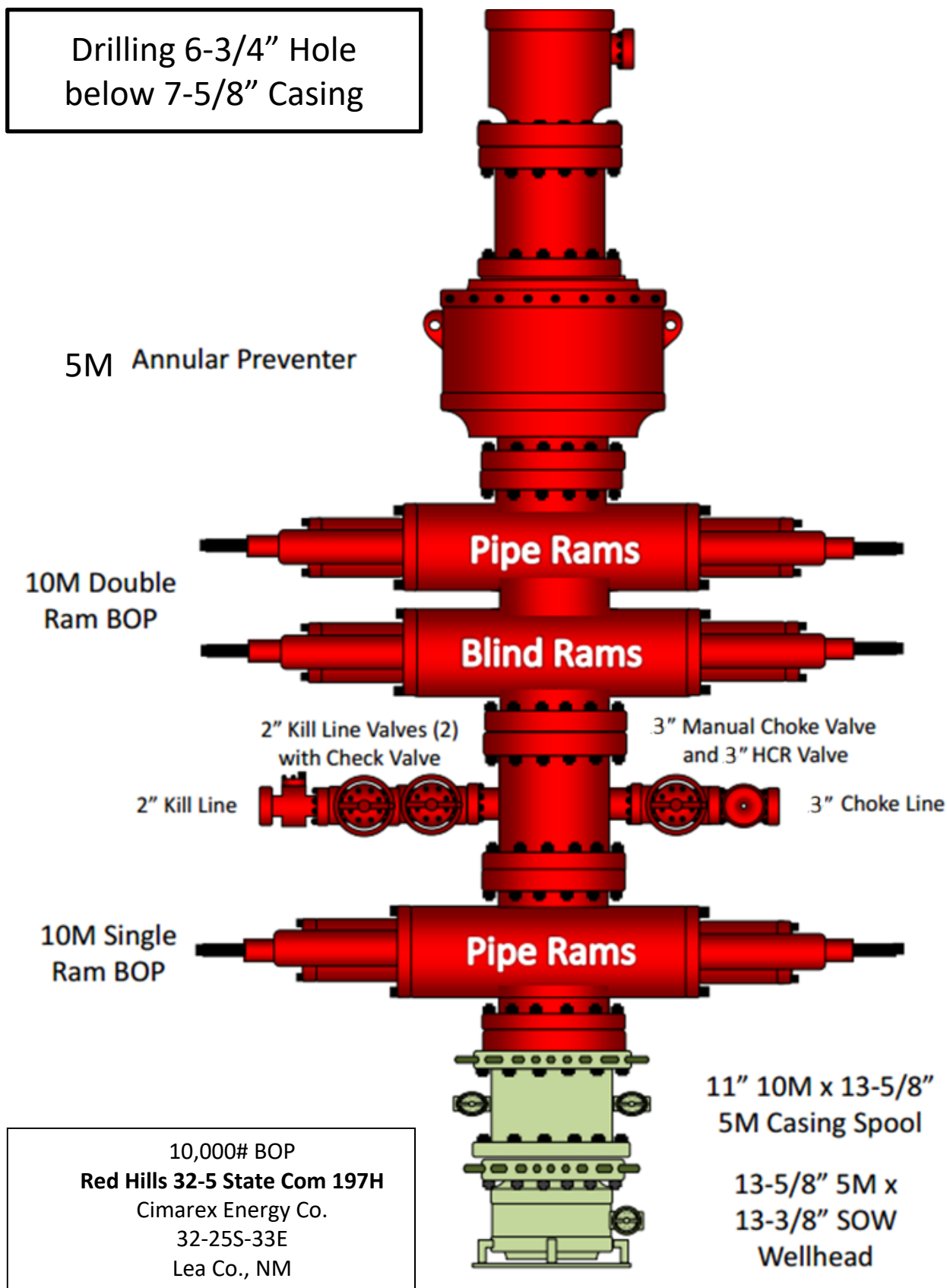
13-5/8" 3000 psi x 11" 5000 psi
Wellhead Assembly

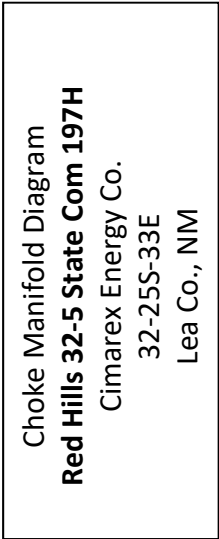
13-5/8" 3000# psi x 13-3/8" SOW Casing Head

5000# BOP
Red Hills 32-5 State Com 197H
Cimarex Energy Co.
32-25S-33E
Lea Co., NM









Red Hills 32-5 State Com #197H

Cimarex Energy Co.

UL: B, Sec. 32, 25S, 33E

Lea Co., NM

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Principal and operation of H₂S detectors, warning system and briefing areas.
 - D. Evacuation procedure, routes and first aid.
 - E. Proper use of safety equipment & life support systems
 - F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

H₂S Detection and Alarm Systems:

 - A. H₂S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H₂S detectors may be placed as deemed necessary.
 - B. An audio alarm system will be installed on the derrick floor and in the top doghouse.
- 3 Windsock and/or wind streamers:
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock on the rig floor and / or top doghouse should be high enough to be visible.
- 4 Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates danger (H₂S present in dangerous concentration). Only H₂S trained and certified personnel admitted to location.
- 5 Well control equipment:
 - A. See exhibit "E-1"
- 6 Communication:
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7 Drillstem Testing:

No DSTs or cores are planned at this time.
- 8 Drilling contractor supervisor will be required to be familiar with the effects H₂S has on tubular goods and other mechanical equipment.
- 9 If H₂S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H₂S scavengers if necessary.

H₂S Contingency Plan
Red Hills 32-5 State Com #197H
Cimarex Energy Co. UL: B, Sec. 32, 25S, 33E
Lea Co., NM

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must:

- « Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- « Evacuate any public places encompassed by the 100 ppm ROE.
- « Be equipped with H₂S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the 432-620-1975
- « Take precautions to avoid personal injury during this operation.
- « Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- « Have received training in the:
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

Characteristics of H₂S and SO₂

Please see attached International Chemical Safety Cards.

Contacting Authorities

Cimarex Energy Co. of Colorado's personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Cimarex Energy Co. of Colorado's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

H₂S Contingency Plan Emergency Contact
s Red Hills 32-5 State Com #197H
 Cimarex Energy Co.
 UL: B, Sec. 32, 25S, 33E
 Lea Co., NM

Company Office

Cimarex Energy Co. of Colorado	800-969-4789
Co. Office and After-Hours Menu	

Key Personnel

Name	Title	Office	Mobile
Larry Seigrist	Drilling Manager	432-620-1934	580-243-8485
Charlie Pritchard	Drilling Superintendent	432-620-1975	432-238-7084
Roy Shirley	Construction Superintendent		432-634-2136

Artesia

Ambulance	911
State Police	575-746-2703
City Police	575-746-2703
Sheriff's Office	575-746-9888
Fire Department	575-746-2701
Local Emergency Planning Committee	575-746-2122
New Mexico Oil Conservation Division	575-748-1283

Carlsbad

Ambulance	911
State Police	575-885-3137
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-887-3798
Local Emergency Planning Committee	575-887-6544
US Bureau of Land Management	575-887-6544

Santa Fe

New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
New Mexico Emergency Response Commission (Santa Fe) 24 Hrs	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635

National

National Emergency Response Center (Washington, D.C.)	800-424-8802
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Medical

Flight for Life - 4000 24th St.; Lubbock, TX	806-743-9911
Aerocare - R3, Box 49F; Lubbock, TX	806-747-8923
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433
SB Air Med Service - 2505 Clark Carr Loop S.E.; Albuquerque, NM	505-842-4949

Other

Boots & Coots IWC	800-256-9688	or	281-931-8884
Cudd Pressure Control	432-699-0139	or	432-563-3356
Halliburton	575-746-2757		
B.J. Services	575-746-3569		