

Well Name: DATA FEDERAL	Well Location: T17S / R30E / SEC 11 / NENE / 32.85296 / -103.9361159	County or Parish/State: EDDY / NM
Well Number: 3H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM002748, NMNM2748	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001546701	Well Status: Approved Application for Permit to Drill	Operator: MR NM OPERATING LLC

Notice of Intent

Sundry ID: 2679707

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 06/29/2022

Time Sundry Submitted: 01:44

Date proposed operation will begin: 07/05/2022

Procedure Description: Request to move the Surface Hole Location from 1209' FNL & 654' FEL, Section 11, T. 17S, R. 30E, NENE to 1218' FNL & 656' FEL, Section 11, T. 17S, R. 30E, NENE. Please see attached directional plan, anticollision report and plat for more detailed information.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Data_Fed_3H_Sundry_Attachment_20220629134234.pdf

Well Name: DATA FEDERAL	Well Location: T17S / R30E / SEC 11 / NENE / 32.85296 / -103.9361159	County or Parish/State: EDDY / NM
Well Number: 3H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM002748, NMNM2748	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001546701	Well Status: Approved Application for Permit to Drill	Operator: MR NM OPERATING LLC

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: BRIAN WOOD	Signed on: JUN 29, 2022 01:42 PM
Name: MR NM OPERATING LLC	
Title: President	
Street Address: 37 VERANO LOOP	
City: SANTA FE	State: NM
Phone: (505) 466-8120	
Email address: AFMSS@PERMITSWEST.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 02/01/2023
Signature: Chris Walls	

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

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46701		² Pool Code 96718		³ Pool Name Loco Hills; Glorieta-Yeso	
⁴ Property Code 332303		⁵ Property Name DATA FEDERAL			⁶ Well Number 3H
⁷ OGRID No. 330506		⁸ Operator Name MR NM OPERATING LLC.			⁹ Elevation 3743'

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	11	17-S	30-E	-	1218'	NORTH	656'	EAST	EDDY

¹¹Bottom 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
D	11	17-S	30-E	-	524'	NORTH	100'	WEST	EDDY

¹² Dedicated Acres 240.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

		¹⁷OPERATOR 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. <i>Cory Walk</i> 6/29/2022 Signature Date Cory Walk Printed Name cory@permitswest.com E-mail Address
LOWER MOST PERF./ BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1983 X=658791 Y=674930 LAT.: N 32.8548217 LONG.: W 103.9508463 NAD 1927 X=617612 Y=674866 LAT.: N 32.8547054 LONG.: W 103.9503385 UPPER MOST PERF. NEW MEXICO EAST NAD 1983 X=662550 Y=674949 LAT.: N 32.8548344 LONG.: W 103.9386041 NAD 1927 X=621372 Y=674885 LAT.: N 32.8547178 LONG.: W 103.9380964		SURFACE LOCATION NEW MEXICO EAST NAD 1983 X=663318 Y=674260 LAT.: N 32.8529339 LONG.: W 103.9361129 NAD 1927 X=622139 Y=674196 LAT.: N 32.8528172 LONG.: W 103.9356053
¹⁸SURVEYOR 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 to the best of my belief. 08/16/2018 Date of Survey <i>Ramon A. Dominguez</i> Signature and Seal of Professional Surveyor 24508 Certificate Number		



Cypress Natural Resources

Eddy County, NM (NAD 27)

SEC 11, T-17-S, R-30-E

DATA FEDERAL 3H

Original Hole

PRELIM #1

Anticollision Report

06 June, 2022





Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Reference	PRELIM #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 1,000.00usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	6/6/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	9,153.43	PRELIM #1 (Original Hole)	MWD+HRGM	OWSG MWD + HRGM

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SEC 11, T-17-S, R-30-E						
DATA FEDERAL 2H - Original Hole - PRELIM #1	591.00	591.00	30.21	24.57	5.360	CC
DATA FEDERAL 2H - Original Hole - PRELIM #1	600.00	600.00	30.22	24.56	5.335	ES
DATA FEDERAL 2H - Original Hole - PRELIM #1	9,153.43	9,064.57	787.20	575.30	3.715	SF
DATA FEDERAL 4H - Original Hole - PRELIM #1	503.01	503.01	60.06	54.90	11.636	CC
DATA FEDERAL 4H - Original Hole - PRELIM #1	591.00	590.24	60.29	54.80	10.965	ES
DATA FEDERAL 4H - Original Hole - PRELIM #1	800.00	793.70	77.57	69.27	9.337	SF
Gissler B105 - Original Hole - Actual						Out of range
Gissler B111 - Original Hole - Actual						Out of range
Gissler B49 - Original Hole - Actual						Out of range
Gissler B51 - Original Hole - Actual	5,811.96	4,778.25	711.79	654.48	12.421	CC, ES
Gissler B51 - Original Hole - Actual	6,000.00	4,787.97	736.14	671.66	11.416	SF
Gissler B57 - Original Hole - Actual						Out of range
Gissler B60 - Original Hole - Actual						Out of range
Gissler B73 - Original Hole - Actual	8,416.92	4,774.83	267.86	142.91	2.144	CC, ES, SF
Gissler B83 - Original Hole - Actual	8,475.44	4,790.21	157.04	33.70	1.273	Collision Avoidance Req., CC
Gissler B85 - Original Hole - Actual	6,517.18	4,666.16	758.23	689.45	11.024	CC
Gissler B85 - Original Hole - Actual	6,517.18	4,666.16	758.23	689.45	11.024	ES
Gissler B85 - Original Hole - Actual	6,600.00	4,665.86	762.74	693.05	10.944	SF
Gissler B86 - Original Hole - Actual	6,476.01	4,804.81	89.63	-1.09	0.988	No-Go Zone - Stop Drilling, CC
Gissler B87 - Original Hole - Actual	7,766.25	4,795.76	41.27	-91.15	0.312	No-Go Zone - Stop Drilling, CC
Gissler B96 - Original Hole - Actual						Out of range
Harvard Federal 13 - Original Hole - Plan	4,914.30	4,626.15	144.51	110.10	4.199	CC, ES, SF
Harvard Federal 14 - Original Hole - Actual	1,809.57	1,774.60	49.57	24.12	1.948	Collision Risk Procedures Req., CC
Harvard Federal 8 - Original Hole - Actual	1,731.64	1,701.91	56.30	40.36	3.532	CC, ES
Harvard Federal 8 - Original Hole - Actual	1,800.00	1,767.00	60.05	42.67	3.456	SF
Harvard Federal 9 - Original Hole - Actual	608.47	605.89	466.98	456.27	43.583	CC
Harvard Federal 9 - Original Hole - Actual	700.00	697.57	468.19	456.04	38.518	ES
Harvard Federal 9 - Original Hole - Actual	1,400.00	1,386.44	562.25	541.54	27.161	SF
Havard Federal 12 - Original Hole - Actual	3,407.94	3,326.20	60.73	32.14	2.124	CC, ES
Havard Federal 12 - Original Hole - Actual	3,500.00	3,417.48	63.09	32.72	2.078	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - DATA FEDERAL 2H - Original Hole - PRELIM #1													Offset Site Error: 0.00 usft	
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	178.04	-30.19	1.03	30.21					
100.00	100.00	100.00	100.00	0.86	0.86	178.04	-30.19	1.03	30.21	28.50	1.71	17.620		
200.00	200.00	200.00	200.00	1.46	1.46	178.04	-30.19	1.03	30.21	27.30	2.92	10.362		
300.00	300.00	300.00	300.00	1.90	1.90	178.04	-30.19	1.03	30.21	26.41	3.80	7.947		
400.00	400.00	400.00	400.00	2.26	2.26	178.04	-30.19	1.03	30.21	25.69	4.52	6.679		
500.00	500.00	500.00	500.00	2.57	2.57	178.04	-30.19	1.03	30.21	25.06	5.15	5.867		
591.00	591.00	591.00	591.00	2.81	2.83	178.04	-30.19	1.03	30.21	24.57	5.64	5.360 CC		
600.00	600.00	600.00	600.00	2.81	2.86	164.34	-30.19	1.03	30.22	24.56	5.66	5.335 ES		
700.00	699.97	699.97	699.97	3.28	3.11	165.32	-30.19	1.03	32.21	25.84	6.38	5.052		
800.00	799.81	799.81	799.81	4.20	3.35	167.44	-30.19	1.03	37.60	30.09	7.52	5.004		
900.00	899.40	899.40	899.40	4.98	3.58	169.83	-30.19	1.03	46.46	37.93	8.52	5.450		
1,000.00	998.61	998.61	998.61	5.69	3.79	171.95	-30.19	1.03	58.80	49.35	9.45	6.222		
1,100.00	1,097.33	1,097.33	1,097.33	6.35	3.99	173.63	-30.19	1.03	74.63	64.31	10.32	7.232		
1,200.00	1,195.42	1,195.42	1,195.42	6.97	4.19	174.90	-30.19	1.03	93.93	82.79	11.14	8.428		
1,300.00	1,292.78	1,292.78	1,292.78	7.58	4.37	175.86	-30.19	1.03	116.66	104.73	11.94	9.774		
1,400.00	1,389.29	1,389.29	1,389.29	8.16	4.55	176.59	-30.19	1.03	142.79	130.09	12.70	11.243		
1,490.93	1,476.20	1,476.20	1,476.20	8.63	4.70	177.10	-30.19	1.03	169.48	156.15	13.33	12.715		
1,500.00	1,484.83	1,484.83	1,484.83	8.66	4.72	177.15	-30.19	1.03	172.28	158.91	13.37	12.886		
1,600.00	1,579.93	1,579.93	1,579.93	8.95	4.88	177.58	-30.19	1.03	203.15	189.31	13.83	14.687		
1,700.00	1,675.04	1,675.04	1,675.04	9.28	5.04	177.90	-30.19	1.03	234.02	219.70	14.32	16.341		
1,800.00	1,770.15	1,769.83	1,769.83	9.63	5.14	178.12	-30.23	1.14	264.92	250.17	14.76	17.952		
1,900.00	1,865.25	1,863.79	1,863.77	9.99	5.35	177.93	-30.90	2.91	296.10	280.88	15.22	19.461		
2,000.00	1,960.36	1,957.42	1,957.30	10.36	5.68	177.36	-32.37	6.82	327.65	311.95	15.70	20.867		
2,100.00	2,055.47	2,050.60	2,050.26	10.74	6.05	176.52	-34.64	12.85	359.63	343.43	16.20	22.193		
2,200.00	2,150.57	2,143.24	2,142.50	11.14	6.43	175.47	-37.69	20.94	392.12	375.40	16.72	23.449		
2,300.00	2,245.68	2,235.91	2,234.53	11.54	6.79	174.28	-41.48	31.02	425.17	407.92	17.25	24.645		
2,400.00	2,340.79	2,329.86	2,327.78	11.95	7.03	173.18	-45.52	41.74	458.49	440.71	17.79	25.776		
2,500.00	2,435.89	2,423.80	2,421.02	12.37	7.24	172.23	-49.55	52.45	491.94	473.61	18.34	26.828		
2,600.00	2,531.00	2,517.74	2,514.26	12.80	7.46	171.39	-53.59	63.17	525.50	506.60	18.90	27.807		
2,700.00	2,626.10	2,611.68	2,607.50	13.23	7.70	170.66	-57.62	73.89	559.15	539.68	19.47	28.718		
2,800.00	2,721.21	2,705.63	2,700.74	13.67	7.96	170.01	-61.66	84.61	592.87	572.81	20.05	29.568		
2,894.45	2,811.04	2,794.35	2,788.81	14.09	8.21	169.46	-65.47	94.73	624.77	604.16	20.61	30.321		
2,900.00	2,816.32	2,799.57	2,793.99	14.11	8.22	169.44	-65.70	95.33	626.64	606.00	20.64	30.366		
3,000.00	2,912.00	2,894.11	2,887.82	14.59	8.50	169.01	-69.76	106.11	658.67	637.41	21.26	30.975		
3,100.00	3,008.64	2,989.65	2,982.65	15.18	8.79	168.56	-73.86	117.01	687.49	665.49	22.01	31.240		
3,200.00	3,106.12	3,086.07	3,078.35	15.76	9.09	168.09	-78.00	128.01	713.09	690.35	22.74	31.359		
3,300.00	3,204.31	3,183.26	3,174.81	16.33	9.40	167.59	-82.18	139.10	735.44	711.98	23.46	31.350		
3,400.00	3,303.11	3,284.07	3,274.91	16.87	9.69	167.05	-86.42	150.36	754.46	730.32	24.14	31.256		
3,500.00	3,402.38	3,389.99	3,380.33	17.39	10.10	166.61	-90.02	159.93	769.42	744.55	24.86	30.947		
3,600.00	3,502.01	3,496.89	3,486.97	17.88	10.55	166.31	-92.61	166.81	780.09	754.52	25.57	30.507		
3,700.00	3,601.88	3,604.45	3,594.44	18.32	10.97	166.13	-94.15	170.91	786.42	760.20	26.22	29.992		
3,794.38	3,696.24	3,706.26	3,696.24	18.59	11.15	179.78	-94.63	172.17	788.38	761.72	26.65	29.578		
3,798.28	3,700.14	3,710.48	3,700.45	18.59	11.15	179.78	-94.63	172.17	788.38	761.72	26.66	29.570		
3,800.00	3,701.86	3,711.89	3,701.86	18.59	11.15	179.78	-94.63	172.17	788.38	761.71	26.66	29.567		
3,894.38	3,796.24	3,806.26	3,796.24	18.63	11.22	179.78	-94.63	172.17	788.38	761.52	26.86	29.349		
3,900.00	3,801.86	3,811.88	3,801.86	18.63	11.22	-89.93	-94.63	172.16	788.38	761.51	26.86	29.347		
3,950.00	3,851.83	3,861.84	3,851.79	18.61	11.21	-89.93	-94.64	170.56	788.38	761.50	26.88	29.331		
4,000.00	3,901.65	3,911.80	3,901.56	18.59	11.22	-89.93	-94.66	166.35	788.38	761.49	26.88	29.327		
4,050.00	3,951.17	3,961.76	3,951.05	18.57	11.23	-89.93	-94.69	159.54	788.38	761.50	26.88	29.330		
4,100.00	4,000.28	4,011.72	4,000.12	18.55	11.23	-89.93	-94.74	150.16	788.37	761.50	26.87	29.338		
4,150.00	4,048.82	4,061.68	4,048.62	18.52	11.23	-89.93	-94.80	138.22	788.37	761.51	26.86	29.348		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



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Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - DATA FEDERAL 2H - Original Hole - PRELIM #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
4,200.00	4,096.67	4,111.65	4,096.44	18.50	11.23	-89.93	-94.87	123.76	788.37	761.51	26.86	29.355		
4,250.00	4,143.70	4,161.61	4,143.44	18.49	11.22	-89.94	-94.95	106.82	788.36	761.50	26.86	29.353		
4,300.00	4,189.77	4,211.57	4,189.49	18.48	11.22	-89.94	-95.04	87.45	788.36	761.48	26.87	29.335		
4,350.00	4,234.77	4,261.54	4,234.46	18.48	11.22	-89.94	-95.15	65.69	788.35	761.44	26.91	29.292		
4,400.00	4,278.56	4,311.50	4,278.23	18.49	11.22	-89.94	-95.26	41.61	788.35	761.36	26.98	29.216		
4,450.00	4,321.04	4,361.47	4,320.69	18.51	11.23	-89.94	-95.39	15.27	788.34	761.25	27.09	29.095		
4,500.00	4,362.07	4,411.43	4,361.71	18.56	11.24	-89.94	-95.53	-13.25	788.33	761.07	27.26	28.920		
4,550.00	4,401.55	4,461.40	4,401.18	18.63	11.25	-89.95	-95.67	-43.88	788.33	760.84	27.49	28.678		
4,600.00	4,439.38	4,511.37	4,439.00	18.72	11.27	-89.95	-95.83	-76.53	788.32	760.52	27.79	28.363		
4,650.00	4,475.44	4,561.34	4,475.06	18.84	11.30	-89.95	-96.00	-111.12	788.31	760.12	28.19	27.967		
4,700.00	4,509.64	4,611.32	4,509.26	19.01	11.33	-89.95	-96.17	-147.54	788.30	759.62	28.68	27.489		
4,750.00	4,541.88	4,661.29	4,541.51	19.21	11.39	-89.96	-96.36	-185.71	788.29	759.02	29.27	26.929		
4,800.00	4,572.08	4,711.27	4,571.72	19.45	11.49	-89.96	-96.55	-225.51	788.28	758.30	29.98	26.292		
4,850.00	4,600.16	4,761.24	4,599.81	19.75	11.67	-89.96	-96.75	-266.84	788.27	757.47	30.81	25.588		
4,894.38	4,623.23	4,805.60	4,622.90	20.05	11.98	-89.97	-96.93	-304.71	788.26	756.63	31.63	24.922		
4,900.00	4,626.04	4,811.23	4,625.71	20.09	12.03	-89.97	-96.95	-309.58	788.26	756.52	31.74	24.831		
5,000.00	4,676.04	4,911.23	4,675.71	20.91	13.18	-89.97	-97.37	-396.18	788.24	754.33	33.91	23.248		
5,094.38	4,723.23	5,005.60	4,722.90	21.80	14.52	-89.97	-97.76	-477.92	788.22	752.04	36.18	21.786		
5,100.00	4,726.02	5,011.22	4,725.69	21.85	14.61	-89.97	-97.79	-482.79	788.22	751.90	36.32	21.700		
5,150.00	4,748.66	5,061.19	4,748.38	22.38	15.39	-89.97	-98.00	-527.30	788.21	750.56	37.65	20.937		
5,200.00	4,767.34	5,111.17	4,767.10	22.98	16.23	-89.98	-98.23	-573.62	788.20	749.10	39.09	20.163		
5,250.00	4,781.90	5,161.15	4,781.72	23.63	17.14	-89.98	-98.45	-621.40	788.18	747.54	40.65	19.390		
5,300.00	4,792.24	5,211.14	4,792.12	24.33	18.09	-89.99	-98.69	-670.28	788.17	745.87	42.30	18.633		
5,350.00	4,798.28	5,261.14	4,798.22	25.08	19.07	-89.99	-98.93	-719.88	788.16	744.14	44.02	17.903		
5,394.38	4,800.00	5,305.51	4,799.99	25.77	19.96	-90.00	-99.14	-764.21	788.15	742.55	45.60	17.286		
5,400.00	4,800.00	5,311.14	4,800.00	25.86	20.07	-90.00	-99.17	-769.83	788.15	742.35	45.80	17.209		
5,500.00	4,800.00	5,411.14	4,800.00	27.49	22.13	-90.00	-99.65	-869.83	788.12	738.64	49.48	15.927		
5,600.00	4,800.00	5,511.14	4,800.00	29.23	24.24	-90.00	-100.13	-969.83	788.10	734.78	53.32	14.781		
5,700.00	4,800.00	5,611.14	4,800.00	31.04	26.39	-90.00	-100.61	-1,069.83	788.07	730.80	57.27	13.760		
5,800.00	4,800.00	5,711.14	4,800.00	32.91	28.56	-90.00	-101.09	-1,169.83	788.05	726.73	61.32	12.851		
5,900.00	4,800.00	5,811.14	4,800.00	34.84	30.76	-90.00	-101.57	-1,269.83	788.02	722.58	65.44	12.041		
6,000.00	4,800.00	5,911.14	4,800.00	36.81	32.98	-90.00	-102.05	-1,369.83	787.99	718.36	69.63	11.316		
6,100.00	4,800.00	6,011.14	4,800.00	38.82	35.21	-90.00	-102.53	-1,469.83	787.97	714.09	73.88	10.666		
6,200.00	4,800.00	6,111.14	4,800.00	40.86	37.45	-90.00	-103.01	-1,569.82	787.94	709.78	78.17	10.080		
6,300.00	4,800.00	6,211.14	4,800.00	42.93	39.71	-90.00	-103.49	-1,669.82	787.92	705.42	82.50	9.551		
6,400.00	4,800.00	6,311.14	4,800.00	45.03	41.97	-90.00	-103.97	-1,769.82	787.89	701.04	86.86	9.071		
6,500.00	4,800.00	6,411.14	4,800.00	47.15	44.23	-90.00	-104.45	-1,869.82	787.87	696.62	91.25	8.635		
6,600.00	4,800.00	6,511.14	4,800.00	49.29	46.51	-90.00	-104.93	-1,969.82	787.84	692.18	95.66	8.236		
6,700.00	4,800.00	6,611.14	4,800.00	51.44	48.79	-90.00	-105.41	-2,069.82	787.82	687.72	100.10	7.871		
6,800.00	4,800.00	6,711.14	4,800.00	53.61	51.07	-90.00	-105.89	-2,169.82	787.79	683.24	104.55	7.535		
6,900.00	4,800.00	6,811.14	4,800.00	55.79	53.36	-90.00	-106.37	-2,269.82	787.77	678.74	109.02	7.226		
7,000.00	4,800.00	6,911.14	4,800.00	57.98	55.65	-90.00	-106.85	-2,369.82	787.74	674.23	113.51	6.940		
7,100.00	4,800.00	7,011.14	4,800.00	60.18	57.95	-90.00	-107.33	-2,469.81	787.72	669.71	118.01	6.675		
7,200.00	4,800.00	7,111.14	4,800.00	62.39	60.24	-90.00	-107.81	-2,569.81	787.69	665.17	122.52	6.429		
7,300.00	4,800.00	7,211.14	4,800.00	64.61	62.54	-90.00	-108.29	-2,669.81	787.67	660.63	127.04	6.200		
7,400.00	4,800.00	7,311.14	4,800.00	66.84	64.84	-90.00	-108.77	-2,769.81	787.64	656.07	131.57	5.986		
7,500.00	4,800.00	7,411.14	4,800.00	69.07	67.15	-90.00	-109.25	-2,869.81	787.62	651.51	136.11	5.787		
7,600.00	4,800.00	7,511.14	4,800.00	71.31	69.45	-90.00	-109.73	-2,969.81	787.59	646.93	140.66	5.599		
7,700.00	4,800.00	7,611.14	4,800.00	73.56	71.76	-90.00	-110.21	-3,069.81	787.57	642.35	145.21	5.424		
7,800.00	4,800.00	7,711.14	4,800.00	75.81	74.06	-90.00	-110.69	-3,169.81	787.54	637.77	149.77	5.258		
7,900.00	4,800.00	7,811.14	4,800.00	78.06	76.37	-90.00	-111.17	-3,269.80	787.51	633.18	154.34	5.103		
8,000.00	4,800.00	7,911.14	4,800.00	80.32	78.68	-90.00	-111.65	-3,369.80	787.49	628.58	158.91	4.956		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - DATA FEDERAL 2H - Original Hole - PRELIM #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
8,100.00	4,800.00	8,011.14	4,800.00	82.58	80.99	-90.00	-112.13	-3,469.80	787.46	623.98	163.48	4.817		
8,200.00	4,800.00	8,111.14	4,800.00	84.85	83.31	-90.00	-112.61	-3,569.80	787.44	619.38	168.06	4.685		
8,300.00	4,800.00	8,211.14	4,800.00	87.12	85.62	-90.00	-113.09	-3,669.80	787.41	614.77	172.65	4.561		
8,400.00	4,800.00	8,311.14	4,800.00	89.39	87.93	-90.00	-113.57	-3,769.80	787.39	610.15	177.24	4.443		
8,500.00	4,800.00	8,411.14	4,800.00	91.66	90.25	-90.00	-114.05	-3,869.80	787.36	605.54	181.83	4.330		
8,600.00	4,800.00	8,511.14	4,800.00	93.94	92.56	-90.00	-114.53	-3,969.80	787.34	600.92	186.42	4.223		
8,700.00	4,800.00	8,611.14	4,800.00	96.22	94.88	-90.00	-115.01	-4,069.80	787.31	596.29	191.02	4.122		
8,800.00	4,800.00	8,711.14	4,800.00	98.50	97.20	-90.00	-115.49	-4,169.79	787.29	591.67	195.62	4.025		
8,900.00	4,800.00	8,811.14	4,800.00	100.79	99.51	-90.00	-115.97	-4,269.79	787.26	587.04	200.22	3.932		
9,000.00	4,800.00	8,911.14	4,800.00	103.07	101.83	-90.00	-116.45	-4,369.79	787.24	582.41	204.83	3.843		
9,100.00	4,800.00	9,011.14	4,800.00	105.36	104.15	-90.00	-116.93	-4,469.79	787.21	577.77	209.44	3.759		
9,153.43	4,800.00	9,064.57	4,800.00	106.59	105.39	-90.00	-117.19	-4,523.22	787.20	575.30	211.90	3.715 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - DATA FEDERAL 4H - Original Hole - PRELIM #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HRGM													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	178.03	-60.02	2.07	60.06				
100.00	100.00	100.00	100.00	0.86	0.86	178.03	-60.02	2.07	60.06	58.34	1.71	35.027	
200.00	200.00	200.00	200.00	1.46	1.46	178.03	-60.02	2.07	60.06	57.14	2.92	20.600	
300.00	300.00	300.00	300.00	1.90	1.90	178.03	-60.02	2.07	60.06	56.26	3.80	15.798	
400.00	400.00	400.00	400.00	2.26	2.26	178.03	-60.02	2.07	60.06	55.53	4.52	13.278	
500.00	500.00	500.00	500.00	2.57	2.57	178.03	-60.02	2.07	60.06	54.91	5.15	11.663	
503.01	503.01	503.01	503.01	2.58	2.58	178.03	-60.02	2.07	60.06	54.90	5.16	11.636 CC	
591.00	591.00	590.24	590.24	2.81	2.69	177.99	-60.25	2.12	60.29	54.80	5.50	10.965 ES	
600.00	600.00	599.05	599.05	2.81	2.70	164.27	-60.38	2.14	60.44	54.92	5.51	10.965	
700.00	699.97	696.80	696.74	3.28	3.35	164.24	-63.53	2.80	65.66	59.07	6.60	9.954	
800.00	799.81	793.70	793.42	4.20	4.21	164.44	-69.87	4.13	77.57	69.27	8.31	9.337 SF	
900.00	899.40	889.13	888.36	4.98	4.96	164.73	-79.24	6.10	96.08	86.31	9.76	9.840	
1,000.00	998.61	982.48	980.88	5.69	5.61	165.01	-91.40	8.64	121.03	109.98	11.05	10.953	
1,100.00	1,097.33	1,073.23	1,070.38	6.35	6.22	165.22	-106.04	11.71	152.26	140.04	12.21	12.465	
1,200.00	1,195.42	1,160.89	1,156.35	6.97	6.77	165.35	-122.81	15.23	189.53	176.25	13.28	14.270	
1,300.00	1,292.78	1,245.07	1,238.37	7.58	7.28	165.42	-141.32	19.11	232.59	218.32	14.27	16.304	
1,400.00	1,389.29	1,325.43	1,316.13	8.16	7.76	165.42	-161.20	23.27	281.15	265.97	15.18	18.526	
1,490.93	1,476.20	1,400.00	1,387.74	8.63	8.20	165.39	-181.54	27.54	329.87	313.88	16.00	20.619	
1,500.00	1,484.83	1,400.00	1,387.74	8.66	8.20	165.39	-181.54	27.54	334.91	318.98	15.93	21.025	
1,600.00	1,579.93	1,474.81	1,459.01	8.95	8.62	165.57	-203.77	32.20	391.94	375.40	16.54	23.692	
1,700.00	1,675.04	1,545.40	1,525.70	9.28	9.02	165.63	-226.41	36.94	450.98	433.86	17.12	26.338	
1,800.00	1,770.15	1,613.53	1,589.50	9.63	9.40	165.63	-249.79	41.84	511.91	494.22	17.69	28.937	
1,900.00	1,865.25	1,679.25	1,650.50	9.99	9.78	165.59	-273.74	46.86	574.63	556.37	18.25	31.479	
2,000.00	1,960.36	1,751.18	1,716.75	10.36	10.11	165.52	-301.15	52.61	638.72	619.86	18.86	33.863	
2,100.00	2,055.47	1,827.83	1,787.31	10.74	10.40	165.45	-330.46	58.75	702.94	683.45	19.49	36.065	
2,200.00	2,150.57	1,904.48	1,857.87	11.14	10.67	165.40	-359.77	64.89	767.16	747.06	20.10	38.174	
2,300.00	2,245.68	1,981.14	1,928.43	11.54	10.94	165.35	-389.08	71.04	831.38	810.65	20.72	40.119	
2,400.00	2,340.79	2,057.79	1,998.99	11.95	11.23	165.31	-418.40	77.18	895.59	874.23	21.36	41.920	
2,500.00	2,435.89	2,134.45	2,069.55	12.37	11.52	165.28	-447.71	83.32	959.81	937.79	22.02	43.588	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Gissler B51 - Original Hole - Actual													Offset Site Error:	0.00 usft
Survey Program: 440-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,094.38	4,723.23	4,656.22	4,621.68	21.80	36.06	-58.29	-13.06	-1,175.82	993.12	955.44	37.67	26.360		
5,100.00	4,726.02	4,659.34	4,624.70	21.85	36.11	-58.77	-13.31	-1,175.98	989.97	952.27	37.70	26.260		
5,150.00	4,748.66	4,694.71	4,659.16	22.38	36.64	-63.76	-13.66	-1,176.02	958.47	920.44	38.03	25.205		
5,200.00	4,767.34	4,695.49	4,659.94	22.98	36.65	-67.03	-13.73	-1,176.06	929.60	891.33	38.27	24.292		
5,250.00	4,781.90	4,726.70	4,689.79	23.63	37.11	-72.43	-18.73	-1,179.41	903.72	864.87	38.84	23.265		
5,300.00	4,792.24	4,754.48	4,716.92	24.33	37.49	-77.78	-18.37	-1,179.08	872.38	832.80	39.57	22.044		
5,350.00	4,798.28	4,754.82	4,717.25	25.08	37.50	-81.03	-18.39	-1,179.09	844.94	804.58	40.36	20.937		
5,394.38	4,800.00	4,754.98	4,717.41	25.77	37.50	-83.72	-18.41	-1,179.10	821.86	780.61	41.24	19.927		
5,400.00	4,800.00	4,754.99	4,717.42	25.86	37.50	-83.72	-18.41	-1,179.10	819.03	777.66	41.37	19.798		
5,500.00	4,800.00	4,755.22	4,717.66	27.49	37.50	-83.74	-18.43	-1,179.11	773.95	729.85	44.11	17.547		
5,600.00	4,800.00	4,755.49	4,717.92	29.23	37.51	-83.76	-18.45	-1,179.13	739.72	691.98	47.74	15.493		
5,700.00	4,800.00	4,772.46	4,734.02	31.04	37.74	-85.09	-22.29	-1,181.71	720.52	668.30	52.22	13.798		
5,800.00	4,800.00	4,777.63	4,739.01	32.91	37.80	-85.49	-22.69	-1,181.96	711.89	655.12	56.77	12.540		
5,811.96	4,800.00	4,778.25	4,739.61	33.14	37.81	-85.54	-22.73	-1,181.99	711.79	654.48	57.30	12.421 CC, ES		
5,900.00	4,800.00	4,782.80	4,744.01	34.84	37.87	-85.89	-23.08	-1,182.21	717.20	656.21	60.99	11.760		
6,000.00	4,800.00	4,787.97	4,749.01	36.81	37.94	-86.30	-23.47	-1,182.46	736.14	671.66	64.48	11.416 SF		
6,100.00	4,800.00	4,793.14	4,754.01	38.82	38.00	-86.70	-23.86	-1,182.71	767.72	700.64	67.08	11.444		
6,200.00	4,800.00	4,798.31	4,759.01	40.86	38.07	-87.10	-24.25	-1,182.96	810.45	741.65	68.81	11.779		
6,300.00	4,800.00	4,813.84	4,774.27	42.93	38.26	-88.33	-22.88	-1,181.96	861.64	791.66	69.98	12.313		
6,400.00	4,800.00	4,814.22	4,774.65	45.03	38.27	-88.36	-22.90	-1,181.97	921.97	851.69	70.28	13.118		
6,500.00	4,800.00	4,814.79	4,775.21	47.15	38.27	-88.40	-22.94	-1,182.00	988.76	918.56	70.20	14.085		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Gissler B73 - Original Hole - Actual													Offset Site Error:	0.00 usft
Survey Program: 500-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
7,500.00	4,800.00	4,890.34	4,869.66	69.07	37.45	-104.86	392.34	-3,774.77	948.42	883.04	65.37	14.507		
7,600.00	4,800.00	4,878.16	4,857.72	71.31	37.45	-102.64	394.11	-3,776.32	853.71	785.88	67.83	12.587		
7,700.00	4,800.00	4,865.93	4,845.72	73.56	37.44	-100.34	395.86	-3,777.88	760.15	689.25	70.90	10.721		
7,800.00	4,800.00	4,853.70	4,833.71	75.81	37.43	-97.98	397.60	-3,779.45	668.23	593.40	74.83	8.930		
7,900.00	4,800.00	4,842.00	4,822.22	78.06	37.43	-95.66	399.24	-3,780.94	578.73	498.78	79.95	7.238		
8,000.00	4,800.00	4,829.12	4,809.58	80.32	37.42	-93.06	401.04	-3,782.59	492.96	406.29	86.67	5.688		
8,100.00	4,800.00	4,816.60	4,797.29	82.58	37.42	-90.48	402.78	-3,784.21	413.24	317.75	95.50	4.327		
8,200.00	4,800.00	4,803.79	4,784.71	84.85	37.41	-87.81	404.57	-3,785.88	343.81	237.23	106.58	3.226		
8,300.00	4,800.00	4,790.59	4,771.76	87.12	37.41	-85.03	406.43	-3,787.62	292.07	173.85	118.22	2.471		
8,400.00	4,800.00	4,777.08	4,758.51	89.39	37.40	-82.17	408.36	-3,789.42	268.42	143.59	124.82	2.150		
8,416.92	4,800.00	4,774.83	4,756.30	89.77	37.40	-81.69	408.68	-3,789.72	267.86	142.91	124.94	2.144	CC, ES, SF	
8,500.00	4,800.00	4,763.79	4,745.47	91.66	37.39	-79.35	410.25	-3,791.20	280.06	159.09	120.97	2.315		
8,600.00	4,800.00	4,750.43	4,732.38	93.94	37.39	-76.54	412.15	-3,793.00	323.21	213.29	109.92	2.940		
8,700.00	4,800.00	4,737.25	4,719.45	96.22	37.38	-73.78	414.03	-3,794.78	387.48	289.22	98.26	3.943		
8,800.00	4,800.00	4,724.31	4,706.76	98.50	37.38	-71.11	415.87	-3,796.51	464.18	375.45	88.73	5.232		
8,900.00	4,800.00	4,711.43	4,694.13	100.79	37.37	-68.49	417.69	-3,798.21	548.13	466.66	81.47	6.728		
9,000.00	4,800.00	4,698.29	4,681.23	103.07	37.37	-65.88	419.54	-3,799.96	636.47	560.45	76.01	8.373		
9,100.00	4,800.00	4,685.02	4,668.21	105.36	37.36	-63.32	421.39	-3,801.74	727.58	655.72	71.86	10.124		
9,153.43	4,800.00	4,677.63	4,660.96	106.59	37.36	-61.92	422.41	-3,802.73	777.07	707.02	70.05	11.093		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Gissler B83 - Original Hole - Actual													Offset Site Error:	0.00 usft
Survey Program: 500-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
7,500.00	4,800.00	4,829.31	4,813.79	69.07	34.01	-96.66	512.52	-3,846.47	987.09	932.62	54.47	18.120		
7,600.00	4,800.00	4,825.63	4,810.15	71.31	34.00	-95.39	513.02	-3,846.63	888.59	832.93	55.66	15.965		
7,700.00	4,800.00	4,821.87	4,806.43	73.56	34.00	-94.09	513.53	-3,846.79	790.45	733.26	57.19	13.822		
7,800.00	4,800.00	4,818.05	4,802.64	75.81	34.00	-92.75	514.04	-3,846.95	692.81	633.60	59.21	11.701		
7,900.00	4,800.00	4,814.15	4,798.78	78.06	33.99	-91.36	514.56	-3,847.12	595.93	533.96	61.97	9.616		
8,000.00	4,800.00	4,810.18	4,794.85	80.32	33.99	-89.95	515.08	-3,847.30	500.25	434.35	65.89	7.592		
8,100.00	4,800.00	4,806.13	4,790.84	82.58	33.98	-88.49	515.61	-3,847.48	406.60	334.90	71.70	5.671		
8,200.00	4,800.00	4,802.01	4,786.76	84.85	33.98	-87.00	516.15	-3,847.67	316.81	236.05	80.75	3.923		
8,300.00	4,800.00	4,797.80	4,782.59	87.12	33.97	-85.47	516.69	-3,847.86	235.31	140.06	95.25	2.471		
8,400.00	4,800.00	4,793.51	4,778.34	89.39	33.97	-83.91	517.24	-3,848.05	174.18	58.98	115.20	1.512	Collision Risk Procedures Req.	
8,475.44	4,800.00	4,790.21	4,775.08	91.10	33.96	-82.71	517.66	-3,848.21	157.04	33.70	123.34	1.273	Collision Avoidance Req., CC, ES, SF	
8,500.00	4,800.00	4,789.13	4,774.00	91.66	33.96	-82.32	517.80	-3,848.26	158.95	36.81	122.14	1.301	Collision Avoidance Req.	
8,600.00	4,800.00	4,784.67	4,769.58	93.94	33.96	-80.69	518.36	-3,848.46	200.38	96.48	103.90	1.929	Collision Risk Procedures Req.	
8,700.00	4,800.00	4,780.11	4,765.06	96.22	33.95	-79.03	518.92	-3,848.68	273.85	188.22	85.64	3.198		
8,800.00	4,800.00	4,775.46	4,760.45	98.50	33.95	-77.35	519.50	-3,848.90	360.27	286.24	74.03	4.867		
8,900.00	4,800.00	4,770.71	4,755.75	100.79	33.94	-75.64	520.08	-3,849.13	452.28	385.45	66.83	6.768		
9,000.00	4,800.00	4,765.87	4,750.94	103.07	33.94	-73.91	520.66	-3,849.37	547.05	484.89	62.16	8.800		
9,100.00	4,800.00	4,760.92	4,746.03	105.36	33.93	-72.16	521.26	-3,849.61	643.37	584.36	59.01	10.903		
9,153.43	4,800.00	4,758.23	4,743.37	106.59	33.93	-71.22	521.57	-3,849.74	695.25	637.51	57.74	12.042		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Gissler B85 - Original Hole - Actual													Offset Site Error:	0.00 usft
Survey Program: 554-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,900.00	4,800.00	4,668.34	4,648.64	34.84	27.04	-78.87	-60.66	-1,886.99	977.66	922.90	54.75	17.856		
6,000.00	4,800.00	4,667.51	4,647.83	36.81	27.04	-78.81	-60.50	-1,887.00	917.82	860.69	57.12	16.067		
6,100.00	4,800.00	4,666.75	4,647.09	38.82	27.04	-78.75	-60.34	-1,887.00	865.42	805.78	59.64	14.512		
6,200.00	4,800.00	4,666.05	4,646.40	40.86	27.04	-78.70	-60.21	-1,887.01	821.90	759.72	62.19	13.217		
6,300.00	4,800.00	4,666.81	4,647.15	42.93	27.04	-78.76	-60.35	-1,887.02	788.72	724.07	64.65	12.199		
6,400.00	4,800.00	4,666.53	4,646.87	45.03	27.04	-78.73	-60.29	-1,887.02	767.23	700.41	66.82	11.482		
6,437.24	4,800.00	4,666.42	4,646.76	45.82	27.04	-78.73	-60.27	-1,887.02	762.43	694.91	67.52	11.292		
6,500.00	4,800.00	4,666.21	4,646.56	47.15	27.04	-78.71	-60.23	-1,887.02	758.43	689.89	68.54	11.066		
6,517.18	4,800.00	4,666.16	4,646.51	47.52	27.04	-78.71	-60.22	-1,887.02	758.23	689.45	68.78	11.024 CC		
6,517.18	4,800.00	4,666.16	4,646.51	47.52	27.04	-78.71	-60.22	-1,887.02	758.23	689.45	68.78	11.024 ES		
6,600.00	4,800.00	4,665.86	4,646.21	49.29	27.03	-78.68	-60.16	-1,887.02	762.74	693.05	69.70	10.944 SF		
6,700.00	4,800.00	4,665.45	4,645.81	51.44	27.03	-78.65	-60.08	-1,887.02	779.96	709.70	70.26	11.100		
6,800.00	4,800.00	4,664.97	4,645.35	53.61	27.03	-78.62	-59.99	-1,887.03	809.26	738.98	70.29	11.514		
6,900.00	4,800.00	4,664.42	4,644.81	55.79	27.03	-78.58	-59.88	-1,887.03	849.39	779.53	69.87	12.157		
7,000.00	4,800.00	4,663.77	4,644.17	57.98	27.03	-78.53	-59.75	-1,887.03	898.91	829.78	69.13	13.004		
7,100.00	4,800.00	4,662.99	4,643.40	60.18	27.03	-78.47	-59.60	-1,887.04	956.35	888.16	68.18	14.026		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Gissler B86 - Original Hole - Actual													Offset Site Error:	0.00 usft
Survey Program: 496-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,500.00	4,800.00	4,804.41	4,801.91	27.49	44.91	94.42	772.90	-1,850.07	980.12	922.40	57.72	16.981		
5,600.00	4,800.00	4,804.46	4,801.95	29.23	44.91	94.45	772.89	-1,850.07	880.58	822.90	57.69	15.265		
5,700.00	4,800.00	4,804.50	4,801.99	31.04	44.91	94.47	772.89	-1,850.07	781.17	723.50	57.67	13.546		
5,800.00	4,800.00	4,804.54	4,802.03	32.91	44.91	94.50	772.89	-1,850.07	681.93	624.25	57.67	11.824		
5,900.00	4,800.00	4,804.58	4,802.07	34.84	44.91	94.53	772.88	-1,850.07	582.94	525.21	57.74	10.096		
6,000.00	4,800.00	4,804.62	4,802.11	36.81	44.91	94.55	772.88	-1,850.07	484.38	426.44	57.94	8.360		
6,100.00	4,800.00	4,804.66	4,802.15	38.82	44.92	94.58	772.88	-1,850.07	386.55	328.07	58.48	6.610		
6,200.00	4,800.00	4,804.70	4,802.19	40.86	44.92	94.60	772.87	-1,850.07	290.20	230.26	59.94	4.841		
6,300.00	4,800.00	4,804.74	4,802.23	42.93	44.92	94.63	772.87	-1,850.07	197.52	133.32	64.20	3.077		
6,400.00	4,800.00	4,804.78	4,802.27	45.03	44.92	94.66	772.87	-1,850.07	117.52	40.47	77.06		1.525 Collision Risk Procedures Req.	
6,476.01	4,800.00	4,804.81	4,802.30	46.64	44.92	94.68	772.86	-1,850.07	89.63	-1.09	90.72		0.988 No-Go Zone - Stop Drilling, CC, ES, SF	
6,500.00	4,800.00	4,804.82	4,802.31	47.15	44.92	94.68	772.86	-1,850.07	92.79	2.17	90.62		1.024 Collision Avoidance Req.	
6,600.00	4,800.00	4,804.87	4,802.36	49.29	44.92	94.71	772.86	-1,850.07	152.99	75.71	77.29		1.980 Collision Risk Procedures Req.	
6,700.00	4,800.00	4,804.91	4,802.40	51.44	44.92	94.74	772.86	-1,850.07	241.26	171.80	69.46	3.474		
6,800.00	4,800.00	4,804.95	4,802.44	53.61	44.92	94.76	772.85	-1,850.07	336.16	270.27	65.89	5.102		
6,900.00	4,800.00	4,804.99	4,802.48	55.79	44.92	94.79	772.85	-1,850.07	433.36	369.35	64.01	6.770		
7,000.00	4,800.00	4,805.03	4,802.52	57.98	44.92	94.81	772.85	-1,850.07	531.60	468.70	62.90	8.452		
7,100.00	4,800.00	4,805.07	4,802.56	60.18	44.92	94.84	772.84	-1,850.07	630.39	568.21	62.18	10.138		
7,200.00	4,800.00	4,805.11	4,802.60	62.39	44.92	94.87	772.84	-1,850.07	729.52	667.83	61.69	11.826		
7,300.00	4,800.00	4,805.15	4,802.64	64.61	44.92	94.89	772.84	-1,850.07	828.85	767.51	61.34	13.512		
7,400.00	4,800.00	4,805.19	4,802.68	66.84	44.92	94.92	772.83	-1,850.07	928.33	867.24	61.08	15.198		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Gissler B87 - Original Hole - Actual													Offset Site Error: 0.00 usft
Survey Program: 431-MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
6,800.00	4,800.00	4,795.73	4,795.19	53.61	57.50	90.26	718.28	-3,140.05	967.14	895.98	71.16	13.592	
6,900.00	4,800.00	4,795.73	4,795.19	55.79	57.50	90.27	718.28	-3,140.05	867.24	796.09	71.15	12.189	
7,000.00	4,800.00	4,795.73	4,795.19	57.98	57.50	90.27	718.28	-3,140.05	767.37	696.22	71.15	10.786	
7,100.00	4,800.00	4,795.74	4,795.20	60.18	57.50	90.28	718.28	-3,140.05	667.53	596.38	71.16	9.381	
7,200.00	4,800.00	4,795.74	4,795.20	62.39	57.50	90.28	718.28	-3,140.05	567.76	496.56	71.20	7.974	
7,300.00	4,800.00	4,795.74	4,795.20	64.61	57.50	90.28	718.28	-3,140.05	468.08	396.76	71.32	6.563	
7,400.00	4,800.00	4,795.75	4,795.20	66.84	57.50	90.29	718.28	-3,140.05	368.57	296.91	71.66	5.143	
7,500.00	4,800.00	4,795.75	4,795.21	69.07	57.50	90.29	718.28	-3,140.05	269.43	196.76	72.68	3.707	
7,600.00	4,800.00	4,795.75	4,795.21	71.31	57.50	90.29	718.28	-3,140.05	171.30	94.99	76.31	2.245	
7,700.00	4,800.00	4,795.75	4,795.21	73.56	57.50	90.30	718.28	-3,140.05	78.06	-16.54	94.60	0.825 No-Go Zone - Stop Drilling	
7,766.25	4,800.00	4,795.76	4,795.21	75.05	57.50	90.30	718.28	-3,140.05	41.27	-91.15	132.42	0.312 No-Go Zone - Stop Drilling, CC, ES, SF	
7,800.00	4,800.00	4,795.76	4,795.22	75.81	57.50	90.30	718.28	-3,140.05	53.31	-65.54	118.85	0.449 No-Go Zone - Stop Drilling	
7,900.00	4,800.00	4,795.76	4,795.22	78.06	57.50	90.31	718.28	-3,140.05	139.97	53.13	86.84	1.612 Collision Risk Procedures Req.	
8,000.00	4,800.00	4,795.76	4,795.22	80.32	57.50	90.31	718.28	-3,140.05	237.36	157.75	79.61	2.982	
8,100.00	4,800.00	4,795.76	4,795.22	82.58	57.50	90.31	718.28	-3,140.05	336.29	259.35	76.94	4.371	
8,200.00	4,800.00	4,795.77	4,795.23	84.85	57.50	90.32	718.28	-3,140.05	435.70	360.06	75.64	5.760	
8,300.00	4,800.00	4,795.77	4,795.23	87.12	57.50	90.32	718.28	-3,140.05	535.34	460.43	74.91	7.147	
8,400.00	4,800.00	4,795.77	4,795.23	89.39	57.50	90.33	718.28	-3,140.05	635.09	560.63	74.45	8.530	
8,500.00	4,800.00	4,795.78	4,795.24	91.66	57.50	90.33	718.28	-3,140.05	734.90	660.75	74.15	9.910	
8,600.00	4,800.00	4,795.78	4,795.24	93.94	57.50	90.33	718.28	-3,140.05	834.76	760.81	73.95	11.288	
8,700.00	4,800.00	4,795.78	4,795.24	96.22	57.50	90.34	718.28	-3,140.05	934.66	860.85	73.81	12.663	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Harvard Federal 13 - Original Hole - Plan												Offset Site Error:	0.00 usft
Survey Program: O-MWD+HRGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-20.80	593.55	-225.50	635.23				
100.00	100.00	81.00	81.00	0.86	0.98	-20.80	593.55	-225.50	634.94	633.10	1.84	345.520	
200.00	200.00	181.00	181.00	1.46	1.62	-20.80	593.55	-225.50	634.94	631.86	3.08	206.339	
300.00	300.00	281.00	281.00	1.90	2.03	-20.80	593.55	-225.50	634.94	631.01	3.93	161.466	
400.00	400.00	381.00	381.00	2.26	2.37	-20.80	593.55	-225.50	634.94	630.31	4.64	136.974	
500.00	500.00	481.00	481.00	2.57	2.67	-20.80	593.55	-225.50	634.94	629.69	5.25	120.952	
591.00	591.00	572.00	572.00	2.81	2.92	-20.80	593.55	-225.50	634.94	629.21	5.73	110.829	
600.00	600.00	581.00	581.00	2.81	2.95	-34.51	593.55	-225.50	634.93	629.17	5.76	110.306	
700.00	699.97	680.97	680.97	3.28	3.20	-34.63	593.55	-225.50	633.23	626.84	6.40	98.978	
800.00	799.81	780.81	780.81	4.20	3.43	-34.97	593.55	-225.50	628.68	621.32	7.35	85.486	
900.00	899.40	880.40	880.40	4.98	3.65	-35.53	593.55	-225.50	621.29	613.10	8.20	75.800	
1,000.00	998.61	979.61	979.61	5.69	3.86	-36.33	593.55	-225.50	611.15	602.18	8.96	68.196	
1,100.00	1,097.33	1,078.33	1,078.33	6.35	4.06	-37.39	593.55	-225.50	598.32	588.66	9.67	61.892	
1,200.00	1,195.42	1,176.42	1,176.42	6.97	4.25	-38.73	593.55	-225.50	582.95	572.62	10.32	56.476	
1,300.00	1,292.78	1,273.78	1,273.78	7.58	4.43	-40.40	593.55	-225.50	565.18	554.25	10.93	51.711	
1,400.00	1,389.29	1,370.29	1,370.29	8.16	4.61	-42.43	593.55	-225.50	545.24	533.74	11.49	47.451	
1,490.93	1,476.20	1,456.09	1,456.09	8.63	4.71	-44.61	593.55	-225.51	525.46	513.58	11.88	44.247	
1,500.00	1,484.83	1,463.40	1,463.40	8.66	4.72	-44.78	593.58	-225.52	523.45	511.55	11.89	44.009	
1,600.00	1,579.93	1,544.57	1,544.55	8.95	4.95	-46.81	594.99	-226.10	503.22	490.94	12.28	40.975	
1,700.00	1,675.04	1,626.80	1,626.69	9.28	5.38	-48.94	598.58	-227.60	486.61	473.73	12.88	37.774	
1,800.00	1,770.15	1,709.97	1,709.61	9.63	5.86	-51.15	604.43	-230.03	473.71	460.18	13.53	35.014	
1,900.00	1,865.25	1,805.47	1,804.69	9.99	6.02	-53.74	612.70	-233.47	463.48	449.63	13.85	33.461	
2,000.00	1,960.36	1,902.49	1,901.28	10.36	6.23	-56.48	621.11	-236.98	454.32	440.10	14.22	31.950	
2,100.00	2,055.47	1,999.52	1,997.88	10.74	6.46	-59.32	629.53	-240.48	446.30	431.69	14.60	30.559	
2,200.00	2,150.57	2,096.54	2,094.48	11.14	6.70	-62.25	637.94	-243.98	439.46	424.46	15.00	29.301	
2,300.00	2,245.68	2,193.57	2,191.07	11.54	6.95	-65.25	646.36	-247.48	433.87	418.47	15.40	28.176	
2,400.00	2,340.79	2,290.59	2,287.67	11.95	7.22	-68.33	654.77	-250.98	429.57	413.76	15.81	27.177	
2,500.00	2,435.89	2,387.62	2,384.27	12.37	7.50	-71.45	663.19	-254.49	426.60	410.38	16.22	26.298	
2,600.00	2,531.00	2,484.64	2,480.86	12.80	7.78	-74.61	671.60	-257.99	424.99	408.35	16.65	25.531	
2,666.19	2,593.95	2,548.86	2,544.79	13.09	7.97	-76.70	677.17	-260.31	424.68	407.75	16.93	25.079	
2,700.00	2,626.10	2,581.67	2,577.46	13.23	8.07	-77.77	680.02	-261.49	424.76	407.68	17.08	24.866	
2,800.00	2,721.21	2,678.69	2,674.05	13.67	8.37	-80.94	688.43	-264.99	425.91	408.38	17.53	24.295	
2,894.45	2,811.04	2,770.33	2,765.29	14.09	8.67	-83.90	696.38	-268.30	428.25	410.28	17.96	23.838	
2,900.00	2,816.32	2,775.72	2,770.65	14.11	8.68	-84.08	696.85	-268.49	428.42	410.44	17.99	23.818	
3,000.00	2,912.00	2,873.18	2,867.68	14.59	9.00	-87.02	705.30	-272.01	432.38	413.93	18.45	23.435	
3,100.00	3,008.64	2,971.33	2,965.40	15.18	9.32	-89.50	713.81	-275.56	437.47	418.55	18.92	23.118	
3,200.00	3,106.12	3,070.07	3,063.70	15.76	9.65	-91.52	722.38	-279.12	443.23	423.84	19.39	22.861	
3,300.00	3,204.31	3,169.26	3,162.45	16.33	9.98	-93.06	730.98	-282.70	449.28	429.44	19.84	22.647	
3,400.00	3,303.11	3,268.79	3,261.54	16.87	10.32	-94.13	739.61	-286.29	455.34	435.07	20.27	22.465	
3,500.00	3,402.38	3,368.53	3,360.84	17.39	10.67	-94.75	748.26	-289.89	461.23	440.55	20.68	22.305	
3,600.00	3,502.01	3,468.36	3,460.23	17.88	11.02	-94.92	756.92	-293.50	466.85	445.79	21.06	22.163	
3,700.00	3,601.88	3,568.17	3,559.60	18.32	11.37	-94.66	765.57	-297.10	472.18	450.75	21.43	22.035	
3,794.38	3,696.24	3,662.23	3,653.24	18.59	11.70	-80.33	773.73	-300.49	477.00	455.25	21.75	21.930	
3,800.00	3,701.86	3,667.83	3,658.82	18.59	11.72	-80.28	774.22	-300.70	477.28	455.52	21.77	21.927	
3,894.38	3,796.24	3,761.79	3,752.36	18.63	12.05	-79.39	782.37	-304.09	482.10	460.02	22.08	21.833	
3,900.00	3,801.86	3,767.39	3,757.93	18.63	12.07	10.95	782.85	-304.29	482.37	460.27	22.10	21.830	
3,950.00	3,851.83	3,817.19	3,807.52	18.61	12.25	11.44	787.17	-306.09	483.40	461.12	22.28	21.696	
4,000.00	3,901.65	3,866.94	3,857.05	18.59	12.43	12.01	791.49	-307.88	481.91	459.35	22.55	21.369	
4,050.00	3,951.17	3,916.49	3,906.38	18.57	12.61	12.70	795.78	-309.67	477.91	455.07	22.83	20.931	
4,100.00	4,000.28	3,965.71	3,955.38	18.55	12.79	13.50	800.05	-311.45	471.44	448.31	23.12	20.387	
4,150.00	4,048.82	4,014.47	4,003.92	18.52	12.97	14.44	804.28	-313.21	462.53	439.10	23.43	19.741	
4,200.00	4,096.67	4,062.62	4,051.86	18.50	13.14	15.55	808.46	-314.95	451.25	427.50	23.75	18.998	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Harvard Federal 13 - Original Hole - Plan													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)				
4,250.00	4,143.70	4,110.05	4,099.08	18.49	13.31	16.86	812.57	-316.66	437.66	413.56	24.09	18.164		
4,300.00	4,189.77	4,156.61	4,145.44	18.48	13.48	18.40	816.61	-318.34	421.84	397.38	24.46	17.246		
4,350.00	4,234.77	4,202.18	4,190.81	18.48	13.65	20.24	820.56	-319.98	403.90	379.04	24.86	16.249		
4,400.00	4,278.56	4,247.07	4,235.49	18.49	13.80	22.46	824.45	-321.60	383.96	358.68	25.27	15.191		
4,450.00	4,321.04	4,294.49	4,282.75	18.51	13.96	25.27	828.13	-323.13	361.89	336.16	25.73	14.062		
4,500.00	4,362.07	4,340.16	4,328.31	18.56	14.16	28.62	830.99	-324.32	337.70	311.44	26.26	12.858		
4,550.00	4,401.55	4,383.88	4,371.98	18.63	14.35	32.68	833.11	-325.20	311.64	284.78	26.86	11.603		
4,600.00	4,439.38	4,425.51	4,413.57	18.72	14.53	37.64	834.54	-325.80	284.06	256.52	27.54	10.314		
4,650.00	4,475.44	4,464.88	4,452.93	18.84	14.70	43.72	835.39	-326.15	255.48	227.12	28.36	9.009		
4,700.00	4,509.64	4,501.89	4,489.94	19.01	14.85	51.11	835.73	-326.30	226.61	197.25	29.36	7.718		
4,750.00	4,541.88	4,534.84	4,522.88	19.21	14.87	59.48	835.75	-326.30	198.70	168.14	30.56	6.502		
4,800.00	4,572.08	4,565.04	4,553.08	19.45	14.89	68.72	835.75	-326.30	173.79	141.75	32.03	5.425		
4,850.00	4,600.16	4,593.11	4,581.16	19.75	14.90	78.36	835.75	-326.30	154.68	121.14	33.54	4.612		
4,894.38	4,623.23	4,616.18	4,604.23	20.05	14.92	86.58	835.75	-326.30	145.54	111.18	34.36	4.236		
4,900.00	4,626.04	4,619.00	4,607.04	20.09	14.92	87.55	835.75	-326.30	145.04	110.65	34.40	4.217		
4,914.30	4,633.20	4,626.15	4,614.20	20.21	14.93	90.00	835.75	-326.30	144.51	110.10	34.41	4.199 CC, ES, SF		
5,000.00	4,676.04	4,669.00	4,657.04	20.91	14.95	104.40	835.75	-326.30	162.46	130.08	32.38	5.018		
5,094.38	4,723.23	4,716.18	4,704.23	21.80	14.99	118.35	835.75	-326.30	212.62	183.21	29.40	7.231		
5,100.00	4,726.02	4,718.97	4,707.02	21.85	14.99	118.68	835.75	-326.30	216.22	186.95	29.27	7.388		
5,150.00	4,748.66	4,741.62	4,729.66	22.38	15.00	120.46	835.75	-326.30	251.14	222.86	28.28	8.882		
5,200.00	4,767.34	4,760.29	4,748.34	22.98	15.02	120.10	835.75	-326.30	290.29	262.66	27.63	10.508		
5,250.00	4,781.90	4,774.85	4,762.90	23.63	15.03	117.33	835.75	-326.30	332.61	305.41	27.20	12.227		
5,300.00	4,792.24	4,785.19	4,773.24	24.33	15.03	111.57	835.75	-326.30	377.25	350.33	26.93	14.009		
5,350.00	4,798.28	4,791.23	4,779.28	25.08	15.04	102.03	835.75	-326.30	423.51	396.77	26.75	15.833		
5,394.38	4,800.00	4,792.95	4,781.00	25.77	15.04	90.00	835.75	-326.30	465.43	438.79	26.64	17.472		
5,400.00	4,800.00	4,792.95	4,781.00	25.86	15.04	90.00	835.75	-326.30	470.78	444.15	26.63	17.680		
5,500.00	4,800.00	4,792.95	4,781.00	27.49	15.04	90.00	835.75	-326.30	566.78	540.29	26.49	21.396		
5,600.00	4,800.00	4,792.95	4,781.00	29.23	15.04	90.00	835.75	-326.30	663.97	637.54	26.43	25.123		
5,700.00	4,800.00	4,792.95	4,781.00	31.04	15.04	90.00	835.75	-326.30	761.88	735.48	26.40	28.854		
5,800.00	4,800.00	4,792.95	4,781.00	32.91	15.04	90.00	835.75	-326.30	860.28	833.88	26.40	32.585		
5,900.00	4,800.00	4,792.95	4,781.00	34.84	15.04	90.00	835.75	-326.30	959.00	932.59	26.41	36.315		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Harvard Federal 14 - Original Hole - Actual												Offset Site Error:	0.00 usft
Survey Program: 287-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	30.20	219.57	127.82	254.11				
100.00	100.00	95.74	95.74	0.86	0.88	30.15	219.57	127.54	253.92	252.19	1.74	146.313	
200.00	200.00	196.52	196.51	1.46	1.81	29.98	219.57	126.64	253.48	250.22	3.26	77.749	
300.00	300.00	297.19	297.18	1.90	2.77	29.68	219.57	125.13	252.73	248.08	4.65	54.312	
400.00	400.00	397.10	397.06	2.26	3.97	29.34	219.57	123.43	251.89	245.70	6.19	40.674	
500.00	500.00	497.00	496.96	2.57	5.17	29.02	219.57	121.79	251.09	243.41	7.68	32.674	
591.00	591.00	587.97	587.91	2.81	6.20	28.73	219.57	120.35	250.40	241.46	8.93	28.030	
600.00	600.00	596.97	596.92	2.81	6.30	15.00	219.57	120.21	250.32	241.29	9.03	27.725	
700.00	699.97	696.99	696.92	3.28	7.34	14.81	219.57	118.59	247.55	237.05	10.51	23.564	
800.00	799.81	796.85	796.77	4.20	8.39	14.83	219.57	116.92	241.39	228.98	12.41	19.449	
900.00	899.40	896.44	896.34	4.98	9.43	15.07	219.57	115.20	231.85	217.66	14.19	16.339	
1,000.00	998.61	995.50	995.39	5.69	10.68	15.60	219.57	113.52	218.97	202.87	16.10	13.602	
1,100.00	1,097.33	1,094.06	1,093.93	6.35	11.93	16.51	219.57	111.91	202.83	184.88	17.95	11.301	
1,200.00	1,195.42	1,192.00	1,191.86	6.97	13.17	17.93	219.57	110.40	183.50	163.76	19.75	9.293	
1,300.00	1,292.78	1,289.20	1,289.05	7.58	14.40	20.13	219.57	108.97	161.12	139.63	21.49	7.497	
1,400.00	1,389.29	1,385.48	1,385.32	8.16	15.49	23.64	219.57	107.64	135.93	112.89	23.03	5.901	
1,490.93	1,476.20	1,472.15	1,471.98	8.63	16.37	28.93	219.57	106.63	111.09	86.92	24.17	4.596	
1,500.00	1,484.83	1,480.75	1,480.58	8.66	16.46	29.60	219.57	106.54	108.56	84.31	24.25	4.476	
1,600.00	1,579.93	1,575.62	1,575.45	8.95	17.42	39.64	219.57	105.66	81.98	56.93	25.04	3.273	
1,700.00	1,675.04	1,670.53	1,670.36	9.28	18.38	57.66	219.57	105.01	60.14	34.84	25.30	2.377	
1,800.00	1,770.15	1,765.49	1,765.32	9.63	19.34	87.42	219.57	104.58	49.66	24.31	25.34	1.960 Collision Risk Procedures Req.	
1,809.57	1,779.25	1,774.60	1,774.43	9.66	19.44	90.68	219.57	104.55	49.57	24.12	25.45	1.948 Collision Risk Procedures Req., CC, ES	
1,900.00	1,865.25	1,860.63	1,860.46	9.99	20.34	118.98	219.57	104.18	56.91	29.30	27.61	2.062	
2,000.00	1,960.36	1,955.74	1,955.57	10.36	21.33	139.38	219.57	103.65	76.97	46.88	30.09	2.558	
2,100.00	2,055.47	2,050.83	2,050.66	10.74	22.32	150.89	219.57	102.99	102.62	70.63	31.99	3.208	
2,200.00	2,150.57	2,145.90	2,145.73	11.14	23.31	157.79	219.57	102.21	130.62	97.01	33.61	3.886	
2,300.00	2,245.68	2,240.95	2,240.77	11.54	24.30	162.30	219.57	101.30	159.76	124.64	35.12	4.548	
2,400.00	2,340.79	2,335.98	2,335.79	11.95	25.22	165.43	219.57	100.34	189.53	153.02	36.51	5.191	
2,500.00	2,435.89	2,431.02	2,430.83	12.37	26.13	167.69	219.57	99.47	219.69	181.82	37.87	5.802	
2,600.00	2,531.00	2,526.07	2,525.88	12.80	27.03	169.38	219.57	98.70	250.07	210.86	39.21	6.378	
2,700.00	2,626.10	2,621.15	2,620.95	13.23	27.94	170.69	219.57	98.03	280.59	240.05	40.55	6.920	
2,800.00	2,721.21	2,716.23	2,716.04	13.67	28.84	171.72	219.57	97.45	311.22	269.33	41.89	7.430	
2,894.45	2,811.04	2,805.98	2,805.78	14.09	29.59	172.52	219.57	96.94	340.21	297.17	43.04	7.904	
2,900.00	2,816.32	2,811.26	2,811.06	14.11	29.63	172.56	219.57	96.90	341.91	298.80	43.11	7.932	
3,000.00	2,912.00	2,906.79	2,906.59	14.59	30.38	173.33	219.57	96.16	370.85	326.53	44.31	8.369	
3,100.00	3,008.64	3,003.26	3,003.05	15.18	31.13	173.96	219.57	95.22	396.52	350.88	45.64	8.688	
3,200.00	3,106.12	3,100.54	3,100.33	15.76	31.89	174.49	219.57	94.06	418.88	371.92	46.96	8.921	
3,300.00	3,204.31	3,198.53	3,198.30	16.33	32.66	174.94	219.57	92.68	437.89	389.63	48.26	9.074	
3,400.00	3,303.11	3,297.57	3,297.33	16.87	33.01	175.31	219.57	91.31	453.50	404.37	49.13	9.231	
3,500.00	3,402.38	3,397.30	3,397.06	17.39	33.23	175.54	219.57	90.56	465.57	415.73	49.84	9.342	
3,600.00	3,502.01	3,497.05	3,496.81	17.88	33.59	175.67	219.57	90.31	474.10	423.45	50.65	9.360	
3,700.00	3,601.88	3,596.80	3,596.56	18.32	34.03	175.76	219.57	89.98	479.18	427.67	51.51	9.303	
3,794.38	3,696.24	3,691.05	3,690.81	18.59	34.45	-170.47	219.57	89.53	480.81	428.64	52.17	9.217	
3,800.00	3,701.86	3,696.66	3,696.43	18.59	34.47	-170.47	219.57	89.50	480.81	428.62	52.19	9.212	
3,894.38	3,796.24	3,790.93	3,790.69	18.63	34.89	-170.40	219.57	88.92	480.91	428.28	52.62	9.139	
3,900.00	3,801.86	3,796.55	3,796.31	18.63	34.91	-80.11	219.57	88.89	480.91	428.27	52.65	9.135	
3,950.00	3,851.83	3,846.47	3,846.23	18.61	35.13	-80.26	219.57	88.52	480.70	427.86	52.84	9.098	
4,000.00	3,901.65	3,896.27	3,896.02	18.59	35.35	-80.75	219.57	88.13	480.06	427.04	53.02	9.054	
4,050.00	3,951.17	3,945.83	3,945.58	18.57	35.59	-81.56	219.57	87.70	479.07	425.85	53.22	9.002	
4,100.00	4,000.28	3,995.04	3,994.79	18.55	35.86	-82.68	219.57	87.29	477.81	424.38	53.43	8.942	
4,150.00	4,048.82	4,043.70	4,043.45	18.52	36.12	-84.10	219.57	86.91	476.44	422.80	53.64	8.882	
4,200.00	4,096.67	4,091.67	4,091.42	18.50	36.38	-85.81	219.57	86.54	475.15	421.31	53.84	8.825	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Harvard Federal 14 - Original Hole - Actual												Offset Site Error:	0.00 usft
Survey Program: 287-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,250.00	4,143.70	4,138.83	4,138.58	18.49	36.63	-87.76	219.57	86.21	474.16	420.13	54.03	8.775	
4,300.00	4,189.77	4,185.04	4,184.78	18.48	36.88	-89.91	219.57	85.90	473.74	419.53	54.21	8.738	
4,302.01	4,191.60	4,186.87	4,186.62	18.48	36.89	-90.00	219.57	85.88	473.74	419.52	54.22	8.737	
4,350.00	4,234.77	4,230.17	4,229.91	18.48	37.12	-92.23	219.57	85.61	474.19	419.81	54.39	8.719	
4,400.00	4,278.56	4,274.09	4,273.84	18.49	37.36	-94.66	219.57	85.35	475.83	421.28	54.55	8.723	
4,450.00	4,321.04	4,316.69	4,316.43	18.51	37.59	-97.13	219.57	85.11	478.98	424.29	54.70	8.757	
4,500.00	4,362.07	4,357.86	4,357.61	18.56	37.81	-99.60	219.57	84.89	483.98	429.14	54.84	8.825	
4,550.00	4,401.55	4,397.53	4,397.27	18.63	38.03	-101.99	219.57	84.68	491.12	436.13	54.98	8.932	
4,600.00	4,439.38	4,435.55	4,435.30	18.72	38.25	-104.25	219.57	84.47	500.66	445.54	55.12	9.084	
4,650.00	4,475.44	4,471.83	4,471.58	18.84	38.45	-106.34	219.57	84.26	512.83	457.59	55.24	9.283	
4,700.00	4,509.64	4,506.27	4,506.01	19.01	38.64	-108.19	219.57	84.06	527.79	472.42	55.37	9.532	
4,750.00	4,541.88	4,538.77	4,538.51	19.21	38.82	-109.78	219.57	83.87	545.61	490.13	55.49	9.833	
4,800.00	4,572.08	4,569.24	4,568.98	19.45	38.99	-111.07	219.57	83.69	566.34	510.73	55.60	10.185	
4,850.00	4,600.16	4,597.61	4,597.35	19.75	39.15	-112.02	219.57	83.51	589.92	534.20	55.72	10.588	
4,894.38	4,623.23	4,620.95	4,620.69	20.05	39.28	-112.56	219.57	83.37	613.17	557.36	55.81	10.987	
4,900.00	4,626.04	4,623.79	4,623.53	20.09	39.30	-112.81	219.57	83.35	616.26	560.44	55.82	11.040	
5,000.00	4,676.04	4,674.43	4,674.16	20.91	39.58	-117.15	219.57	83.03	674.71	618.67	56.04	12.040	
5,094.38	4,723.23	4,722.24	4,721.98	21.80	39.84	-120.96	219.57	82.71	734.92	678.63	56.29	13.056	
5,100.00	4,726.02	4,725.07	4,724.80	21.85	39.86	-120.75	219.57	82.70	738.64	682.34	56.30	13.119	
5,150.00	4,748.66	4,748.06	4,747.79	22.38	39.99	-118.44	219.57	82.54	773.24	716.80	56.44	13.701	
5,200.00	4,767.34	4,767.09	4,766.83	22.98	40.09	-115.21	219.57	82.41	810.28	753.71	56.56	14.326	
5,250.00	4,781.90	4,782.01	4,781.75	23.63	40.18	-110.86	219.57	82.31	849.44	792.80	56.65	14.995	
5,300.00	4,792.24	4,792.72	4,792.45	24.33	40.24	-105.21	219.57	82.24	890.39	833.70	56.70	15.705	
5,350.00	4,798.28	4,799.12	4,798.85	25.08	40.27	-98.14	219.57	82.19	932.74	876.04	56.70	16.450	
5,394.38	4,800.00	4,801.15	4,800.88	25.77	40.28	-90.71	219.57	82.18	971.18	914.51	56.67	17.137	
5,400.00	4,800.00	4,801.19	4,800.92	25.86	40.29	-90.72	219.57	82.18	976.09	919.43	56.67	17.225	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Harvard Federal 8 - Original Hole - Actual												Offset Site Error:	0.00 usft
Survey Program: 250-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis		
0.00	0.00	0.00	0.00	0.00	0.00	-13.41	218.89	-52.20	225.09				
100.00	100.00	95.43	95.43	0.86	0.79	-13.31	218.89	-51.80	224.94	223.30	1.64	136.991	
200.00	200.00	195.87	195.86	1.46	1.63	-13.00	218.89	-50.53	224.65	221.58	3.07	73.217	
300.00	300.00	296.37	296.34	1.90	2.61	-12.45	218.89	-48.33	224.17	219.69	4.48	50.071	
400.00	400.00	396.91	396.81	2.26	3.78	-11.59	218.89	-44.91	223.46	217.49	5.97	37.455	
500.00	500.00	497.30	497.10	2.57	4.89	-10.41	218.89	-40.22	222.57	215.21	7.36	30.234	
591.00	591.00	588.06	587.74	2.81	5.22	-9.25	218.89	-35.64	221.78	213.93	7.85	28.241	
600.00	600.00	597.04	596.71	2.81	5.25	-22.84	218.89	-35.20	221.70	213.82	7.88	28.127	
700.00	699.97	696.90	696.45	3.28	5.48	-21.83	218.89	-30.41	219.07	210.60	8.47	25.857	
800.00	799.81	796.36	795.83	4.20	5.80	-21.31	218.89	-26.23	213.34	203.79	9.55	22.337	
900.00	899.40	895.81	895.23	4.98	6.10	-21.41	218.89	-23.06	204.51	194.03	10.48	19.513	
1,000.00	998.61	995.06	994.43	5.69	6.39	-21.96	218.89	-20.03	192.47	181.14	11.33	16.983	
1,100.00	1,097.33	1,093.85	1,093.17	6.35	6.73	-23.04	218.89	-17.01	177.26	165.09	12.17	14.569	
1,200.00	1,195.42	1,191.87	1,191.16	6.97	7.02	-24.92	218.89	-14.25	159.01	146.10	12.90	12.322	
1,300.00	1,292.78	1,289.21	1,288.47	7.58	7.47	-28.20	218.89	-12.09	138.04	124.29	13.74	10.044	
1,400.00	1,389.29	1,385.77	1,385.01	8.16	8.04	-33.63	218.89	-10.14	114.79	100.18	14.60	7.861	
1,490.93	1,476.20	1,472.73	1,471.96	8.63	8.55	-41.99	218.89	-8.51	92.62	77.48	15.14	6.116	
1,500.00	1,484.83	1,481.36	1,480.59	8.66	8.60	-43.07	218.89	-8.35	90.43	75.27	15.16	5.964	
1,600.00	1,579.93	1,576.56	1,575.77	8.95	9.26	-58.96	218.89	-6.68	69.19	53.86	15.33	4.513	
1,700.00	1,675.04	1,671.78	1,670.98	9.28	9.97	-83.90	218.89	-5.02	57.12	41.56	15.57	3.670	
1,731.64	1,705.14	1,701.91	1,701.10	9.39	10.20	-93.18	218.89	-4.49	56.30	40.36	15.94	3.532 CC, ES	
1,800.00	1,770.15	1,767.00	1,766.18	9.63	10.69	-112.63	218.89	-3.36	60.05	42.67	17.38	3.456 SF	
1,900.00	1,865.25	1,862.13	1,861.30	9.99	11.57	-134.17	218.89	-1.73	76.28	56.58	19.70	3.872	
2,000.00	1,960.36	1,957.15	1,956.30	10.36	12.62	-147.23	218.89	-0.33	99.66	78.03	21.63	4.608	
2,100.00	2,055.47	2,052.13	2,051.28	10.74	13.67	-155.12	218.89	0.80	126.32	103.05	23.27	5.429	
2,200.00	2,150.57	2,147.07	2,146.22	11.14	14.72	-160.17	218.89	1.67	154.62	129.81	24.81	6.233	
2,300.00	2,245.68	2,241.98	2,241.13	11.54	15.77	-163.58	218.89	2.28	183.82	157.51	26.31	6.987	
2,400.00	2,340.79	2,337.07	2,336.21	11.95	16.77	-166.02	218.89	2.70	213.54	185.80	27.74	7.698	
2,500.00	2,435.89	2,432.20	2,431.35	12.37	17.76	-167.86	218.89	3.11	243.53	214.38	29.16	8.353	
2,600.00	2,531.00	2,527.34	2,526.48	12.80	18.74	-169.30	218.89	3.53	273.71	243.13	30.57	8.953	
2,700.00	2,626.10	2,622.48	2,621.62	13.23	19.72	-170.46	218.89	3.94	304.01	272.01	31.99	9.502	
2,800.00	2,721.21	2,717.62	2,716.76	13.67	20.66	-171.40	218.89	4.36	334.40	301.03	33.37	10.020	
2,894.45	2,811.04	2,807.47	2,806.61	14.09	21.42	-172.15	218.89	4.75	363.17	328.64	34.53	10.518	
2,900.00	2,816.32	2,812.75	2,811.89	14.11	21.46	-172.20	218.89	4.77	364.85	330.26	34.60	10.546	
3,000.00	2,912.00	2,908.47	2,907.60	14.59	22.26	-172.90	218.89	5.19	393.53	357.67	35.86	10.973	
3,100.00	3,008.64	3,005.13	3,004.27	15.18	23.07	-173.45	218.89	5.61	418.90	381.65	37.25	11.246	
3,200.00	3,106.12	3,102.63	3,101.76	15.76	23.88	-173.89	218.89	6.04	440.93	402.30	38.63	11.414	
3,300.00	3,204.31	3,200.84	3,199.98	16.33	24.76	-174.23	218.89	6.47	459.58	419.53	40.05	11.475	
3,400.00	3,303.11	3,299.65	3,298.79	16.87	25.65	-174.49	218.89	6.90	474.81	433.33	41.48	11.447	
3,500.00	3,402.38	3,398.94	3,398.07	17.39	26.56	-174.70	218.89	7.33	486.61	443.72	42.89	11.347	
3,600.00	3,502.01	3,498.58	3,497.71	17.88	27.46	-174.85	218.89	7.77	494.95	450.69	44.27	11.181	
3,700.00	3,601.88	3,598.45	3,597.58	18.32	28.37	-174.96	218.89	8.20	499.83	454.22	45.61	10.960	
3,794.38	3,696.24	3,692.81	3,691.94	18.59	29.10	-161.32	218.89	8.61	501.25	454.66	46.58	10.760	
3,800.00	3,701.86	3,698.43	3,697.56	18.59	29.14	-161.32	218.89	8.64	501.24	454.62	46.62	10.751	
3,894.38	3,796.24	3,792.81	3,791.94	18.63	29.80	-161.37	218.89	9.05	501.11	453.80	47.30	10.593	
3,900.00	3,801.86	3,798.43	3,797.56	18.63	29.84	-71.08	218.89	9.07	501.09	453.75	47.34	10.585	
3,950.00	3,851.83	3,848.39	3,847.52	18.61	30.19	-71.31	218.89	9.29	500.51	452.85	47.66	10.502	
4,000.00	3,901.65	3,898.19	3,897.32	18.59	30.54	-71.87	218.89	9.51	499.10	451.13	47.97	10.404	
4,050.00	3,951.17	3,947.69	3,946.81	18.57	30.89	-72.76	218.89	9.73	496.95	448.67	48.28	10.293	
4,100.00	4,000.28	3,996.75	3,995.87	18.55	31.23	-73.97	218.89	9.94	494.15	445.56	48.58	10.171	
4,150.00	4,048.82	4,045.24	4,044.36	18.52	31.57	-75.49	218.89	10.15	490.85	441.97	48.89	10.041	
4,200.00	4,096.67	4,093.06	4,092.18	18.50	31.87	-77.30	218.89	10.36	487.25	438.10	49.15	9.914	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Harvard Federal 8 - Original Hole - Actual													Offset Site Error:	0.00 usft
Survey Program: 250-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
4,250.00	4,143.70	4,140.05	4,139.18	18.49	32.15	-79.39	218.89	10.59	483.56	434.18	49.38	9.792		
4,300.00	4,189.77	4,186.06	4,185.18	18.48	32.42	-81.73	218.89	10.84	480.07	430.46	49.61	9.677		
4,350.00	4,234.77	4,230.96	4,230.08	18.48	32.68	-84.26	218.89	11.10	477.08	427.25	49.83	9.574		
4,400.00	4,278.56	4,274.62	4,273.74	18.49	32.94	-86.95	218.89	11.37	474.95	424.91	50.05	9.491		
4,450.00	4,321.04	4,316.92	4,316.04	18.51	33.19	-89.72	218.89	11.66	474.05	423.80	50.25	9.434		
4,454.91	4,325.13	4,320.99	4,320.12	18.52	33.21	-90.00	218.89	11.69	474.04	423.77	50.27	9.430		
4,500.00	4,362.07	4,357.74	4,356.86	18.56	33.43	-92.52	218.89	11.95	474.76	424.32	50.44	9.412		
4,550.00	4,401.55	4,396.98	4,396.10	18.63	33.66	-95.28	218.89	12.24	477.47	426.84	50.63	9.431		
4,600.00	4,439.38	4,434.51	4,433.63	18.72	33.88	-97.93	218.89	12.54	482.53	431.72	50.80	9.498		
4,650.00	4,475.44	4,470.25	4,469.37	18.84	34.09	-100.41	218.89	12.83	490.25	439.28	50.97	9.619		
4,700.00	4,509.64	4,504.10	4,503.21	19.01	34.29	-102.66	218.89	13.12	500.88	449.76	51.12	9.797		
4,750.00	4,541.88	4,536.07	4,535.18	19.21	34.49	-104.63	218.89	13.40	514.60	463.32	51.28	10.035		
4,800.00	4,572.08	4,566.00	4,565.12	19.45	34.67	-106.29	218.89	13.64	531.48	480.05	51.43	10.334		
4,850.00	4,600.16	4,593.81	4,592.93	19.75	34.84	-107.59	218.89	13.86	551.54	499.96	51.57	10.694		
4,894.38	4,623.23	4,616.66	4,615.77	20.05	34.99	-108.42	218.89	14.04	571.94	520.25	51.69	11.065		
4,900.00	4,626.04	4,619.44	4,618.55	20.09	35.00	-108.68	218.89	14.06	574.69	522.98	51.70	11.115		
5,000.00	4,676.04	4,668.97	4,668.08	20.91	35.31	-113.22	218.89	14.43	627.96	576.00	51.96	12.085		
5,094.38	4,723.23	4,715.79	4,714.91	21.80	35.60	-117.24	218.89	14.75	684.59	632.36	52.23	13.107		
5,100.00	4,726.02	4,718.56	4,717.67	21.85	35.61	-117.07	218.89	14.77	688.13	635.88	52.25	13.170		
5,150.00	4,748.66	4,741.02	4,740.13	22.38	35.75	-115.06	218.89	14.92	721.20	668.81	52.39	13.767		
5,200.00	4,767.34	4,759.50	4,758.61	22.98	35.87	-112.13	218.89	15.04	756.85	704.33	52.51	14.413		
5,250.00	4,781.90	4,773.85	4,772.95	23.63	35.95	-108.13	218.89	15.13	794.76	742.16	52.60	15.110		
5,300.00	4,792.24	4,783.95	4,783.06	24.33	36.02	-102.89	218.89	15.19	834.57	781.93	52.64	15.854		
5,350.00	4,798.28	4,789.72	4,788.83	25.08	36.05	-96.33	218.89	15.22	875.89	823.25	52.64	16.639		
5,394.38	4,800.00	4,791.19	4,790.30	25.77	36.06	-89.43	218.89	15.23	913.49	860.89	52.60	17.365		
5,400.00	4,800.00	4,791.15	4,790.26	25.86	36.06	-89.43	218.89	15.23	918.30	865.70	52.60	17.459		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Harvard Federal 9 - Original Hole - Actual												Offset Site Error:	0.00 usft
Survey Program: 445-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	160.01	-440.45	160.22	468.71				
100.00	100.00	95.45	95.45	0.86	1.29	160.03	-440.45	160.08	468.64	466.50	2.14	219.078	
200.00	200.00	195.92	195.92	1.46	2.64	160.08	-440.45	159.65	468.49	464.40	4.09	114.578	
300.00	300.00	296.39	296.39	1.90	3.99	160.16	-440.45	158.92	468.25	462.36	5.88	79.618	
400.00	400.00	396.85	396.84	2.26	5.35	160.28	-440.45	157.90	467.90	460.31	7.59	61.639	
500.00	500.00	497.18	497.17	2.57	6.62	160.43	-440.45	156.60	467.47	458.30	9.16	51.006	
591.00	591.00	588.38	588.35	2.81	7.71	160.58	-440.45	155.28	467.03	456.56	10.47	44.608	
600.00	600.00	597.40	597.37	2.81	7.81	146.90	-440.45	155.14	466.99	456.41	10.58	44.145	
608.47	608.47	605.89	605.86	2.85	7.92	146.91	-440.45	155.01	466.98	456.27	10.71	43.583 CC	
700.00	699.97	697.57	697.53	3.28	9.01	147.20	-440.45	153.54	468.19	456.04	12.16	38.518 ES	
800.00	799.81	797.59	797.53	4.20	9.98	147.73	-440.45	151.80	472.31	458.46	13.85	34.096	
900.00	899.40	897.32	897.25	4.98	10.69	148.44	-440.45	149.92	479.40	464.19	15.21	31.522	
1,000.00	998.61	996.65	996.55	5.69	11.40	149.32	-440.45	147.92	489.53	473.01	16.52	29.632	
1,100.00	1,097.33	1,095.33	1,095.21	6.35	12.05	150.35	-440.45	145.81	502.77	485.03	17.74	28.338	
1,200.00	1,195.42	1,193.10	1,192.96	6.97	12.54	151.45	-440.45	143.80	519.26	500.47	18.80	27.626	
1,300.00	1,292.78	1,290.15	1,289.99	7.58	13.03	152.61	-440.45	141.96	539.08	519.24	19.84	27.170	
1,400.00	1,389.29	1,386.44	1,386.27	8.16	13.35	153.78	-440.45	140.26	562.25	541.54	20.70	27.161 SF	
1,490.93	1,476.20	1,473.23	1,473.05	8.63	13.53	154.86	-440.45	138.75	586.23	564.91	21.33	27.488	
1,500.00	1,484.83	1,481.84	1,481.66	8.66	13.56	154.99	-440.45	138.60	588.76	567.39	21.38	27.541	
1,600.00	1,579.93	1,576.80	1,576.61	8.95	13.86	156.35	-440.45	136.94	616.87	594.90	21.98	28.071	
1,700.00	1,675.04	1,671.77	1,671.56	9.28	14.17	157.59	-440.45	135.28	645.28	622.68	22.60	28.553	
1,800.00	1,770.15	1,766.73	1,766.51	9.63	14.53	158.73	-440.45	133.62	673.94	650.65	23.29	28.939	
1,900.00	1,865.25	1,861.70	1,861.45	9.99	14.97	159.77	-440.45	131.97	702.83	678.76	24.07	29.196	
2,000.00	1,960.36	1,956.66	1,956.40	10.36	15.42	160.74	-440.45	130.31	731.92	707.06	24.87	29.433	
2,100.00	2,055.47	2,051.58	2,051.30	10.74	15.94	161.63	-440.45	128.67	761.20	735.44	25.76	29.555	
2,200.00	2,150.57	2,146.42	2,146.14	11.14	16.64	162.44	-440.45	127.25	790.64	763.81	26.83	29.468	
2,300.00	2,245.68	2,241.32	2,241.03	11.54	17.33	163.17	-440.45	126.12	820.23	792.31	27.91	29.385	
2,400.00	2,340.79	2,336.27	2,335.97	11.95	18.02	163.83	-440.45	125.27	849.94	820.94	29.00	29.306	
2,500.00	2,435.89	2,431.26	2,430.97	12.37	18.71	164.42	-440.45	124.71	879.75	849.65	30.10	29.231	
2,600.00	2,531.00	2,526.34	2,526.04	12.80	19.23	164.97	-440.45	124.30	909.65	878.62	31.02	29.322	
2,700.00	2,626.10	2,621.41	2,621.11	13.23	19.75	165.48	-440.45	123.88	939.62	907.66	31.96	29.404	
2,800.00	2,721.21	2,716.48	2,716.19	13.67	20.26	165.96	-440.45	123.47	969.65	936.76	32.89	29.480	
2,894.45	2,811.04	2,806.28	2,805.98	14.09	20.68	166.39	-440.45	123.08	998.07	964.36	33.71	29.611	
2,900.00	2,816.32	2,811.56	2,811.26	14.11	20.70	166.43	-440.45	123.05	999.74	965.99	33.75	29.623	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Havard Federal 12 - Original Hole - Actual												Offset Site Error:	0.00 usft
Survey Program: 100-MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-7.09	508.92	-63.27	512.86				
100.00	100.00	93.38	93.38	0.86	0.46	-7.12	509.03	-63.62	512.99	511.67	1.32	389.909	
200.00	200.00	194.57	194.57	1.46	1.27	-7.19	509.17	-64.25	513.21	510.51	2.70	189.908	
300.00	300.00	292.37	292.36	1.90	1.72	-7.21	509.42	-64.43	513.49	509.90	3.59	143.127	
400.00	400.00	390.84	390.83	2.26	2.11	-7.20	510.09	-64.41	514.16	509.80	4.36	118.051	
500.00	500.00	489.29	489.28	2.57	2.48	-7.22	511.00	-64.75	515.12	510.09	5.03	102.391	
591.00	591.00	579.26	579.24	2.81	2.80	-7.28	512.01	-65.45	516.22	510.65	5.57	92.662	
600.00	600.00	588.16	588.14	2.81	2.83	-20.99	512.12	-65.52	516.33	510.72	5.60	92.130	
700.00	699.97	688.89	688.85	3.28	3.17	-21.16	513.30	-66.44	515.68	509.32	6.37	81.018	
800.00	799.77	789.77	789.73	4.20	3.49	-21.51	514.29	-67.35	511.61	504.09	7.51	68.099	
900.00	899.40	891.55	891.51	4.98	3.80	-22.01	515.01	-68.02	504.01	495.49	8.52	59.169	
1,000.00	998.61	989.12	989.07	5.69	4.06	-22.65	515.68	-68.31	493.15	483.73	9.42	52.334	
1,100.00	1,097.33	1,087.37	1,087.31	6.35	4.32	-23.49	516.65	-68.42	479.43	469.14	10.29	46.589	
1,200.00	1,195.42	1,185.17	1,185.12	6.97	4.59	-24.58	517.71	-68.62	462.75	451.64	11.12	41.623	
1,300.00	1,292.78	1,282.54	1,282.48	7.58	4.86	-25.97	518.85	-68.80	443.21	431.28	11.92	37.167	
1,400.00	1,389.29	1,379.53	1,379.45	8.16	5.26	-27.72	519.98	-68.97	420.83	408.00	12.82	32.817	
1,490.93	1,476.20	1,462.80	1,462.72	8.63	5.57	-29.59	521.10	-68.94	398.31	384.79	13.52	29.456	
1,500.00	1,484.83	1,470.38	1,470.30	8.66	5.60	-29.76	521.28	-68.93	396.05	382.49	13.56	29.201	
1,600.00	1,579.93	1,559.89	1,559.74	8.95	5.92	-31.70	524.71	-68.36	372.56	358.44	14.12	26.385	
1,700.00	1,675.04	1,650.57	1,650.23	9.28	6.30	-33.54	529.98	-66.05	350.84	336.11	14.73	23.818	
1,800.00	1,770.15	1,740.94	1,740.21	9.63	6.74	-35.25	537.59	-62.58	331.48	316.14	15.34	21.609	
1,900.00	1,865.25	1,838.46	1,836.96	9.99	7.20	-36.78	548.24	-56.71	313.95	297.96	15.99	19.638	
2,000.00	1,960.36	1,941.45	1,938.87	10.36	7.62	-37.95	559.55	-47.05	295.41	278.74	16.67	17.722	
2,100.00	2,055.47	2,040.23	2,036.30	10.74	7.95	-38.67	570.37	-34.94	275.81	258.51	17.31	15.936	
2,200.00	2,150.57	2,138.31	2,132.74	11.14	8.24	-39.10	581.97	-21.39	256.41	238.54	17.87	14.349	
2,300.00	2,245.68	2,236.60	2,229.22	11.54	8.50	-39.35	593.87	-6.84	236.89	218.47	18.43	12.857	
2,400.00	2,340.79	2,336.08	2,326.92	11.95	8.82	-39.70	605.53	7.87	217.03	198.00	19.03	11.404	
2,500.00	2,435.89	2,433.20	2,422.23	12.37	9.16	-40.01	616.83	22.65	196.93	177.26	19.66	10.015	
2,600.00	2,531.00	2,531.37	2,518.55	12.80	9.51	-40.37	628.74	37.43	177.34	157.04	20.30	8.735	
2,700.00	2,626.10	2,630.84	2,616.16	13.23	9.88	-40.78	640.15	52.84	156.98	136.06	20.93	7.502	
2,800.00	2,721.21	2,728.74	2,712.58	13.67	10.25	-42.14	650.07	66.52	136.13	114.72	21.42	6.357	
2,894.45	2,811.04	2,820.00	2,802.41	14.09	10.63	-43.69	659.77	79.40	116.88	95.02	21.86	5.348	
2,900.00	2,816.32	2,825.28	2,807.60	14.11	10.65	-43.75	660.39	80.17	115.79	93.91	21.88	5.291	
3,000.00	2,912.00	2,921.94	2,902.35	14.59	11.05	-43.98	673.07	94.39	98.69	76.14	22.56	4.375	
3,100.00	3,008.64	3,021.72	3,000.15	15.18	11.44	-42.64	686.18	109.26	84.03	60.56	23.47	3.580	
3,200.00	3,106.12	3,120.61	3,097.26	15.76	11.83	-39.81	698.42	123.32	71.67	47.08	24.58	2.915	
3,300.00	3,204.31	3,219.00	3,193.61	16.33	12.28	-33.18	712.10	137.83	63.62	37.32	26.30	2.419	
3,400.00	3,303.11	3,318.30	3,290.69	16.87	12.76	-23.16	726.85	152.62	60.75	32.32	28.43	2.137	
3,407.94	3,310.98	3,326.20	3,298.42	16.91	12.80	-22.31	728.01	153.76	60.73	32.14	28.59	2.124 CC, ES	
3,500.00	3,402.38	3,417.48	3,387.77	17.39	13.20	-12.47	741.40	166.75	63.09	32.72	30.37	2.078 SF	
3,600.00	3,502.01	3,516.56	3,484.75	17.88	13.62	-2.92	756.17	180.66	71.13	39.31	31.82	2.236	
3,700.00	3,601.88	3,615.66	3,581.84	18.32	14.04	4.30	770.61	194.28	83.79	50.98	32.81	2.553	
3,794.38	3,696.24	3,708.76	3,673.16	18.59	14.44	22.49	784.01	206.52	99.36	65.94	33.43	2.972	
3,800.00	3,701.86	3,714.30	3,678.59	18.59	14.47	22.70	784.81	207.23	100.39	66.94	33.45	3.001	
3,894.38	3,796.24	3,807.32	3,769.91	18.63	14.86	25.58	798.01	219.04	117.55	83.74	33.81	3.477	
3,900.00	3,801.86	3,812.86	3,775.35	18.63	14.89	115.97	798.78	219.75	118.57	84.75	33.83	3.505	
3,950.00	3,851.83	3,861.92	3,823.52	18.61	15.10	117.34	805.55	226.06	128.35	94.43	33.92	3.784	
4,000.00	3,901.65	3,910.40	3,871.15	18.59	15.29	119.26	812.27	232.18	139.46	105.51	33.95	4.108	
4,050.00	3,951.17	3,960.00	3,919.92	18.57	15.48	121.62	819.01	238.12	151.86	117.95	33.91	4.479	
4,100.00	4,000.28	4,010.28	3,969.50	18.55	15.69	124.31	825.28	243.68	165.30	131.50	33.80	4.891	
4,150.00	4,048.82	4,060.55	4,019.23	18.52	15.90	127.22	830.65	248.71	179.71	146.08	33.62	5.345	
4,200.00	4,096.67	4,109.70	4,067.96	18.50	16.13	130.07	835.38	252.94	195.43	162.01	33.42	5.848	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Offset Design SEC 11, T-17-S, R-30-E - Havard Federal 12 - Original Hole - Actual													Offset Site Error:	0.00 usft
Survey Program: 100-MWD													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance				Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Total Uncertainty Axis	Separation Factor	
4,250.00	4,143.70	4,158.50	4,116.45	18.49	16.35	132.83	839.69	256.43	212.66	179.49	33.17	6.411		
4,300.00	4,189.77	4,206.69	4,164.42	18.48	16.54	135.56	843.22	259.49	231.48	198.62	32.87	7.043		
4,350.00	4,234.77	4,252.94	4,210.50	18.48	16.72	138.10	846.01	262.13	252.14	219.58	32.56	7.744		
4,400.00	4,278.56	4,298.22	4,255.67	18.49	16.90	140.47	848.32	264.40	274.79	242.53	32.26	8.518		
4,450.00	4,321.04	4,341.65	4,299.01	18.51	17.06	142.57	850.20	266.34	299.50	267.51	31.99	9.362		
4,500.00	4,362.07	4,383.76	4,341.06	18.56	17.23	144.45	851.75	268.01	326.34	294.58	31.76	10.276		
4,550.00	4,401.55	4,424.46	4,381.72	18.63	17.39	146.09	853.00	269.44	355.25	323.70	31.56	11.257		
4,600.00	4,439.38	4,464.99	4,422.22	18.72	17.52	147.58	853.98	270.62	386.13	354.77	31.36	12.312		
4,650.00	4,475.44	4,504.23	4,461.45	18.84	17.65	148.85	854.70	271.44	418.84	387.64	31.20	13.423		
4,700.00	4,509.64	4,540.44	4,497.65	19.01	17.76	149.80	855.17	271.94	453.33	422.26	31.08	14.588		
4,750.00	4,541.88	4,573.35	4,530.55	19.21	17.86	150.40	855.56	272.29	489.69	458.71	30.98	15.808		
4,800.00	4,572.08	4,604.30	4,561.50	19.45	17.96	150.73	855.92	272.55	527.82	496.92	30.90	17.079		
4,850.00	4,600.16	4,633.22	4,590.41	19.75	18.05	150.78	856.24	272.74	567.60	536.75	30.85	18.398		
4,894.38	4,623.23	4,657.09	4,614.29	20.05	18.12	150.57	856.50	272.85	604.19	573.38	30.82	19.607		
4,900.00	4,626.04	4,660.01	4,617.21	20.09	18.13	150.78	856.53	272.86	608.90	578.09	30.81	19.762		
5,000.00	4,676.04	4,710.21	4,667.40	20.91	18.28	153.99	857.04	272.99	693.01	662.27	30.74	22.542		
5,094.38	4,723.23	4,756.11	4,713.30	21.80	18.41	156.40	857.47	273.16	772.96	742.22	30.74	25.147		
5,100.00	4,726.02	4,758.81	4,716.00	21.85	18.42	156.16	857.49	273.18	777.75	747.01	30.74	25.302		
5,150.00	4,748.66	4,780.72	4,737.91	22.38	18.49	153.50	857.69	273.29	821.52	790.76	30.77	26.701		
5,200.00	4,767.34	4,798.68	4,755.87	22.98	18.54	149.46	857.84	273.39	867.15	836.32	30.82	28.135		
5,250.00	4,781.90	4,812.57	4,769.76	23.63	18.58	143.02	857.95	273.47	914.26	883.40	30.86	29.630		
5,300.00	4,792.24	4,822.31	4,779.50	24.33	18.61	132.08	858.03	273.54	962.49	931.62	30.87	31.176		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Cypress Natural Resources	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Project:	Eddy County, NM (NAD 27)	TVD Reference:	25' KB @ 3768.00usft
Reference Site:	SEC 11, T-17-S, R-30-E	MD Reference:	25' KB @ 3768.00usft
Site Error:	0.00usft	North Reference:	Grid
Reference Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	USA EDM 5000 Multi Users DB
Reference Design:	PRELIM #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 25' KB @ 3768.00usft

Offset Depths are relative to Offset Datum

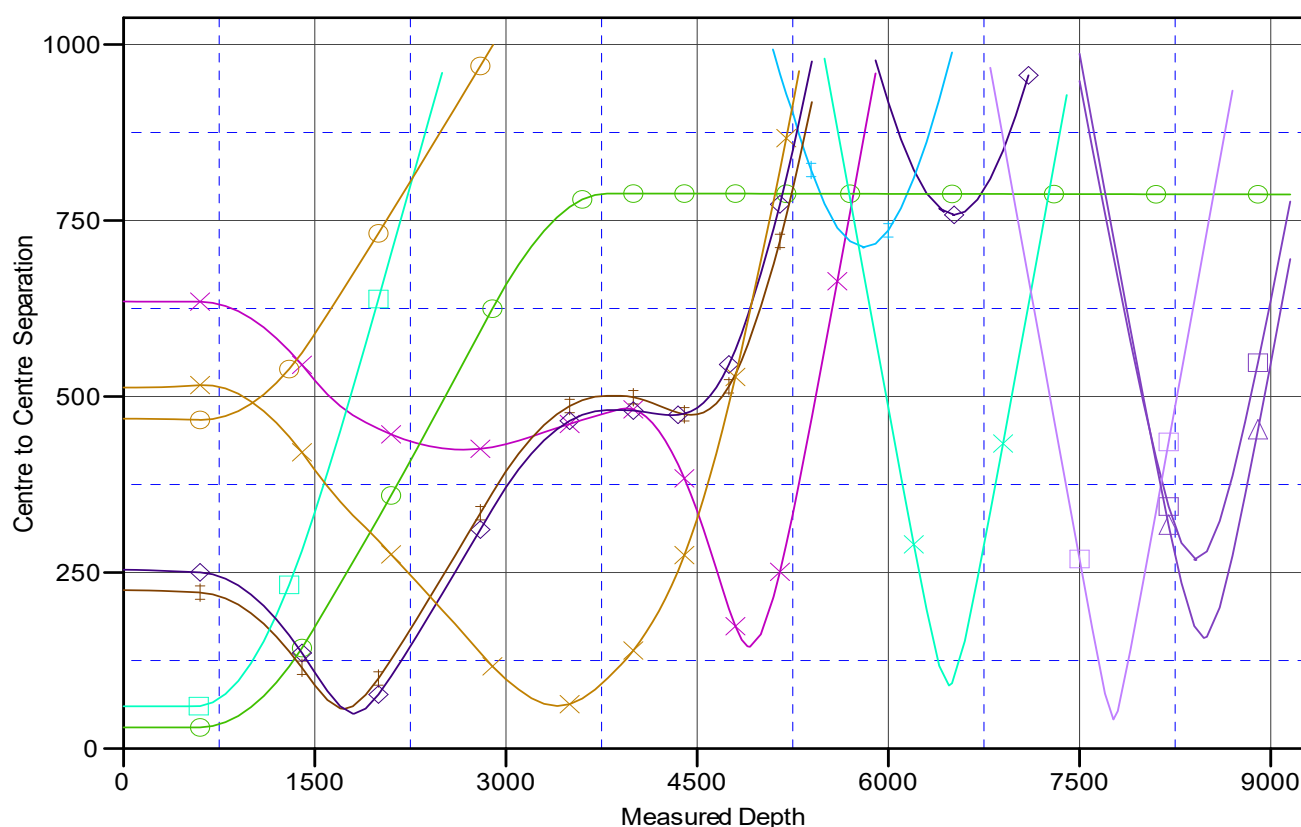
Central Meridian is -104.333333 °

Coordinates are relative to: DATA FEDERAL 3H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.22°

Ladder Plot



LEGEND

- ◆ Gissler B85, Original Hole, Actual V0
- ✕ Gissler B86, Original Hole, Actual V0
- Harvard Federal 9, Original Hole, Actual V0
- ✕ Gissler B87, Original Hole, Actual V0
- ◆ Harvard Federal 14, Original Hole, Actual V0
- ✕ Gissler B51, Original Hole, Actual V0
- ✕ Gissler B83, Original Hole, Actual V0
- ✕ Harvard Federal 12, Original Hole, Actual V0
- ✕ Gissler B73, Original Hole, Actual V0
- ✕ Harvard Federal 8, Original Hole, Actual V0
- ✕ DATAFEDERAL 2H, Original Hole, PRELIM #1 V0
- ✕ DATAFEDERAL 4H, Original Hole, PRELIM #1 V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



CATHEDRAL

Project: Eddy County, NM (NAD 27)
Site: SEC 11, T-17-S, R-30-E
Well: DATA FEDERAL 3H
Wellbore: Original Hole
PRELIM #1

WELL DETAILS: DATA FEDERAL 3H

25' KB @ 3768.00usft
Ground Level: 3743.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	674196.05	622139.30	32.852817	-103.935605

US State Plane 1927 (Exact solution)
New Mexico East 3001



Total Azimuth to Grid North
True North: -0.22°
Magnetic North: 6.77°

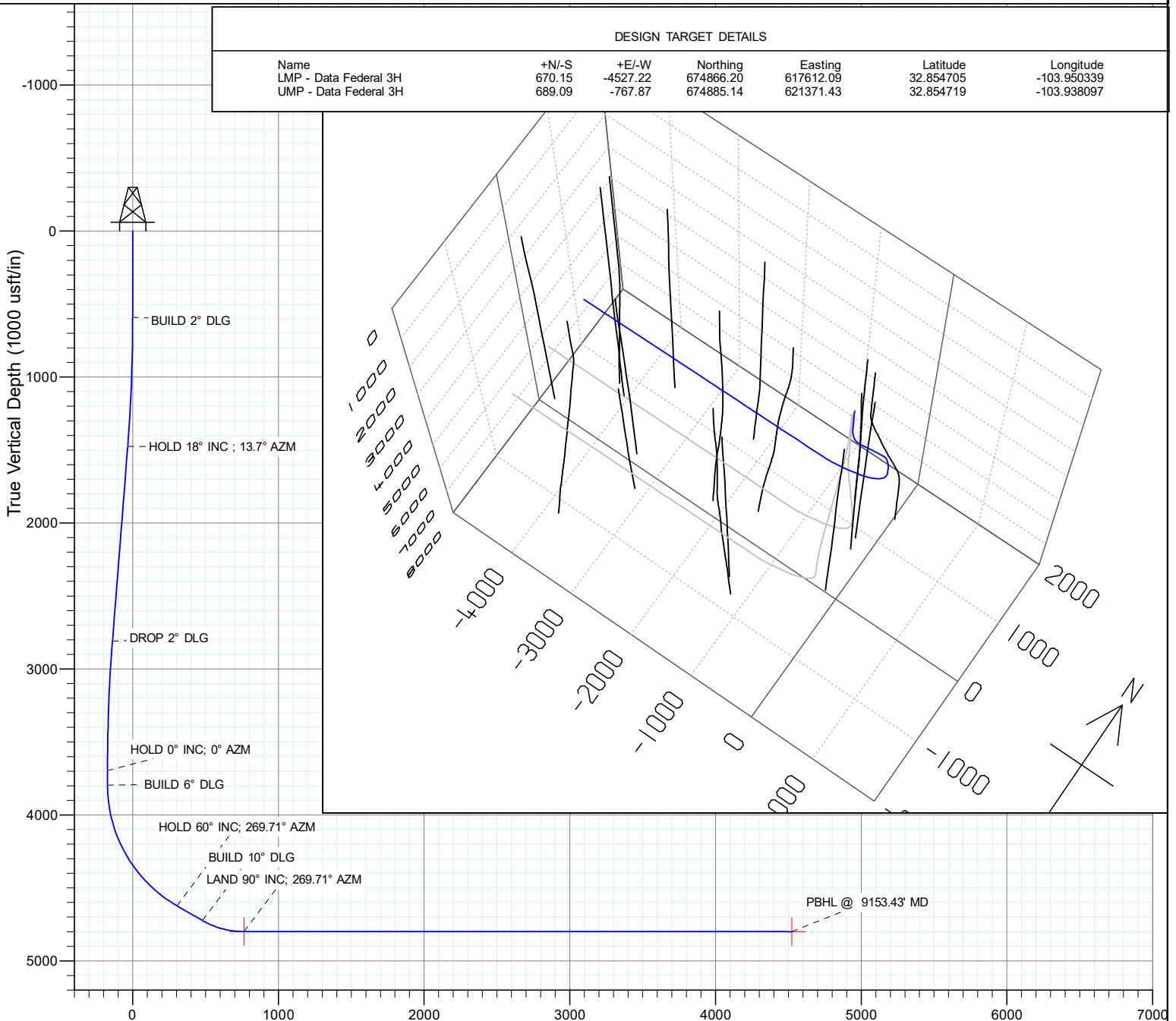
Magnetic Field
Strength: 47834.0nT
Dip Angle: 60.56°
Date: 5/27/2022
Model: HRGM

SECTION DETAILS

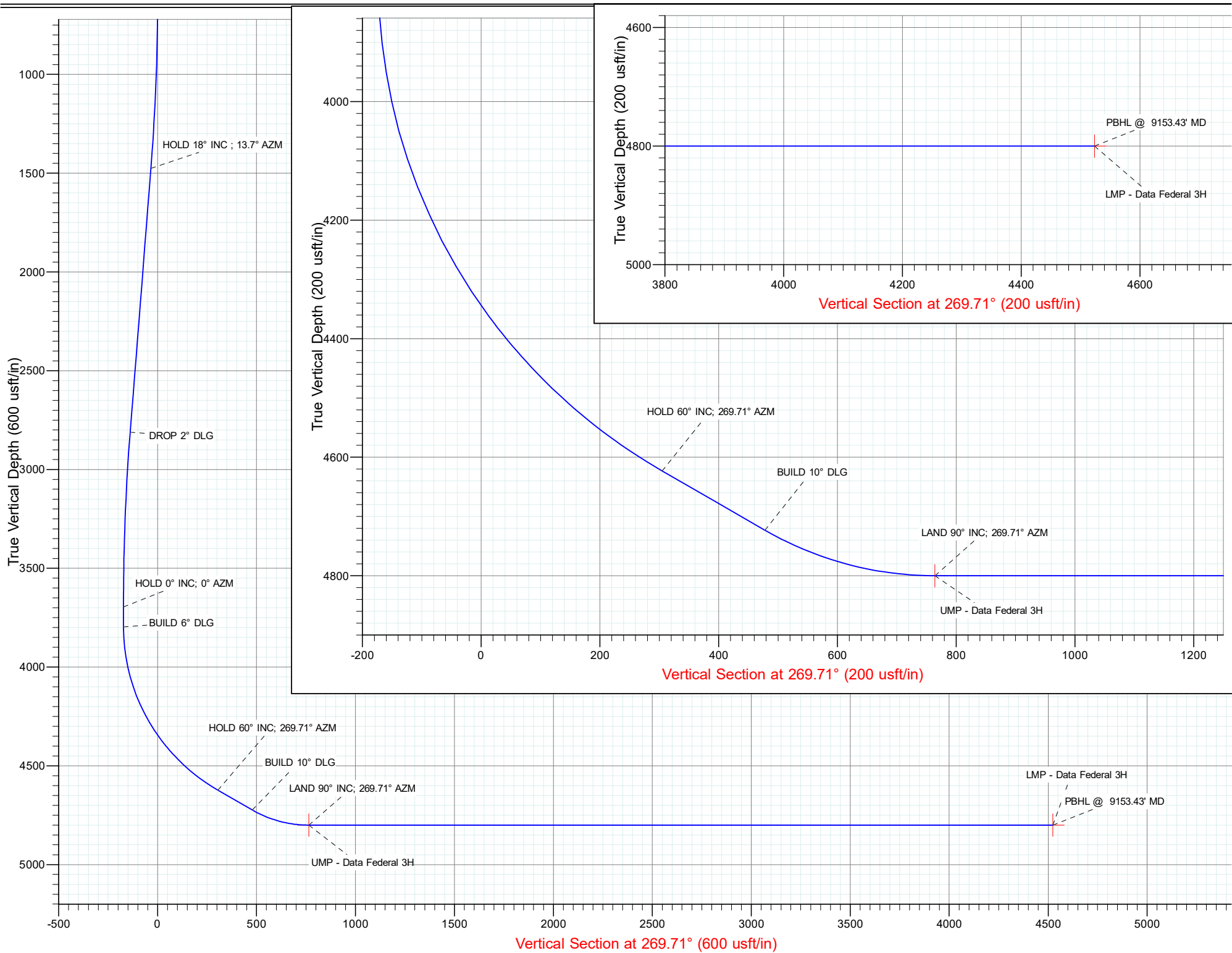
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	
591.00	0.00	0.00	591.00	0.00	0.00	0.0	0.00	0.00	BUILD 2° DLG
1490.93	18.00	13.70	1476.20	136.20	33.21	2.0	13.70	-33.90	HOLD 18° INC ; 13.7° AZM
2894.45	18.00	13.70	2811.04	557.54	135.93	0.0	0.00	-138.75	DROP 2° DLG
3794.38	0.00	0.00	3696.24	693.74	169.14	2.0	180.00	-172.65	HOLD 0° INC; 0° AZM
3894.38	0.00	0.00	3796.24	693.74	169.14	0.0	0.00	-172.65	BUILD 6° DLG
4894.38	60.00	269.71	4623.23	691.32	-308.32	6.0	269.71	304.82	HOLD 60° INC; 269.71° AZM
5094.38	60.00	269.71	4723.23	690.45	-481.52	0.0	0.00	478.02	BUILD 10° DLG
5394.38	90.00	269.71	4800.00	689.00	-768.00	10.0	0.00	764.50	LAND 90° INC; 269.71° AZM
9153.43	90.00	269.71	4800.00	670.00	-4527.00	0.0	0.00	4523.55	PBHL @ 9153.43' MD

DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LMP - Data Federal 3H	670.15	-4527.22	674866.20	617612.09	32.854705	-103.950339
UMP - Data Federal 3H	689.09	-767.87	674885.14	621371.43	32.854719	-103.938097

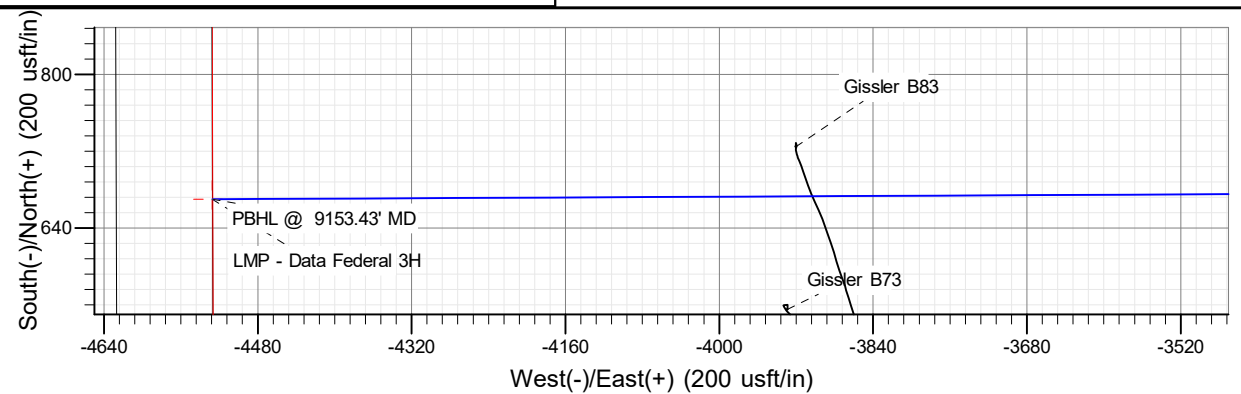
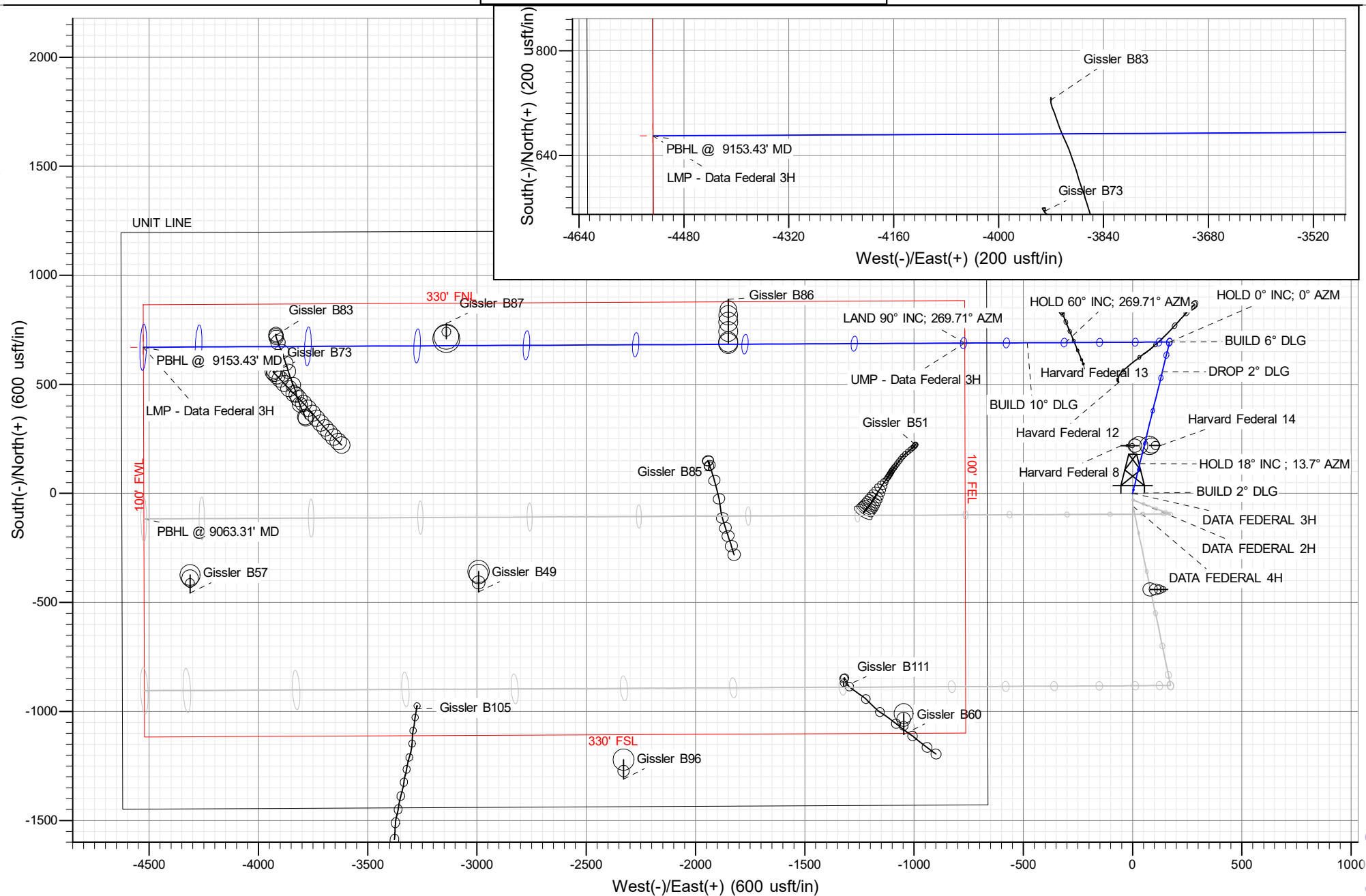


Vertical Section at 269.71° (1000 usft/in)





US State Plane 1927 (Exact solution)
New Mexico East 3001
Project: Eddy County, NM (NAD 27)
Site: SEC 11, T-17-S, R-30-E
Well: DATA FEDERAL 3H
Wellbore: Original Hole
25' KB @ 3768.00usft
Ground Elevation: 3743.00
PRELIM #1





Cypress Natural Resources

Eddy County, NM (NAD 27)

SEC 11, T-17-S, R-30-E

DATA FEDERAL 3H

Original Hole

Plan: PRELIM #1

Standard Planning Report

06 June, 2022





Planning Report



Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Company:	Cypress Natural Resources	TVD Reference:	25' KB @ 3768.00usft
Project:	Eddy County, NM (NAD 27)	MD Reference:	25' KB @ 3768.00usft
Site:	SEC 11, T-17-S, R-30-E	North Reference:	Grid
Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	PRELIM #1		

Project	Eddy County, NM (NAD 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	SEC 11, T-17-S, R-30-E				
Site Position:		Northing:	674,165.85 usft	Latitude:	32.852734
From:	Lat/Long	Easting:	622,140.34 usft	Longitude:	-103.935602
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.22

Well	DATA FEDERAL 3H					
Well Position	+N/-S	30.19 usft	Northing:	674,196.05 usft	Latitude:	32.852817
	+E/-W	-1.03 usft	Easting:	622,139.31 usft	Longitude:	-103.935605
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,743.00 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HRGM	5/27/2022	6.98	60.56	47,833.96252182

Design	PRELIM #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	269.71

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.00	
591.00	0.00	0.00	591.00	0.00	0.00	0.0	0.0	0.0	0.00	
1,490.93	18.00	13.70	1,476.20	136.20	33.21	2.0	2.0	0.0	13.70	
2,894.45	18.00	13.70	2,811.04	557.54	135.93	0.0	0.0	0.0	0.00	
3,794.38	0.00	0.00	3,696.24	693.74	169.14	2.0	-2.0	0.0	180.00	
3,894.38	0.00	0.00	3,796.24	693.74	169.14	0.0	0.0	0.0	0.00	
4,894.38	60.00	269.71	4,623.23	691.32	-308.32	6.0	6.0	0.0	269.71	
5,094.38	60.00	269.71	4,723.23	690.45	-481.52	0.0	0.0	0.0	0.00	
5,394.38	90.00	269.71	4,800.00	689.00	-768.00	10.0	10.0	0.0	0.00	
9,153.43	90.00	269.71	4,800.00	670.00	-4,527.00	0.0	0.0	0.0	0.00	



Planning Report



Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Company:	Cypress Natural Resources	TVD Reference:	25' KB @ 3768.00usft
Project:	Eddy County, NM (NAD 27)	MD Reference:	25' KB @ 3768.00usft
Site:	SEC 11, T-17-S, R-30-E	North Reference:	Grid
Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	PRELIM #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.0	0.0	0.0
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.0	0.0	0.0
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.0	0.0	0.0
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.0	0.0	0.0
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.0	0.0	0.0
591.00	0.00	0.00	591.00	0.00	0.00	0.00	0.0	0.0	0.0
BUILD 2° DLG									
600.00	0.18	13.70	600.00	0.01	0.00	0.00	2.0	2.0	0.0
700.00	2.18	13.70	699.97	2.01	0.49	-0.50	2.0	2.0	0.0
800.00	4.18	13.70	799.81	7.40	1.81	-1.84	2.0	2.0	0.0
900.00	6.18	13.70	899.40	16.17	3.94	-4.03	2.0	2.0	0.0
1,000.00	8.18	13.70	998.61	28.32	6.90	-7.05	2.0	2.0	0.0
1,100.00	10.18	13.70	1,097.33	43.82	10.68	-10.90	2.0	2.0	0.0
1,200.00	12.18	13.70	1,195.42	62.65	15.28	-15.59	2.0	2.0	0.0
1,300.00	14.18	13.70	1,292.78	84.80	20.68	-21.10	2.0	2.0	0.0
1,400.00	16.18	13.70	1,389.29	110.24	26.88	-27.44	2.0	2.0	0.0
1,490.93	18.00	13.70	1,476.20	136.20	33.21	-33.90	2.0	2.0	0.0
HOLD 18° INC ; 13.7° AZM									
1,500.00	18.00	13.70	1,484.83	138.92	33.87	-34.57	0.0	0.0	0.0
1,600.00	18.00	13.70	1,579.93	168.94	41.19	-42.04	0.0	0.0	0.0
1,700.00	18.00	13.70	1,675.04	198.96	48.51	-49.52	0.0	0.0	0.0
1,800.00	18.00	13.70	1,770.15	228.98	55.83	-56.99	0.0	0.0	0.0
1,900.00	18.00	13.70	1,865.25	259.00	63.15	-64.46	0.0	0.0	0.0
2,000.00	18.00	13.70	1,960.36	289.02	70.47	-71.93	0.0	0.0	0.0
2,100.00	18.00	13.70	2,055.47	319.04	77.79	-79.40	0.0	0.0	0.0
2,200.00	18.00	13.70	2,150.57	349.06	85.11	-86.87	0.0	0.0	0.0
2,300.00	18.00	13.70	2,245.68	379.08	92.42	-94.34	0.0	0.0	0.0
2,400.00	18.00	13.70	2,340.79	409.10	99.74	-101.81	0.0	0.0	0.0
2,500.00	18.00	13.70	2,435.89	439.12	107.06	-109.28	0.0	0.0	0.0
2,600.00	18.00	13.70	2,531.00	469.14	114.38	-116.75	0.0	0.0	0.0
2,700.00	18.00	13.70	2,626.10	499.16	121.70	-124.23	0.0	0.0	0.0
2,800.00	18.00	13.70	2,721.21	529.18	129.02	-131.70	0.0	0.0	0.0
2,894.45	18.00	13.70	2,811.04	557.54	135.93	-138.75	0.0	0.0	0.0
DROP 2° DLG									
2,900.00	17.89	13.70	2,816.32	559.20	136.34	-139.17	2.0	-2.0	0.0
3,000.00	15.89	13.70	2,912.00	587.42	143.22	-146.19	2.0	-2.0	0.0
3,100.00	13.89	13.70	3,008.64	612.38	149.30	-152.40	2.0	-2.0	0.0
3,200.00	11.89	13.70	3,106.12	634.05	154.59	-157.79	2.0	-2.0	0.0
3,300.00	9.89	13.70	3,204.31	652.40	159.06	-162.36	2.0	-2.0	0.0
3,400.00	7.89	13.70	3,303.11	667.41	162.72	-166.10	2.0	-2.0	0.0
3,500.00	5.89	13.70	3,402.38	679.06	165.56	-169.00	2.0	-2.0	0.0
3,600.00	3.89	13.70	3,502.01	687.34	167.58	-171.06	2.0	-2.0	0.0
3,700.00	1.89	13.70	3,601.88	692.23	168.77	-172.27	2.0	-2.0	0.0
3,794.38	0.00	0.00	3,696.24	693.74	169.14	-172.65	2.0	-2.0	0.0
HOLD 0° INC; 0° AZM									
3,800.00	0.00	0.00	3,701.86	693.74	169.14	-172.65	0.0	0.0	0.0
3,894.38	0.00	0.00	3,796.24	693.74	169.14	-172.65	0.0	0.0	0.0
BUILD 6° DLG									
3,900.00	0.34	269.71	3,801.86	693.74	169.12	-172.63	6.0	6.0	0.0
4,000.00	6.34	269.71	3,901.65	693.71	163.30	-166.81	6.0	6.0	0.0
4,100.00	12.34	269.71	4,000.28	693.63	147.09	-150.60	6.0	6.0	0.0
4,200.00	18.34	269.71	4,096.67	693.49	120.65	-124.16	6.0	6.0	0.0
4,300.00	24.34	269.71	4,189.77	693.31	84.28	-87.79	6.0	6.0	0.0



Planning Report



Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Company:	Cypress Natural Resources	TVD Reference:	25' KB @ 3768.00usft
Project:	Eddy County, NM (NAD 27)	MD Reference:	25' KB @ 3768.00usft
Site:	SEC 11, T-17-S, R-30-E	North Reference:	Grid
Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	PRELIM #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400.00	30.34	269.71	4,278.56	693.08	38.38	-41.89	6.0	6.0	0.0
4,500.00	36.34	269.71	4,362.07	692.80	-16.55	13.04	6.0	6.0	0.0
4,600.00	42.34	269.71	4,439.38	692.48	-79.91	76.40	6.0	6.0	0.0
4,700.00	48.34	269.71	4,509.64	692.12	-151.00	147.50	6.0	6.0	0.0
4,800.00	54.34	269.71	4,572.09	691.72	-229.05	225.54	6.0	6.0	0.0
4,894.38	60.00	269.71	4,623.23	691.32	-308.32	304.82	6.0	6.0	0.0
HOLD 60° INC; 269.71° AZM									
4,900.00	60.00	269.71	4,626.04	691.30	-313.19	309.68	0.0	0.0	0.0
5,000.00	60.00	269.71	4,676.04	690.86	-399.79	396.29	0.0	0.0	0.0
5,094.38	60.00	269.71	4,723.23	690.45	-481.52	478.02	0.0	0.0	0.0
BUILD 10° DLG									
5,100.00	60.56	269.71	4,726.02	690.42	-486.40	482.90	10.0	10.0	0.0
5,200.00	70.56	269.71	4,767.34	689.96	-577.33	573.83	10.0	10.0	0.0
5,300.00	80.56	269.71	4,792.24	689.47	-674.05	670.55	10.0	10.0	0.0
5,394.38	90.00	269.71	4,800.00	689.00	-768.00	764.50	10.0	10.0	0.0
LAND 90° INC; 269.71° AZM									
5,400.00	90.00	269.71	4,800.00	688.97	-773.62	770.12	0.0	0.0	0.0
5,500.00	90.00	269.71	4,800.00	688.46	-873.62	870.12	0.0	0.0	0.0
5,600.00	90.00	269.71	4,800.00	687.96	-973.62	970.12	0.0	0.0	0.0
5,700.00	90.00	269.71	4,800.00	687.45	-1,073.61	1,070.12	0.0	0.0	0.0
5,800.00	90.00	269.71	4,800.00	686.95	-1,173.61	1,170.12	0.0	0.0	0.0
5,900.00	90.00	269.71	4,800.00	686.44	-1,273.61	1,270.12	0.0	0.0	0.0
6,000.00	90.00	269.71	4,800.00	685.94	-1,373.61	1,370.12	0.0	0.0	0.0
6,100.00	90.00	269.71	4,800.00	685.43	-1,473.61	1,470.12	0.0	0.0	0.0
6,200.00	90.00	269.71	4,800.00	684.93	-1,573.61	1,570.12	0.0	0.0	0.0
6,300.00	90.00	269.71	4,800.00	684.42	-1,673.61	1,670.12	0.0	0.0	0.0
6,400.00	90.00	269.71	4,800.00	683.92	-1,773.61	1,770.12	0.0	0.0	0.0
6,500.00	90.00	269.71	4,800.00	683.41	-1,873.60	1,870.12	0.0	0.0	0.0
6,600.00	90.00	269.71	4,800.00	682.90	-1,973.60	1,970.12	0.0	0.0	0.0
6,700.00	90.00	269.71	4,800.00	682.40	-2,073.60	2,070.12	0.0	0.0	0.0
6,800.00	90.00	269.71	4,800.00	681.89	-2,173.60	2,170.12	0.0	0.0	0.0
6,900.00	90.00	269.71	4,800.00	681.39	-2,273.60	2,270.12	0.0	0.0	0.0
7,000.00	90.00	269.71	4,800.00	680.88	-2,373.60	2,370.12	0.0	0.0	0.0
7,100.00	90.00	269.71	4,800.00	680.38	-2,473.60	2,470.12	0.0	0.0	0.0
7,200.00	90.00	269.71	4,800.00	679.87	-2,573.59	2,570.12	0.0	0.0	0.0
7,300.00	90.00	269.71	4,800.00	679.37	-2,673.59	2,670.12	0.0	0.0	0.0
7,400.00	90.00	269.71	4,800.00	678.86	-2,773.59	2,770.12	0.0	0.0	0.0
7,500.00	90.00	269.71	4,800.00	678.36	-2,873.59	2,870.12	0.0	0.0	0.0
7,600.00	90.00	269.71	4,800.00	677.85	-2,973.59	2,970.12	0.0	0.0	0.0
7,700.00	90.00	269.71	4,800.00	677.35	-3,073.59	3,070.12	0.0	0.0	0.0
7,800.00	90.00	269.71	4,800.00	676.84	-3,173.59	3,170.12	0.0	0.0	0.0
7,900.00	90.00	269.71	4,800.00	676.33	-3,273.59	3,270.12	0.0	0.0	0.0
8,000.00	90.00	269.71	4,800.00	675.83	-3,373.58	3,370.12	0.0	0.0	0.0
8,100.00	90.00	269.71	4,800.00	675.32	-3,473.58	3,470.12	0.0	0.0	0.0
8,200.00	90.00	269.71	4,800.00	674.82	-3,573.58	3,570.12	0.0	0.0	0.0
8,300.00	90.00	269.71	4,800.00	674.31	-3,673.58	3,670.12	0.0	0.0	0.0
8,400.00	90.00	269.71	4,800.00	673.81	-3,773.58	3,770.12	0.0	0.0	0.0
8,500.00	90.00	269.71	4,800.00	673.30	-3,873.58	3,870.12	0.0	0.0	0.0
8,600.00	90.00	269.71	4,800.00	672.80	-3,973.58	3,970.12	0.0	0.0	0.0
8,700.00	90.00	269.71	4,800.00	672.29	-4,073.58	4,070.12	0.0	0.0	0.0
8,800.00	90.00	269.71	4,800.00	671.79	-4,173.57	4,170.12	0.0	0.0	0.0
8,900.00	90.00	269.71	4,800.00	671.28	-4,273.57	4,270.12	0.0	0.0	0.0
9,000.00	90.00	269.71	4,800.00	670.78	-4,373.57	4,370.12	0.0	0.0	0.0



Planning Report



Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DATA FEDERAL 3H
Company:	Cypress Natural Resources	TVD Reference:	25' KB @ 3768.00usft
Project:	Eddy County, NM (NAD 27)	MD Reference:	25' KB @ 3768.00usft
Site:	SEC 11, T-17-S, R-30-E	North Reference:	Grid
Well:	DATA FEDERAL 3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	PRELIM #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,100.00	90.00	269.71	4,800.00	670.27	-4,473.57	4,470.12	0.0	0.0	0.0
9,153.43	90.00	269.71	4,800.00	670.00	-4,527.00	4,523.55	0.0	0.0	0.0
PBHL @ 9153.43' MD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LMP - Data Federal 3H - hit/miss target - Shape - Point	0.00	0.00	4,800.00	670.15	-4,527.22	674,866.20	617,612.09	32.854705	-103.950339
- plan misses target center by 0.26usft at 9153.43usft MD (4800.00 TVD, 670.00 N, -4527.00 E)									
UMP - Data Federal 3H - plan misses target center by 0.09usft at 5394.25usft MD (4800.00 TVD, 689.00 N, -767.87 E) - Point	0.00	0.00	4,800.00	689.09	-767.87	674,885.14	621,371.44	32.854719	-103.938097

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
591.00	591.00	0.00	0.00	BUILD 2° DLG
1,490.93	1,476.20	136.20	33.21	HOLD 18° INC ; 13.7° AZM
2,894.45	2,811.04	557.54	135.93	DROP 2° DLG
3,794.38	3,696.24	693.74	169.14	HOLD 0° INC; 0° AZM
3,894.38	3,796.24	693.74	169.14	BUILD 6° DLG
4,894.38	4,623.23	691.32	-308.32	HOLD 60° INC; 269.71° AZM
5,094.38	4,723.23	690.45	-481.52	BUILD 10° DLG
5,394.38	4,800.00	689.00	-768.00	LAND 90° INC; 269.71° AZM
9,153.43	4,800.00	670.00	-4,527.00	PBHL @ 9153.43' MD

a

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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: MR NM OPERATING

OGRID: 330506

Date: 2-20-23

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Data Federal 3H	30-15-46701	A-11-17S-30E	1209 FNL & 654 FEL	375	500	2,500

IV. Central Delivery Point Name: DCP Midstream, LLC in E-12-17S-30E [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Data Federal 3H	30-015-46701	3-15-23	5-1-23	5-15-23	6-1-23	6-5-23

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☒ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☒ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☒ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:



Printed Name: Cory Walk

Title: Consultant

E-mail Address: cory@permitswest.com

Date: 2-23-23

Phone: 505 466-8120

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:

Title:

Approval Date:

Conditions of Approval:

MR NM Operating, LLC Natural Gas Management Plan

VI. Separation Equipment

Separation equipment will be built on the Data pad. The anticipated production rates from the Data 1H will be accounted for during design/construction to ensure sufficient capacity exists at the surface to capture all produced fluids.

VII. Operational Practices

MR NM Operating, LLC will take the following actions outlined below to comply with 19.15.27.8 NMAC

- A. MR NM Operating, LLC plans to maximize recovery of natural gas and minimize waste thru venting/flaring
- B. MR NM Operating, LLC plans to flare during drilling operations from a location exceeding 100' away from the SHL. The flare will be used to combust natural gas brought to the surface during normal drilling operations. Safety will remain priority #1, and MR NM Operating, LLC will account and report appropriately pertaining to any potential emergency.
- C. MR NM Operating, LLC plans flare any natural gas brought to the surface during normal completions operations. During flowback, fluids will immediately flow thru a separator on location. Gas will not be flared/vented unless there's a safety concern with pressures at the surface. Gas is expected to meet pipeline standards; if not, MR NM Operating, LLC will flare for the allowed 60 days or less until the gas meets quality specifications. MR NM Operating, LLC plans to sample the produced gas at a reasonable frequency or upon request from regulatory bodies.
- D. MR NM Operating, LLC does not plan to flare or vent natural gas except during the situations outlined in 19.15.27.8 D. (1-4).
- E. MR NM Operating, LLC will comply with standards outlined in 19.15.27.8 E. (1-8). EOG Resources, Inc. will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
- F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, EOG Resources, Inc. will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

VIII. Best Management Practices

Pressure maintenance at surface is vital to maintain safe working conditions; venting will be utilized only to depressurize our surface equipment. When maintaining surface or downhole equipment associated with the current production, the well will be shut-in to eliminate venting. If maintenance work takes place on the gas gathering side, gas will route to the flare to eliminate venting.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 190446

CONDITIONS

Operator: MR NM Operating LLC 5950 Berkshire Lane Dallas, TX 75225	OGRID: 330506
	Action Number: 190446
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	3/6/2023