

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMNM77090

- 1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
CENTENNIAL RESOURCE PRODUCTION
Contact: MELISSA LUKE
Email: melissa.luke@cdevinc.com8. Lease Name and Well No.
ROMEO FEDERAL COM 1H3. Address 1001 17TH STREET SUITE 1800
DENVER, CO 802023a. Phone No. (include area code)
Ph: 720-499-14829. API Well No.
30-025-42999

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface NWNW Lot D 400FNL 660FWL 32.209192 N Lat, 103.464233 W Lon

At top prod interval reported below NWNW Lot D 714FNL 348FWL 32.208329 N Lat, 103.465243 W Lon

At total depth SWSW Lot M 265FSL 380FWL 32.196519 N Lat, 103.465146 W Lon

10. Field and Pool, or Exploratory
RED HILLS BS, NORTH11. Sec., T., R., M., or Block and Survey
or Area Sec 22 T24S R34E Mer NMP12. County or Parish
LEA13. State
NM14. Date Spudded
01/21/201715. Date T.D. Reached
02/16/201716. Date Completed
☐ D & A ☒ Ready to Prod.
07/30/201717. Elevations (DF, KB, RT, GL)*
3534 GL18. Total Depth: MD 15905
TVD 1121019. Plug Back T.D.: MD 15854
TVD 1120420. Depth Bridge Plug Set: MD
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
RADIAL CEMENT BOND LOG22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

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

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	54.5	0	1280		1280		0	
11.000	8.625 J-55	32.0	0	5442		1300		0	
7.875	5.500 P-110	20.0	9903	15900		1560		5032	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
AND BONE SPRING SAND	11604	15808	11604 TO 15808	0.350	1178	PRODUCING
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
11604 TO 15808	50,464,420LBS PROPANT (100 MESH& 40/70)
11604 TO 15808	47,742,816GAL FLUID (HCL 15% AND SLICKWATER)

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
07/30/2017	08/17/2017	24	→	1570.0	1380.0	4438.0	40.8		FLOW FROM WELL
Choke Size	Tbg. Press Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
54	SI 0	800.0	→	1570	1380	4438		POW	

28a. Production - Interval B

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

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

ELECTRONIC SUBMISSION #390904 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

Reclamation due: 07/30/2018

HOBBS OIL
NMOCD
FEB 16 2018
Hobbs
RECEIVEDACCEPTED FOR RECORD
FEB 6 2018
BUREAU OF LAND MANAGEMENT
ROSEMBO FIELD OFFICE

K4

K2

28b. Production - Interval C

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

28c. Production - Interval D

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

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
LAMAR	5456	5480	CARBONATE	LAMAR	5456
BELL CANYON	5480	6382	SAND	BELL CANYON	5480
CHERRY CANYON	6382	7798	SAND	CHERRY CANYON	6382
BRUSHY CANYON	7798	9299	SAND	BRUSHY CANYON	7798
AVALON SHALE	9299	10302	SHALE/CARBONATE	AVALON SHALE	9299
1ST BONE SPRING	10302	10871	SAND/SHALE/CARBONATE	1ST BONE SPRING	10302
2ND BONE SPRING	10871	11385	SAND	2ND BONE SPRING	10871

32. Additional remarks (include plugging procedure):

33. Circle enclosed attachments:

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

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

Electronic Submission #390904 Verified by the BLM Well Information System.
For CENTENNIAL RESOURCE PRODUCTION, sent to the Hobbs
Committed to AFMSS for processing by DEBORAH HAM on 10/25/2017 ()

Name (please print) MELISSA LUKETitle SR. REGULATORY ANALYSTSignature (Electronic Submission)Date 10/05/2017

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

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

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) 354-6178 Fax: (505) 354-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 25-42999	Pool Code	Pool Name
Property Code	Property Name ROMEO FEDERAL COM	Well Number 1H
GRID No.	Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC	Elevation 3534'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
D	22	24 S	34 E		400	NORTH	660	WEST	LEA

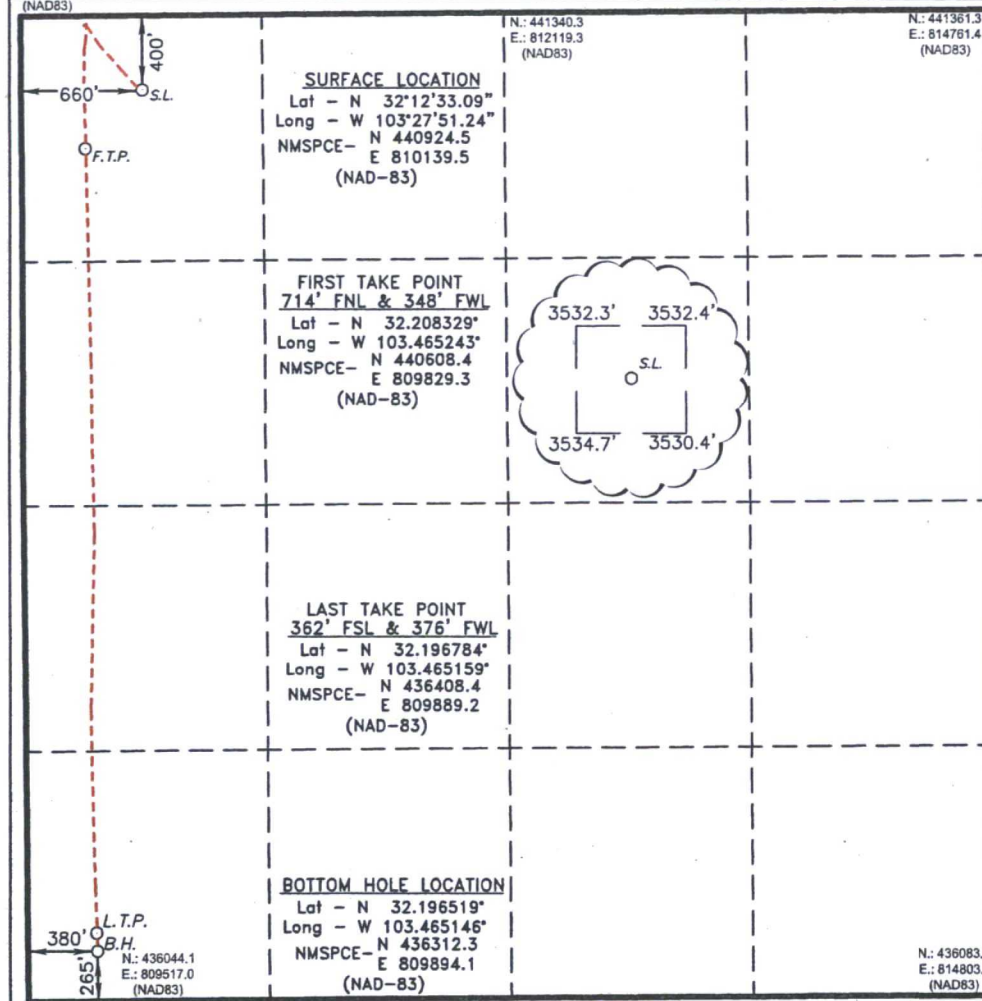
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	SOUTH/South line	Feet from the	East/West line	County
M	22	24 S	34 E		265	SOUTH	380	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
-----------------	-----------------	--------------------	-----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

N: 441319.2
E: 809477.2
(NAD83)



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Digitally signed by Melissa Luke
DN: cn=Melissa Luke, o=US,
o=Centennial Resources Production,
c=US, email=melissa.luke@cdevin.com, Date: 2017.08.01 08:37:51 -0600

Melissa Luke

Printed Name

melissa.luke@cdevin.com

Email Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

AUGUST 28 2017

Date Surveyed

Signature & Seal of
Professional Surveyor

Certificate No. Gary L. Jones 7977
DASIN SERVICES

0' 500' 1000' 1500' 2000'
SCALE: 1" = 1000'
WO Num.: 33248

GMT Exploration, LLC
Romeo Federal 1H
Lea County, NM

Section 3

Newsco Final Definitive

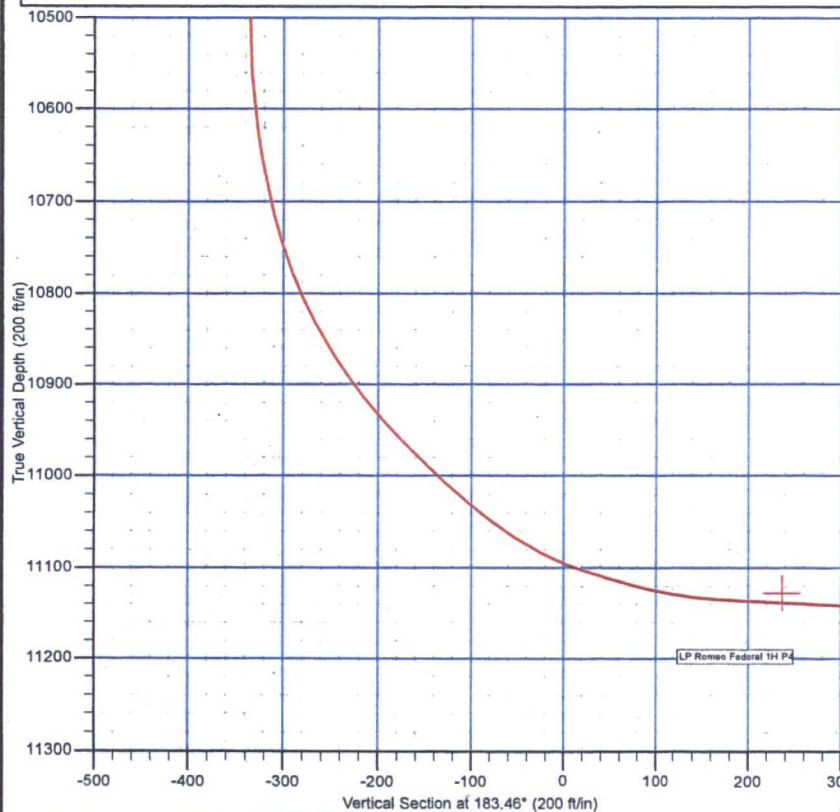
Drilling Plot

Project: Lea County, NM (NAD 83)
Site: Romeo Federal 1H
Well: Romeo Federal 1H
Wellbore: Romeo Federal 1H
Design: Romeo Federal 1H
Latitude: 32° 12' 33.090 N
Longitude: 103° 27' 51.240 W
GL: 3534.00
KB: WELL @ 3554.00ft (McVay 10)

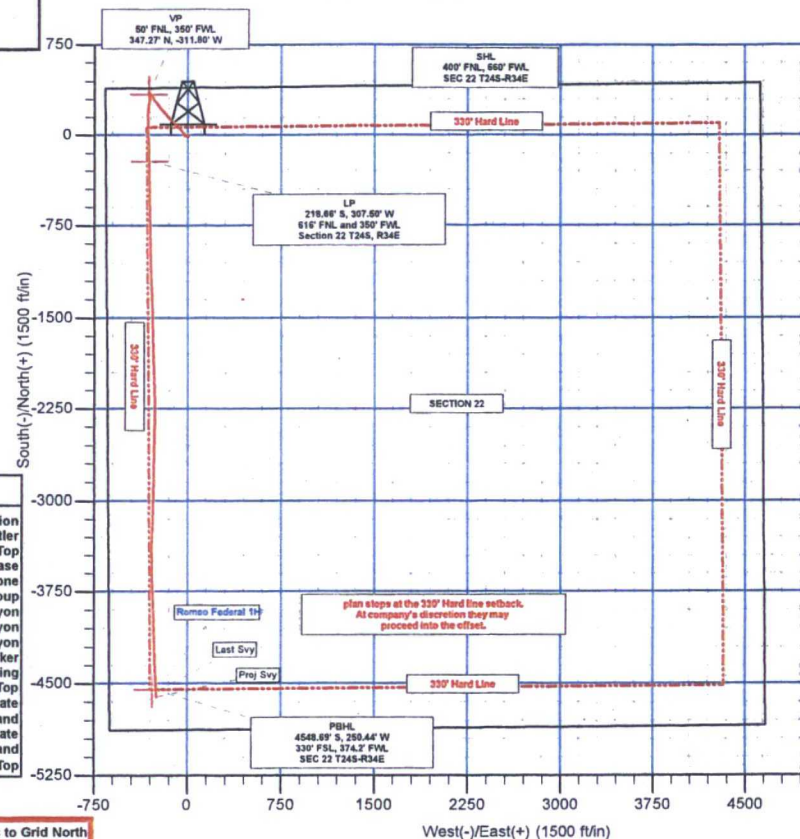
WELLBORE TARGET DETAILS (LAT/LONG)							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL Romeo Federal 1H P6	11197.15	-4548.69	-250.43	436376.05	809888.71	32° 11' 48.101 N	103° 27' 54.582 W

WELL DETAILS: Romeo Federal 1H							
+N/-S	+E/-W	Northing	Ground Level:	Latitude	Longitude	Slot	
0.00	0.00	440924.73	3534.00 Easting 810139.14	32° 12' 33.090 N	103° 27' 51.240 W		

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Annotation
15574.00	86.58	177.81	11181.28	-4282.87	-260.82	0.00	0.00	4290.72	Start 266.49 hold at 15574.00 MD
15840.49	86.58	177.81	11197.18	-4548.69	-250.46	0.00	0.00	4555.58	TD at 15840.49



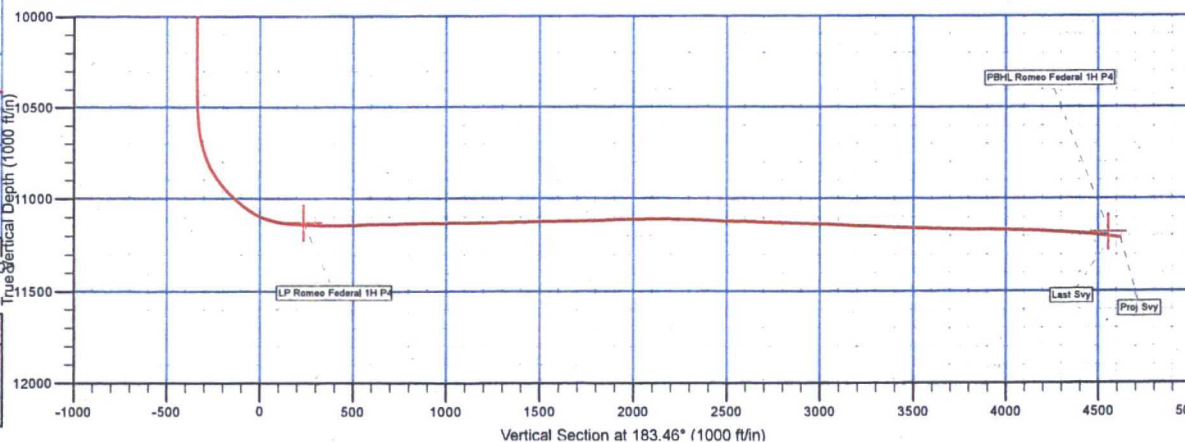
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1195.09	1195.14	Rustler
1295.10	1295.16	Salt Top
3014.96	3015.62	Salt Base
3049.95	3050.63	Lamar Limestone
5350.04	5351.13	Delaware Mountain Group
5375.05	5376.13	Delaware Bell Canyon
6578.65	6593.22	Cherry Canyon
7746.67	7780.26	Brushy Canyon
9040.77	9080.33	Lower Brushy Canyon Marker
9180.77	9220.34	Bone Spring
9230.77	9270.34	Avalon Shale Top
9415.75	9455.33	Carbonate
10230.63	10270.56	1st Bone Spring Sand
10455.63	10495.57	Carbonate
10831.48	10881.49	2nd Bone Spring Sand
11074.24	11217.13	Horizontal Interval Top



Survey: Survey #1 (Romeo Federal 1H/Romeo Federal 1H)
Created By: TRACY WILLIAMS Date: 13:58, February 24 2017

PROJECT DETAILS: Lea County, NM (NAD 83)	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level

CASING DETAILS			
TVD	MD	Name	Size
1264.95	1265.00	13 3/8"	13-3/8
5440.91	5442.00	8 5/8"	8-5/8
11197.18	15840.49	5 1/2"	5-1/2



GMT Exploration, LLC
Romeo Federal 1H
Lea County, NM

Section 4

Newsco Final Definitive

Directional Survey



GMT Exploration

Lea County, NM (NAD 83)

Romeo Federal 1H

Romeo Federal 1H

Romeo Federal 1H

Survey: Survey #1

Standard Survey Report

24 February, 2017



Company:	GMT Exploration	Local Co-ordinate Reference:	Well Romeo Federal 1H
Project:	Lea County, NM (NAD 83)	TVD Reference:	WELL @ 3554.00ft (McVay 10)
Site:	Romeo Federal 1H	MD Reference:	WELL @ 3554.00ft (McVay 10)
Well:	Romeo Federal 1H	North Reference:	Grid
Wellbore:	Romeo Federal 1H	Survey Calculation Method:	Minimum Curvature
Design:	Romeo Federal 1H	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Romeo Federal 1H		
Site Position:		Northing:	440,924.73 usft
From:	Lat/Long	Easting:	810,139.14 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16"
		Latitude:	32° 12' 33.090 N
		Longitude:	103° 27' 51.240 W
		Grid Convergence:	0.46 °

Well	Romeo Federal 1H		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	0.00 ft
		Latitude:	32° 12' 33.090 N
		Longitude:	103° 27' 51.240 W
		Ground Level:	3,534.00 ft

Wellbore	Romeo Federal 1H		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	2017/01/13	6.95
			Dip Angle
			60.07
			Field Strength
			47,984

Design	Romeo Federal 1H		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction
			183.46

Survey Program	Date 2017/02/24		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		
118.00	15,905.00	Survey #1 (Romeo Federal 1H)	MWD
			Description
			OWSG MWD - Standard

Survey										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate	
(ft)			(ft)			(ft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
118.00	0.20	50.40	118.00	0.13	0.16	-0.14	0.17	0.17	0.00	
205.00	0.20	123.30	205.00	0.14	0.40	-0.17	0.27	0.00	83.79	
299.00	0.20	157.00	299.00	-0.10	0.60	0.06	0.12	0.00	35.85	
392.00	0.30	117.20	392.00	-0.36	0.88	0.30	0.21	0.11	-42.80	
483.00	0.40	118.00	483.00	-0.62	1.38	0.53	0.11	0.11	0.88	
574.00	0.60	148.40	573.99	-1.17	1.91	1.05	0.36	0.22	33.41	
661.00	0.50	136.10	660.99	-1.83	2.41	1.68	0.18	-0.11	-14.14	
750.00	0.60	158.60	749.98	-2.55	2.85	2.37	0.27	0.11	25.28	
844.00	0.90	150.70	843.98	-3.65	3.39	3.44	0.34	0.32	-8.40	
939.00	0.90	152.60	938.97	-4.96	4.10	4.70	0.03	0.00	2.00	
1,033.00	0.60	161.40	1,032.96	-6.08	4.59	5.79	0.34	-0.32	9.36	
1,128.00	0.50	159.40	1,127.95	-6.94	4.90	6.63	0.11	-0.11	-2.11	

Company: GMT Exploration
Project: Lea County, NM (NAD 83)
Site: Romeo Federal 1H
Well: Romeo Federal 1H
Wellbore: Romeo Federal 1H
Design: Romeo Federal 1H

Local Co-ordinate Reference: Well Romeo Federal 1H
TVD Reference: WELL @ 3554.00ft (McVay 10)
MD Reference: WELL @ 3554.00ft (McVay 10)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,225.00	0.50	185.20	1,224.95	-7.76	5.01	7.44	0.23	0.00	26.60
1,302.00	0.70	209.60	1,301.94	-8.50	4.75	8.20	0.42	0.26	31.69
1,397.00	0.60	230.50	1,396.94	-9.32	4.08	9.06	0.27	-0.11	22.00
1,493.00	1.20	265.30	1,492.93	-9.73	2.69	9.55	0.82	0.63	36.25
1,589.00	1.80	273.20	1,588.89	-9.72	0.18	9.70	0.66	0.63	8.23
1,683.00	1.90	279.20	1,682.85	-9.39	-2.83	9.55	0.23	0.11	6.38
1,778.00	2.00	283.60	1,777.79	-8.75	-6.00	9.10	0.19	0.11	4.63
1,874.00	2.30	284.80	1,873.72	-7.87	-9.49	8.42	0.32	0.31	1.25
1,969.00	2.60	292.40	1,968.64	-6.56	-13.33	7.35	0.46	0.32	8.00
2,065.00	0.90	274.80	2,064.59	-5.66	-16.09	6.62	1.84	-1.77	-18.33
2,160.00	0.40	238.40	2,159.58	-5.78	-17.12	6.80	0.66	-0.53	-38.32
2,255.00	0.80	270.00	2,254.58	-5.95	-18.06	7.03	0.53	0.42	33.26
2,350.00	0.80	273.50	2,349.57	-5.91	-19.39	7.07	0.05	0.00	3.68
2,446.00	1.00	289.80	2,445.56	-5.58	-20.84	6.83	0.34	0.21	16.98
2,541.00	1.20	286.00	2,540.54	-5.03	-22.58	6.38	0.22	0.21	-4.00
2,637.00	1.50	291.40	2,636.51	-4.29	-24.72	5.78	0.34	0.31	5.63
2,732.00	1.90	305.90	2,731.47	-2.92	-27.15	4.55	0.62	0.42	15.26
2,828.00	2.20	306.10	2,827.41	-0.90	-29.93	2.70	0.31	0.31	0.21
2,923.00	1.40	326.70	2,922.36	1.15	-32.04	0.79	1.07	-0.84	21.68
3,018.00	1.40	339.10	3,017.33	3.20	-33.09	-1.20	0.32	0.00	13.05
3,113.00	1.60	343.80	3,112.30	5.56	-33.87	-3.51	0.25	0.21	4.95
3,208.00	1.80	350.00	3,207.26	8.30	-34.50	-6.21	0.29	0.21	6.53
3,304.00	1.50	15.60	3,303.22	11.00	-34.43	-8.90	0.82	-0.31	26.67
3,399.00	0.80	67.20	3,398.20	12.45	-33.48	-10.41	1.25	-0.74	54.32
3,494.00	0.90	96.30	3,493.19	12.63	-32.13	-10.67	0.46	0.11	30.63
3,589.00	1.20	99.80	3,588.18	12.38	-30.41	-10.52	0.32	0.32	3.68
3,685.00	1.40	103.00	3,684.15	11.94	-28.27	-10.21	0.22	0.21	3.33
3,780.00	0.80	112.70	3,779.13	11.42	-26.53	-9.80	0.66	-0.63	10.21
3,875.00	0.90	132.70	3,874.12	10.66	-25.37	-9.11	0.33	0.11	21.05
3,970.00	0.70	130.40	3,969.11	9.78	-24.38	-8.29	0.21	-0.21	-2.42
4,066.00	0.60	106.90	4,065.11	9.25	-23.45	-7.82	0.29	-0.10	-24.48
4,160.00	0.60	130.20	4,159.10	8.79	-22.61	-7.41	0.26	0.00	24.79
4,255.00	0.50	163.20	4,254.10	8.07	-22.11	-6.73	0.34	-0.11	34.74
4,350.00	0.60	141.20	4,349.10	7.29	-21.67	-5.97	0.24	0.11	-23.16
4,446.00	0.40	131.80	4,445.09	6.68	-21.11	-5.39	0.22	-0.21	-9.79
4,540.00	0.60	129.00	4,539.09	6.15	-20.48	-4.90	0.21	0.21	-2.98
4,636.00	1.30	121.40	4,635.07	5.26	-19.16	-4.10	0.74	0.73	-7.92
4,731.00	1.80	117.80	4,730.04	4.01	-16.92	-2.98	0.54	0.53	-3.79
4,827.00	1.20	125.60	4,826.01	2.72	-14.77	-1.82	0.66	-0.63	8.13
4,921.00	1.70	126.70	4,919.98	1.31	-12.85	-0.53	0.53	0.53	1.17
5,017.00	1.40	133.00	5,015.94	-0.34	-10.85	0.99	0.36	-0.31	6.56
5,112.00	0.60	176.30	5,110.93	-1.63	-9.97	2.23	1.10	-0.84	45.58
5,208.00	0.50	173.50	5,206.92	-2.55	-9.89	3.14	0.11	-0.10	-2.92
5,304.00	0.40	163.00	5,302.92	-3.28	-9.75	3.86	0.13	-0.10	-10.94
5,399.00	0.60	184.10	5,397.92	-4.10	-9.69	4.67	0.28	0.21	22.21
5,457.00	0.50	173.30	5,455.91	-4.65	-9.68	5.22	0.25	-0.17	-18.62
5,538.00	0.50	217.40	5,536.91	-5.28	-9.85	5.87	0.46	0.00	54.44
5,634.00	2.00	307.90	5,632.89	-4.58	-11.43	5.27	2.15	1.56	94.27
5,730.00	5.00	318.10	5,728.70	-0.44	-15.54	1.38	3.18	3.13	10.63
5,825.00	7.50	319.30	5,823.13	7.34	-22.35	-5.98	2.64	2.63	1.26
5,920.00	9.10	319.00	5,917.13	17.71	-31.33	-15.79	1.68	1.68	-0.32
6,016.00	9.30	318.80	6,011.89	29.28	-41.42	-26.73	0.21	0.21	-0.21
6,112.00	11.00	319.30	6,106.39	42.06	-52.50	-38.82	1.77	1.77	0.52
6,207.00	11.20	318.80	6,199.61	55.87	-64.49	-51.88	0.23	0.21	-0.53

Company: GMT Exploration
Project: Lea County, NM (NAD 83)
Site: Romeo Federal 1H
Well: Romeo Federal 1H
Wellbore: Romeo Federal 1H
Design: Romeo Federal 1H

Local Co-ordinate Reference: Well Romeo Federal 1H
TVD Reference: WELL @ 3554.00ft (McVay 10)
MD Reference: WELL @ 3554.00ft (McVay 10)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,303.00	11.10	317.90	6,293.80	69.74	-76.82	-64.99	0.21	-0.10	-0.94
6,399.00	10.80	316.80	6,388.05	83.16	-89.18	-77.63	0.38	-0.31	-1.15
6,494.00	11.10	315.30	6,481.32	96.15	-101.70	-89.84	0.44	0.32	-1.58
6,590.00	11.30	315.00	6,575.49	109.37	-114.85	-102.24	0.22	0.21	-0.31
6,686.00	11.70	315.00	6,669.57	122.90	-128.38	-114.94	0.42	0.42	0.00
6,782.00	11.00	315.80	6,763.69	136.35	-141.65	-127.56	0.75	-0.73	0.83
6,877.00	10.20	320.40	6,857.07	149.33	-153.33	-139.81	1.23	-0.84	4.84
6,973.00	10.20	320.00	6,951.55	162.39	-164.22	-152.19	0.07	0.00	-0.42
7,069.00	10.40	319.40	7,046.00	175.48	-175.32	-164.59	0.24	0.21	-0.63
7,165.00	10.50	318.90	7,140.41	188.65	-186.71	-177.05	0.14	0.10	-0.52
7,260.00	10.60	318.10	7,233.81	201.68	-198.23	-189.36	0.19	0.11	-0.84
7,356.00	9.50	321.20	7,328.33	214.42	-209.09	-201.43	1.28	-1.15	3.23
7,453.00	9.50	321.60	7,424.00	226.93	-219.08	-213.32	0.07	0.00	0.41
7,548.00	9.30	321.70	7,517.73	239.10	-228.71	-224.88	0.21	-0.21	0.11
7,644.00	9.50	324.20	7,612.44	251.62	-238.15	-236.80	0.47	0.21	2.60
7,740.00	10.10	323.80	7,707.04	264.83	-247.76	-249.42	0.63	0.63	-0.42
7,836.00	10.20	323.60	7,801.53	278.47	-257.77	-262.42	0.11	0.10	-0.21
7,932.00	9.80	323.90	7,896.07	291.91	-267.63	-275.25	0.42	-0.42	0.31
8,028.00	8.40	333.30	7,990.87	304.78	-275.60	-287.61	2.12	-1.46	9.79
8,124.00	6.30	340.80	8,086.08	316.02	-280.48	-298.54	2.40	-2.19	7.81
8,220.00	4.80	327.70	8,181.63	324.39	-284.36	-306.66	2.04	-1.56	-13.65
8,315.00	4.90	314.60	8,276.29	330.60	-289.37	-312.55	1.17	0.11	-13.79
8,411.00	4.80	314.20	8,371.95	336.28	-295.17	-317.87	0.11	-0.10	-0.42
8,507.00	3.90	312.10	8,467.67	341.26	-300.47	-322.53	0.95	-0.94	-2.19
8,603.00	1.90	282.80	8,563.55	343.81	-304.45	-324.83	2.53	-2.08	-30.52
8,697.00	1.20	274.40	8,657.51	344.23	-306.95	-325.10	0.78	-0.74	-8.94
8,793.00	1.30	272.20	8,753.49	344.35	-309.04	-325.09	0.12	0.10	-2.29
8,889.00	1.20	271.60	8,849.47	344.42	-311.13	-325.04	0.11	-0.10	-0.63
8,984.00	1.20	269.30	8,944.45	344.43	-313.12	-324.93	0.05	0.00	-2.42
9,079.00	0.50	245.00	9,039.43	344.24	-314.49	-324.66	0.81	-0.74	-25.58
9,174.00	0.40	259.80	9,134.43	344.01	-315.19	-324.39	0.16	-0.11	15.58
9,270.00	0.60	286.40	9,230.43	344.09	-316.01	-324.42	0.31	0.21	27.71
9,365.00	0.60	314.70	9,325.42	344.58	-316.84	-324.86	0.31	0.00	29.79
9,460.00	1.00	339.10	9,420.41	345.71	-317.49	-325.94	0.54	0.42	25.68
9,554.00	1.00	332.80	9,514.40	347.20	-318.15	-327.40	0.12	0.00	-6.70
9,649.00	0.80	330.50	9,609.39	348.52	-318.86	-328.67	0.21	-0.21	-2.42
9,745.00	1.30	11.80	9,705.37	350.17	-318.97	-330.31	0.91	0.52	43.02
9,840.00	2.40	51.70	9,800.33	352.46	-317.18	-332.70	1.72	1.16	42.00
9,935.00	3.00	67.00	9,895.22	354.66	-313.33	-335.13	0.98	0.63	16.11
10,029.00	2.30	73.00	9,989.12	356.17	-309.27	-336.88	0.80	-0.74	6.38
10,125.00	1.00	116.60	10,085.08	356.36	-306.68	-337.23	1.79	-1.35	45.42
10,220.00	0.70	120.40	10,180.07	355.70	-305.43	-336.64	0.32	-0.32	4.00
10,314.00	0.50	113.50	10,274.07	355.24	-304.56	-336.24	0.23	-0.21	-7.34
10,410.00	0.20	89.60	10,370.06	355.08	-304.01	-336.11	0.34	-0.31	-24.90
10,505.00	0.20	83.00	10,465.06	355.10	-303.68	-336.15	0.02	0.00	-6.95
10,600.00	3.50	178.90	10,560.00	352.22	-303.46	-333.29	3.71	3.47	100.95
10,663.00	7.80	171.70	10,622.68	346.06	-302.81	-327.18	6.90	6.83	-11.43
10,695.00	9.80	172.30	10,654.31	341.21	-302.13	-322.38	6.26	6.25	1.88
10,758.00	14.70	178.10	10,715.85	327.90	-301.14	-309.15	8.01	7.78	9.21
10,790.00	17.60	182.60	10,746.59	319.01	-301.23	-300.27	9.86	9.06	14.06
10,822.00	19.80	188.00	10,776.90	308.81	-302.20	-290.03	8.74	6.88	16.88
10,853.00	23.60	190.50	10,805.70	297.50	-304.06	-278.63	12.61	12.26	8.06
10,885.00	27.10	190.70	10,834.61	284.04	-306.59	-265.04	10.94	10.94	0.63
10,917.00	30.80	190.40	10,862.61	268.81	-309.42	-249.67	11.57	11.56	-0.94

Company: GMT Exploration
Project: Lea County, NM (NAD 83)
Site: Romeo Federal 1H
Well: Romeo Federal 1H
Wellbore: Romeo Federal 1H
Design: Romeo Federal 1H

Local Co-ordinate Reference: Well Romeo Federal 1H
TVD Reference: WELL @ 3554.00ft (McVay 10)
MD Reference: WELL @ 3554.00ft (McVay 10)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,948.00	34.30	188.50	10,888.74	252.36	-312.14	-233.09	11.76	11.29	-6.13
10,980.00	37.40	187.70	10,914.67	233.81	-314.78	-214.41	9.80	9.69	-2.50
11,012.00	40.90	185.50	10,939.49	213.74	-317.09	-194.24	11.77	10.94	-6.88
11,044.00	42.90	183.40	10,963.30	192.44	-318.74	-172.88	7.63	6.25	-6.56
11,076.00	45.60	181.00	10,986.22	170.13	-319.58	-150.56	9.93	8.44	-7.50
11,107.00	47.60	179.00	11,007.52	147.61	-319.57	-128.08	7.97	6.45	-6.45
11,139.00	50.50	179.20	11,028.49	123.45	-319.20	-103.98	9.07	9.06	0.63
11,171.00	52.70	180.70	11,048.37	98.37	-319.18	-78.96	7.79	6.88	4.69
11,203.00	57.00	180.10	11,066.79	72.22	-319.36	-52.83	13.52	13.44	-1.88
11,235.00	62.40	178.60	11,082.93	44.60	-319.04	-25.29	17.35	16.88	-4.69
11,266.00	68.30	177.00	11,095.85	16.46	-317.94	2.73	19.60	19.03	-5.16
11,298.00	72.40	175.60	11,106.61	-13.61	-316.00	32.63	13.46	12.81	-4.38
11,330.00	75.00	176.70	11,115.59	-44.25	-313.94	63.09	8.77	8.13	3.44
11,362.00	76.90	177.70	11,123.36	-75.25	-312.42	93.95	6.67	5.94	3.13
11,393.00	80.30	178.90	11,129.49	-105.62	-311.52	124.21	11.61	10.97	3.87
11,425.00	85.30	179.60	11,133.50	-137.36	-311.11	155.86	15.77	15.63	2.19
11,457.00	86.80	179.70	11,135.70	-169.28	-310.91	187.71	4.70	4.69	0.31
11,579.00	87.68	179.74	11,141.58	-291.13	-310.32	309.31	0.72	0.72	0.03
11,674.00	91.02	179.48	11,142.65	-386.11	-309.67	404.08	3.53	3.52	-0.27
11,770.00	91.59	179.13	11,140.47	-482.08	-308.51	499.80	0.70	0.59	-0.36
11,865.00	91.94	179.13	11,137.54	-577.02	-307.06	594.48	0.37	0.37	0.00
11,959.00	90.98	178.86	11,135.15	-670.98	-305.42	688.17	1.06	-1.02	-0.29
12,055.00	91.42	178.60	11,133.14	-766.93	-303.29	783.82	0.53	0.46	-0.27
12,150.00	89.73	178.80	11,132.18	-861.90	-301.13	878.48	1.79	-1.78	0.21
12,245.00	90.10	178.51	11,132.32	-956.87	-298.90	973.15	0.49	0.39	-0.31
12,340.00	90.41	178.16	11,131.90	-1,051.83	-296.14	1,067.77	0.49	0.33	-0.37
12,436.00	90.85	177.81	11,130.85	-1,147.77	-292.77	1,163.33	0.59	0.46	-0.36
12,531.00	91.18	178.16	11,129.16	-1,242.69	-289.43	1,257.88	0.51	0.35	0.37
12,626.00	91.57	177.81	11,126.88	-1,337.61	-286.09	1,352.42	0.55	0.41	-0.37
12,721.00	91.04	178.86	11,124.72	-1,432.54	-283.33	1,447.01	1.24	-0.56	1.11
12,816.00	91.51	178.60	11,122.61	-1,527.49	-281.22	1,541.67	0.57	0.49	-0.27
12,912.00	90.52	179.48	11,120.91	-1,623.46	-279.62	1,637.36	1.38	-1.03	0.92
13,007.00	90.85	178.69	11,119.77	-1,718.44	-278.10	1,732.08	0.90	0.35	-0.83
13,102.00	91.24	178.07	11,118.04	-1,813.39	-275.41	1,826.69	0.77	0.41	-0.65
13,197.00	92.38	177.72	11,115.04	-1,908.27	-271.93	1,921.20	1.26	1.20	-0.37
13,292.00	91.97	177.19	11,111.43	-2,003.11	-267.71	2,015.61	0.71	-0.43	-0.56
13,387.00	90.16	178.43	11,109.67	-2,098.02	-264.08	2,110.12	2.31	-1.91	1.31
13,482.00	88.60	179.48	11,110.69	-2,192.99	-262.35	2,204.82	1.98	-1.64	1.11
13,577.00	88.32	180.71	11,113.25	-2,287.96	-262.51	2,299.62	1.33	-0.29	1.29
13,672.00	88.08	181.68	11,116.23	-2,382.89	-264.49	2,394.50	1.05	-0.25	1.02
13,767.00	88.34	181.94	11,119.20	-2,477.80	-267.49	2,489.41	0.39	0.27	0.27
13,862.00	88.45	181.06	11,121.86	-2,572.72	-269.97	2,584.32	0.93	0.12	-0.93
13,957.00	87.97	180.27	11,124.83	-2,667.67	-271.07	2,679.16	0.97	-0.51	-0.83
14,052.00	87.42	179.83	11,128.65	-2,762.59	-271.16	2,773.91	0.74	-0.58	-0.46
14,147.00	87.48	180.18	11,132.87	-2,857.50	-271.17	2,868.65	0.37	0.06	0.37
14,242.00	88.56	181.50	11,136.16	-2,952.43	-272.56	2,963.49	1.79	1.14	1.39
14,338.00	87.20	181.94	11,139.71	-3,048.32	-275.44	3,059.38	1.49	-1.42	0.46
14,433.00	87.77	182.12	11,143.88	-3,143.17	-278.80	3,154.26	0.63	0.60	0.19
14,528.00	86.80	182.38	11,148.38	-3,237.99	-282.52	3,249.13	1.06	-1.02	0.27
14,623.00	87.26	180.62	11,153.30	-3,332.82	-285.01	3,343.94	1.91	0.48	-1.85
14,718.00	88.23	179.48	11,157.04	-3,427.74	-285.09	3,438.70	1.57	1.02	-1.20
14,813.00	88.49	179.65	11,159.76	-3,522.70	-284.37	3,533.44	0.33	0.27	0.18
14,908.00	88.01	179.57	11,162.66	-3,617.66	-283.72	3,628.18	0.51	-0.51	-0.08
15,003.00	88.45	179.13	11,165.59	-3,712.60	-282.65	3,722.89	0.65	0.46	-0.46

Company: GMT Exploration
 Project: Lea County, NM (NAD 83)
 Site: Romeo Federal 1H
 Well: Romeo Federal 1H
 Wellbore: Romeo Federal 1H
 Design: Romeo Federal 1H

Local Co-ordinate Reference: Well Romeo Federal 1H
 TVD Reference: WELL @ 3554.00ft (McVay 10)
 MD Reference: WELL @ 3554.00ft (McVay 10)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,098.00	89.37	177.11	11,167.40	-3,807.53	-279.53	3,817.46	2.34	0.97	-2.13
15,193.00	89.22	176.84	11,168.57	-3,902.39	-274.52	3,911.84	0.33	-0.16	-0.28
15,288.00	88.32	178.43	11,170.61	-3,997.28	-270.60	4,006.33	1.92	-0.95	1.67
15,383.00	89.20	177.63	11,172.66	-4,092.20	-267.33	4,100.88	1.25	0.93	-0.84
15,479.00	86.93	178.25	11,175.90	-4,188.08	-263.88	4,196.37	2.45	-2.36	0.65
15,574.00	86.58	177.81	11,181.28	-4,282.87	-260.62	4,290.79	0.59	-0.37	-0.46
15,669.00	86.34	177.46	11,187.15	-4,377.61	-256.71	4,385.12	0.45	-0.25	-0.37
15,764.00	84.19	177.37	11,194.99	-4,472.18	-252.44	4,479.27	2.27	-2.26	-0.09
Last Svy									
15,855.00	83.64	177.02	11,204.63	-4,562.56	-248.01	4,569.21	0.72	-0.60	-0.38
Proj Svy									
15,905.00	83.64	177.02	11,210.17	-4,612.19	-245.43	4,618.59	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VP Romeo Federal 1H F - survey misses target center by 10.86ft at 8539.92ft MD (8500.53 TVD, 342.55 N, -302.03 E) - Point	0.00	0.00	8,500.00	347.27	-311.80	441,272.00	809,827.34	32° 12' 36.551 N	103° 27' 54.836 W
LP Romeo Federal 1H P - survey misses target center by 11.73ft at 11505.92ft MD (11138.28 TVD, -218.13 N, -310.66 E) - Point	0.00	0.00	11,127.00	-218.66	-307.50	440,706.07	809,831.64	32° 12' 30.951 N	103° 27' 54.839 W
PBHL Romeo Federal 1I - survey misses target center by 34.43ft at 15836.69ft MD (11202.62 TVD, -4544.38 N, -248.95 E) - Point	0.00	0.00	11,180.00	-4,548.06	-274.64	436,376.68	809,864.50	32° 11' 48.109 N	103° 27' 54.864 W

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
15,855.00	11,204.63	-4,562.56	-248.01	Last Svy
15,905.00	11,210.17	-4,612.19	-245.43	Proj Svy

Checked By: _____ Approved By: _____ Date: _____