

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		8. Well Name and No. MESCAL 22 FEDERAL 3H
2. Name of Operator COG OPERATING LLC Contact: DEBORA WILBOURN E-Mail: dwilbourn@concho.com		9. API Well No. 30-015-40929
3a. Address 2208 W MAIN ST ARTESIA, NM 88210	3b. Phone No. (include area code) Ph: 575-748-6958	10. Field and Pool, or Exploratory WILLOW LAKE; BS, SE
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 22 T25S R29E NENE 380FNL 190FEL		11. County or Parish, and State EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A PD
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

COG OPERATING LLC RESPECTFULLY REQUESTS THE FOLLOWING CHANGES TO THE ORIGINAL APD:

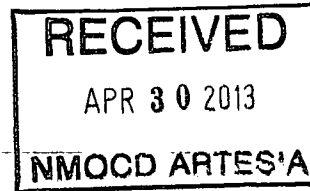
CHANGE DIRECTIONL PLAN

FROM: 12334 MD, 7710 TVD

TO: 12314 MD, 7670 TVD, BHT 134°F, BHP 3510 PSI

SEE ATTACHED STANDARD PLANNING REPORT

Accepted for record 4/30/2013
NMOCDCR/Deade



Original COAs still stand.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #204936 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JOHNNY DICKERSON on 04/24/2013 ()	
Name (Printed/Typed) DEBORA WILBOURN	Title DRLG ENGINEERING TECH
Signature (Electronic Submission)	Date 04/22/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

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

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

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



COG PRODUCTION, L.L.C.

EDDY COUNTY(NAD83)

SECTION 22

Mescal 22 Federal #3H

Wellbore #1

Plan: Proposal 1

Standard Planning Report

19 April, 2013





Stryker Directional
Planning Report



Database Company:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well/Mescal 22 Federal #3H
Project:	COG PRODUCTION, L.L.C	TVD Reference:	WELL @ 18.0usft (Original Well Elev)
Site:	EDDY COUNTY (NAD83)	MD Reference:	WELL @ 18.0usft (Original Well Elev)
Well:	SECTION 22	North Reference:	Grid
Wellbore:	Mescal 22 Federal #3H	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1		
	Proposal 1		

Project:	EDDY COUNTY (NAD83), NM: East		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	SECTION 22		
Site Position:		Northing:	408,224.85 usft
From:	Map	Easting:	655,561.49 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 7' 18.306 N
		Longitude:	103° 57' 51.723 W
		Grid Convergence:	0.20 °

Well:	Mescal 22 Federal #3H		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level:
			0.0 usft

Wellbore:	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	4/19/2013	7.53
			Dip Angle
			(°)
			59.98
			Field Strength
			(nT)
			48,352

Design:	Proposal 1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			269.62

Plan Sections									
Measured Depth	Inclination	Azimuth	Vertical Depth	N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00
7,242.3	0.00	0.00	7,242.3	0.0	0.0	0.00	0.00	0.00	0.00
7,997.8	90.66	269.62	7,719.7	-3.2	-483.0	12.00	12.00	0.00	269.62
12,314.1	90.66	269.62	7,670.0	-32.2	-4,798.9	0.00	0.00	0.00	0.00 PBHL Mescal 22 Fede



Stryker Directional
Planning Report



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Site:	SECTION 22	North Reference:	Grid
Well:	Mescal 22 Federal #3H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Proposal		

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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00	



Stryker Directional
Planning Report



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Wellbore:	Wellbore #		
Design:	Proposal 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)	
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
7,242.3	0.00	0.00	7,242.3	0.0	0.0	0.0	0.00	0.00	0.00	
KOP @ 7242.3 MD										
7,300.0	6.93	269.62	7,299.9	0.0	-3.5	3.5	12.00	12.00	0.00	
7,400.0	18.93	269.62	7,397.1	-0.2	-25.8	25.8	12.00	12.00	0.00	
7,500.0	30.93	269.62	7,487.7	-0.5	-67.9	67.9	12.00	12.00	0.00	
7,600.0	42.93	269.62	7,567.5	-0.9	-127.8	127.8	12.00	12.00	0.00	
7,700.0	54.93	269.62	7,633.0	-1.4	-203.1	203.1	12.00	12.00	0.00	
7,800.0	66.93	269.62	7,681.6	-1.9	-290.3	290.3	12.00	12.00	0.00	
7,900.0	78.93	269.62	7,710.9	-2.6	-385.7	385.8	12.00	12.00	0.00	
7,992.4	90.01	269.62	7,719.8	-3.2	-477.5	477.5	12.00	12.00	0.00	
LP Mescal 22 Federal #3H										
7,997.8	90.66	269.62	7,719.7	-3.2	-483.0	483.0	12.00	12.00	0.00	
LP @ 7997.8 MD										
8,000.0	90.66	269.62	7,719.7	-3.3	-485.2	485.2	0.00	0.00	0.00	
8,100.0	90.66	269.62	7,718.5	-3.9	-585.2	585.2	0.00	0.00	0.00	
8,200.0	90.66	269.62	7,717.4	-4.6	-685.1	685.2	0.00	0.00	0.00	
8,300.0	90.66	269.62	7,716.2	-5.3	-785.1	785.2	0.00	0.00	0.00	
8,400.0	90.66	269.62	7,715.1	-5.9	-885.1	885.2	0.00	0.00	0.00	
8,500.0	90.66	269.62	7,713.9	-6.6	-985.1	985.1	0.00	0.00	0.00	
8,600.0	90.66	269.62	7,712.8	-7.3	-1,085.1	1,085.1	0.00	0.00	0.00	
8,700.0	90.66	269.62	7,711.6	-8.0	-1,185.1	1,185.1	0.00	0.00	0.00	
8,800.0	90.66	269.62	7,710.5	-8.6	-1,285.1	1,285.1	0.00	0.00	0.00	
8,900.0	90.66	269.62	7,709.3	-9.3	-1,385.1	1,385.1	0.00	0.00	0.00	
9,000.0	90.66	269.62	7,708.2	-10.0	-1,485.1	1,485.1	0.00	0.00	0.00	
9,100.0	90.66	269.62	7,707.0	-10.6	-1,585.1	1,585.1	0.00	0.00	0.00	
9,200.0	90.66	269.62	7,705.9	-11.3	-1,685.1	1,685.1	0.00	0.00	0.00	
9,300.0	90.66	269.62	7,704.7	-12.0	-1,785.1	1,785.1	0.00	0.00	0.00	
9,400.0	90.66	269.62	7,703.6	-12.7	-1,885.0	1,885.1	0.00	0.00	0.00	
9,500.0	90.66	269.62	7,702.4	-13.3	-1,985.0	1,985.1	0.00	0.00	0.00	
9,600.0	90.66	269.62	7,701.3	-14.0	-2,085.0	2,085.1	0.00	0.00	0.00	
9,700.0	90.66	269.62	7,700.1	-14.7	-2,185.0	2,185.1	0.00	0.00	0.00	
9,800.0	90.66	269.62	7,699.0	-15.3	-2,285.0	2,285.1	0.00	0.00	0.00	
9,900.0	90.66	269.62	7,697.8	-16.0	-2,385.0	2,385.1	0.00	0.00	0.00	
10,000.0	90.66	269.62	7,696.7	-16.7	-2,485.0	2,485.0	0.00	0.00	0.00	



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Wellbore:	Wellbore #1		
Design:	Proposal 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)	
10,100.0	90.66	269.62	7,695.5	-17.4	-2,585.0	2,585.0	0.00	0.00	0.00	
10,200.0	90.66	269.62	7,694.4	-18.0	-2,685.0	2,685.0	0.00	0.00	0.00	
10,300.0	90.66	269.62	7,693.2	-18.7	-2,785.0	2,785.0	0.00	0.00	0.00	
10,400.0	90.66	269.62	7,692.0	-19.4	-2,885.0	2,885.0	0.00	0.00	0.00	
10,500.0	90.66	269.62	7,690.9	-20.0	-2,984.9	2,985.0	0.00	0.00	0.00	
10,600.0	90.66	269.62	7,689.7	-20.7	-3,084.9	3,085.0	0.00	0.00	0.00	
10,700.0	90.66	269.62	7,688.6	-21.4	-3,184.9	3,185.0	0.00	0.00	0.00	
10,800.0	90.66	269.62	7,687.4	-22.1	-3,284.9	3,285.0	0.00	0.00	0.00	
10,900.0	90.66	269.62	7,686.3	-22.7	-3,384.9	3,385.0	0.00	0.00	0.00	
11,000.0	90.66	269.62	7,685.1	-23.4	-3,484.9	3,485.0	0.00	0.00	0.00	
11,100.0	90.66	269.62	7,684.0	-24.1	-3,584.9	3,585.0	0.00	0.00	0.00	
11,200.0	90.66	269.62	7,682.8	-24.7	-3,684.9	3,685.0	0.00	0.00	0.00	
11,300.0	90.66	269.62	7,681.7	-25.4	-3,784.9	3,785.0	0.00	0.00	0.00	
11,400.0	90.66	269.62	7,680.5	-26.1	-3,884.9	3,885.0	0.00	0.00	0.00	
11,500.0	90.66	269.62	7,679.4	-26.8	-3,984.9	3,984.9	0.00	0.00	0.00	
11,600.0	90.66	269.62	7,678.2	-27.4	-4,084.8	4,084.9	0.00	0.00	0.00	
11,700.0	90.66	269.62	7,677.1	-28.1	-4,184.8	4,184.9	0.00	0.00	0.00	
11,800.0	90.66	269.62	7,675.9	-28.8	-4,284.8	4,284.9	0.00	0.00	0.00	
11,900.0	90.66	269.62	7,674.8	-29.4	-4,384.8	4,384.9	0.00	0.00	0.00	
12,000.0	90.66	269.62	7,673.6	-30.1	-4,484.8	4,484.9	0.00	0.00	0.00	
12,100.0	90.66	269.62	7,672.5	-30.8	-4,584.8	4,584.9	0.00	0.00	0.00	
12,200.0	90.66	269.62	7,671.3	-31.5	-4,684.8	4,684.9	0.00	0.00	0.00	
12,300.0	90.66	269.62	7,670.2	-32.1	-4,784.8	4,784.9	0.00	0.00	0.00	
12,314.1	90.66	269.62	7,670.0	-32.2	-4,798.9	4,799.0	0.00	0.00	0.00	
TD at 12314.1 MD - PBHL Mescal 22 Federal #3H										

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/S (usft)	+E/W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL Mescal 22 Federa	- plan hits target center - Point	0.00	0.00	7,670.0	-32.2	-4,798.9	408,192.62	650,762.61	32° 7' 18.146 N	103° 58' 47.528 W
LP Mescal 22 Federal #:	- plan misses target center by 0.3usft at 7992.3usft MD (7719.8 TVD, -3.2 N, -477.5 E) - Point	0.00	0.00	7,720.0	-3.2	-477.5	408,221.68	655,084.01	32° 7' 18.290 N	103° 57' 57.275 W

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/S (usft)	+E/W (usft)	Comment	
7,242.3	7,242.3	0.0	0.0	KOP @ 7242.3 MD	
7,997.8	7,719.7	-3.2	-483.0	LP @ 7997.8 MD	
12,314.1	7,670.0	-32.2	-4,798.9	TD at 12314.1 MD	

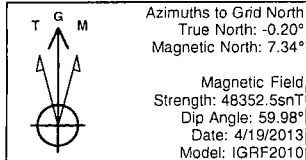


COMPANY: COG PRODUCTION, L.L.C.
WELL: Mescal 22 Federal #3H
COUNTY: EDDY COUNTY(NAD83)
DATUM: North American Datum 1983
RIG: Silver Oak #7
GRID CORRECTION: 7.34° E



OFFICE: 936.582.7296

PLANNING: 214.784.3778



GEODETTIC ZONE: New Mexico Eastern Zone					
WELL @ 18.0usft (Original Well Elev)					
GROUND ELEVATION: 0.0					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	408224.85	655561.49	32° 7' 18.306 N	103° 57' 51.723 W

CRITICAL POINTS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
7242.3	7242.3	0.00	0.00	0.0	0.0	0.0	0.0	KOP @ 7242.3 MD	
7719.7	7997.8	90.66	269.62	-3.2	-483.0	483.0	483.0	LP @ 7997.8 MD	
7670.0	12314.1	90.66	269.62	-32.2	-4798.9	4799.0	4799.0	TD at 12314.1 MD	

CREATED BY: BRANDON ESTES

DATE: 15:44, April 19 2013
PLAN: Proposal 1

