

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-144 CLEZ
July 21, 2008

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☒ Permit ☐ Closure

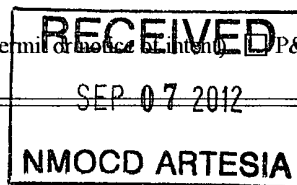
Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1. Operator: COG OPERATING LLC OGRID #: 229137
Address: ONE CONCHO CENTER 600 W ILLINOIS AVE MIDLAND, TX 79701
Facility or well name: MESILLA 16 STATE #1H
API Number: 30-015- 406 47 OCD Permit Number: 213391
U/L or Qtr/Qtr UL D Section 16 Township 17S Range 30E County: EDDY
Center of Proposed Design: Latitude N/A Longitude N/A NAD: ☐ 1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2. ☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Operation: ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A
☐ Above Ground Steel Tanks or ☒ Haul-off Bins

3. **Signs:** Subsection C of 19.15.17.11 NMAC
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19.15 3 103 NMAC



4. **Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☒ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15 17 13 NMAC
☐ Previously Approved Design (attach copy of design) API Number: _____
☐ Previously Approved Operating and Maintenance Plan API Number: _____

5. **Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.
Disposal Facility Name: CRI Disposal Facility Permit Number: R1966
Disposal Facility Name: GM INC Disposal Facility Permit Number: 711-019-001
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☒ No
Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17 13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Kelly J. Holly Title: Permitting Tech
Signature: [Signature] Date: 09/05/2012
e-mail address: kholly@concho.com Telephone: 432-685-4384

7. **OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: RP Dade

Approval Date: 9/13/12

Title: D. J. P. Supervisor

OCD Permit Number: 213391

8. **Closure Report (required within 60 days of closure completion):** Subsection K of 19 15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ Closure Completion Date: _____

9. **Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____

Disposal Facility Permit Number: _____

Disposal Facility Name: _____

Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

10.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____

Title: _____

Signature: _____

Date: _____

e-mail address: _____

Telephone: _____

All drilling fluid circulated over shaker(s) with cuttings discharged into roll off container.

Fluid and fines below shaker(s) are circulated with transfer pump through centrifuge(s) or solids separator with cuttings and fines discharged into roll off container.

Fluid is continuously re-circulated through equipment with polymer added to aid separation of cutting fines.

Roll off containers are lined and de-watered with fluids re-circulated into system.

Additional tank is used to capture unused drilling fluid or cement returns from casing jobs.

This equipment will be maintained 24 hrs./day by solids control personnel and or rig crews that stay on location.

Cuttings will be hauled to either:

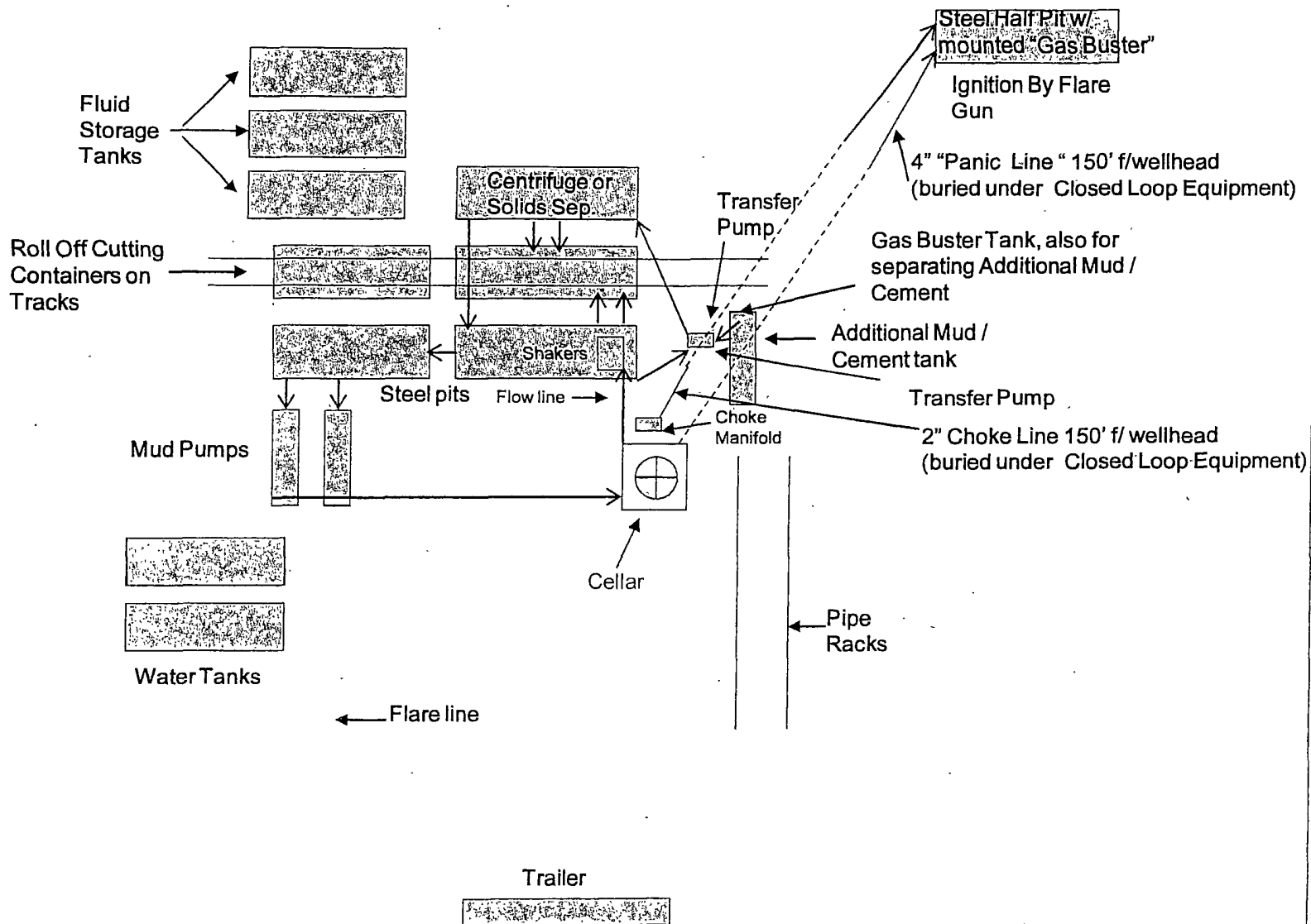
CRI (permit number R9166)

or

GMI (permit number 711-019-001)

dependent upon which rig is available to drill this well.

COG Operating LLC
Closed Loop Equipment Diagram



COG Operating LLC

Eddy County, NM

Mesilla 16 State 1H

Mesilla 16 State 1H

Wellbore #1

Plan: Plan #1

Surface: 660' FNL, 330' FWL, Sec 16, T17S, R30E, Unit D

BHL: 660' FNL, 330' FEL, Sec 16, T17S, R30E, Unit A

Standard Planning Report

01 August, 2012

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Site Mesilla 16 State 1H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3692 00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3692 00ft (Original Well Elev)
Site:	Mesilla 16 State 1H	North Reference:	Grid
Well:	Mesilla 16 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County, NM		
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	Mesilla 16 State 1H				
Site Position:		Northing:	669,433.300 ft	Latitude:	32 839866
From:	Map	Easting:	607,299.300 ft	Longitude:	-103 983984
Position Uncertainty:	0 00 ft	Slot Radius:	13 200 in	Grid Convergence:	0 19 °

Well	Mesilla 16 State 1H				
Well Position	+N/-S	0 00 ft	Northing:	669,433.300 ft	Latitude: 32 839866
	+E/-W	0 00 ft	Easting:	607,299.300 ft	Longitude: -103 983984
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level: 3,674 00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	8/1/2012	(°) 7 68	(°) 60.66	(nT) 48,826

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0 00	0 00	0 00	89 90	

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
5,022 61	0 00	0 00	5,022 61	0 00	0 00	0 00	0 00	0 00	0 00	
5,780 95	91 00	89 90	5,500.00	0 88	485 80	12 00	12 00	0 00	89 90	
9,919 29	91 00	89 90	5,427.78	8.40	4,623 50	0 00	0 00	0 00	0 00	PBHL (Mesilla 16 Stat

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Site Mesilla 16 State 1H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3692.00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3692.00ft (Original Well Elev)
Site:	Mesilla 16 State 1H	North Reference:	Grid
Well:	Mesilla 16 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,022.61	0.00	0.00	5,022.61	0.00	0.00	0.00	0.00	0.00	0.00	
KOP - Start Build @ 12.00°/100'										
5,100.00	9.29	89.90	5,099.66	0.01	6.26	6.26	12.00	12.00	0.00	
5,200.00	21.29	89.90	5,195.95	0.06	32.57	32.57	12.00	12.00	0.00	
5,300.00	33.29	89.90	5,284.66	0.14	78.33	78.33	12.00	12.00	0.00	
5,400.00	45.29	89.90	5,361.92	0.26	141.54	141.54	12.00	12.00	0.00	
5,500.00	57.29	89.90	5,424.34	0.40	219.42	219.42	12.00	12.00	0.00	
5,600.00	69.29	89.90	5,469.21	0.56	308.59	308.59	12.00	12.00	0.00	
5,700.00	81.29	89.90	5,494.57	0.74	405.13	405.13	12.00	12.00	0.00	
5,780.95	91.00	89.90	5,500.00	0.88	485.80	485.80	12.00	12.00	0.00	
Landing Point - Hold @ 91.00° INC, 89.90° AZ										
5,800.00	91.00	89.90	5,499.67	0.92	504.85	504.85	0.00	0.00	0.00	
5,900.00	91.00	89.90	5,497.93	1.10	604.83	604.83	0.00	0.00	0.00	
6,000.00	91.00	89.90	5,496.18	1.28	704.82	704.82	0.00	0.00	0.00	
6,100.00	91.00	89.90	5,494.44	1.46	804.80	804.80	0.00	0.00	0.00	
6,200.00	91.00	89.90	5,492.69	1.64	904.79	904.79	0.00	0.00	0.00	
6,300.00	91.00	89.90	5,490.95	1.83	1,004.77	1,004.77	0.00	0.00	0.00	
6,400.00	91.00	89.90	5,489.20	2.01	1,104.76	1,104.76	0.00	0.00	0.00	
6,500.00	91.00	89.90	5,487.45	2.19	1,204.74	1,204.74	0.00	0.00	0.00	
6,600.00	91.00	89.90	5,485.71	2.37	1,304.73	1,304.73	0.00	0.00	0.00	
6,700.00	91.00	89.90	5,483.96	2.55	1,404.71	1,404.71	0.00	0.00	0.00	
6,800.00	91.00	89.90	5,482.22	2.73	1,504.69	1,504.70	0.00	0.00	0.00	
6,900.00	91.00	89.90	5,480.47	2.92	1,604.68	1,604.68	0.00	0.00	0.00	
7,000.00	91.00	89.90	5,478.73	3.10	1,704.66	1,704.67	0.00	0.00	0.00	
7,100.00	91.00	89.90	5,476.98	3.28	1,804.65	1,804.65	0.00	0.00	0.00	
7,200.00	91.00	89.90	5,475.24	3.46	1,904.63	1,904.64	0.00	0.00	0.00	
7,300.00	91.00	89.90	5,473.49	3.64	2,004.62	2,004.62	0.00	0.00	0.00	
7,400.00	91.00	89.90	5,471.75	3.82	2,104.60	2,104.61	0.00	0.00	0.00	
7,500.00	91.00	89.90	5,470.00	4.01	2,204.59	2,204.59	0.00	0.00	0.00	
7,600.00	91.00	89.90	5,468.26	4.19	2,304.57	2,304.58	0.00	0.00	0.00	
7,700.00	91.00	89.90	5,466.51	4.37	2,404.56	2,404.56	0.00	0.00	0.00	
7,800.00	91.00	89.90	5,464.77	4.55	2,504.54	2,504.55	0.00	0.00	0.00	
7,900.00	91.00	89.90	5,463.02	4.73	2,604.53	2,604.53	0.00	0.00	0.00	
8,000.00	91.00	89.90	5,461.28	4.91	2,704.51	2,704.51	0.00	0.00	0.00	
8,100.00	91.00	89.90	5,459.53	5.10	2,804.49	2,804.50	0.00	0.00	0.00	
8,200.00	91.00	89.90	5,457.79	5.28	2,904.48	2,904.48	0.00	0.00	0.00	
8,300.00	91.00	89.90	5,456.04	5.46	3,004.46	3,004.47	0.00	0.00	0.00	
8,400.00	91.00	89.90	5,454.30	5.64	3,104.45	3,104.45	0.00	0.00	0.00	
8,500.00	91.00	89.90	5,452.55	5.82	3,204.43	3,204.44	0.00	0.00	0.00	
8,600.00	91.00	89.90	5,450.80	6.00	3,304.42	3,304.42	0.00	0.00	0.00	
8,700.00	91.00	89.90	5,449.06	6.19	3,404.40	3,404.41	0.00	0.00	0.00	
8,800.00	91.00	89.90	5,447.31	6.37	3,504.39	3,504.39	0.00	0.00	0.00	
8,900.00	91.00	89.90	5,445.57	6.55	3,604.37	3,604.38	0.00	0.00	0.00	
9,000.00	91.00	89.90	5,443.82	6.73	3,704.36	3,704.36	0.00	0.00	0.00	
9,100.00	91.00	89.90	5,442.08	6.91	3,804.34	3,804.35	0.00	0.00	0.00	
9,200.00	91.00	89.90	5,440.33	7.09	3,904.33	3,904.33	0.00	0.00	0.00	
9,300.00	91.00	89.90	5,438.59	7.28	4,004.31	4,004.32	0.00	0.00	0.00	
9,400.00	91.00	89.90	5,436.84	7.46	4,104.29	4,104.30	0.00	0.00	0.00	
9,500.00	91.00	89.90	5,435.10	7.64	4,204.28	4,204.29	0.00	0.00	0.00	
9,600.00	91.00	89.90	5,433.35	7.82	4,304.26	4,304.27	0.00	0.00	0.00	
9,700.00	91.00	89.90	5,431.61	8.00	4,404.25	4,404.26	0.00	0.00	0.00	
9,800.00	91.00	89.90	5,429.86	8.18	4,504.23	4,504.24	0.00	0.00	0.00	
9,900.00	91.00	89.90	5,428.12	8.36	4,604.22	4,604.23	0.00	0.00	0.00	
9,919.29	91.00	89.90	5,427.78	8.40	4,623.50	4,623.51	0.00	0.00	0.00	

Planning Report

Database:	Houston R5000 Database	Local Co-ordinate Reference:	Site Mesilla 16 State 1H
Company:	COG Operating LLC	TVD Reference:	WELL @ 3692 00ft (Original Well Elev)
Project:	Eddy County, NM	MD Reference:	WELL @ 3692 00ft (Original Well Elev)
Site:	Mesilla 16 State 1H	North Reference:	Grid
Well:	Mesilla 16 State 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
TD @ 9919.29' MD, 5427.78' TVD - PBHL (Mesilla 16 State 1H Plan 1)									

Design Targets									
Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude Longitude
PBHL (Mesilla 16 State 1H)	- plan hits target center - Point	0 00	0 00	5,427.78	8 40	4,623 50	669,441 700	611,922 800	32 839847 -103 968931

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
5,022 61	5,022 61	0 00	0 00	KOP - Start Build @ 12 00°/100'
5,780 95	5,500 00	0 88	485 80	Landing Point - Hold @ 91 00° INC, 89 90° AZ
9,919 29	5,427.78	8.40	4,623.50	TD @ 9919 29' MD, 5427.78' TVD



COG Operating LLC
Mesilla 16 State 1H
Eddy County, NM
Plan #1



Surface Location		Ground Elev: 3674.00 WELL @ 3692.00ft (Original Well Elev)			
+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.00	0.00	669433.300	607299.300	32.839866	-103.983984

TARGET DETAILS							
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
PBHL (Mesilla 16 State 1H Plan 1)	5427.78	8.40	4623.50	669441.700	611622.800	32.839847	-103.968930

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Flag	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5022.61	0.00	0.00	5022.61	0.00	0.00	0.00	0.00	0.00	
3	5780.85	81.00	89.90	5500.00	0.88	485.80	12.00	89.80	485.80	
4	9919.29	91.00	89.90	5427.78	8.40	4623.50	0.00	0.00	4623.51	PBHL (Mesilla 16 State 1H Plan 1)

