

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.*5. Lease Serial No.
NMLC028784C

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
BURCH KEELY UNIT 933H2. Name of Operator
COG OPERATING LLCContact: KELLY J HOLLY
E-Mail: kholly@concho.com9. API Well No.
30-015-409703a. Address
ONE CONCHO CENTER 600 W ILLINOIS AVE
MIDLAND, TX 797013b. Phone No. (include area code)
Ph: 432-685-438410. Field and Pool, or Exploratory
BURCH KEELY; GLORIETA-UPPE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 13 T17S R29E Mer NMP SWNW 2310FNL 330FWL

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
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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 recompleat 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 recompleat 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 permission to change the TVD, MD and Landing Point for this well.

FROM:
TVD 4778'
MD 9267'
Landing Point 4850'

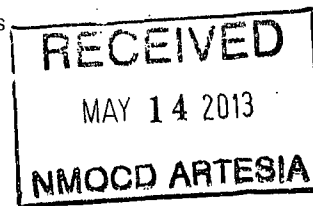
TO:
TVD 4879'
MD 9348'
Landing Point 4950'

Accepted for record

NMOC

5/15/2013

go by directional plan
per Kelly Holly
5/8/13



Original COAs still stand.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #205726 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by JOHNNY DICKERSON on 05/01/2013 ()

Name (Printed/Typed) KELLY J HOLLY

Title PERMITTING TECH

Signature (Electronic Submission)

Date 04/30/2013

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 to 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 ****

Additional data for EC transaction #205726 that would not fit on the form

32. Additional remarks, continued

Attached is the revised Directional Plan.

Project: Eddy County, New Mexico
 Site: Burch Keely Unit
 Well: Burch Keely Unit 933H
 Wellbore: Wellbore #1
 Plan: Plan #1
 Rig: Silver Oak #3

Surface Hole Location
 2310' FNL & 330' FWL
 Section 13: T17S- R29E Unit E
Bottom Hole Location
 2310' FNL & 330' FEL
 Section 13: T17S- R29E Unit H

SURFACE LOCATION

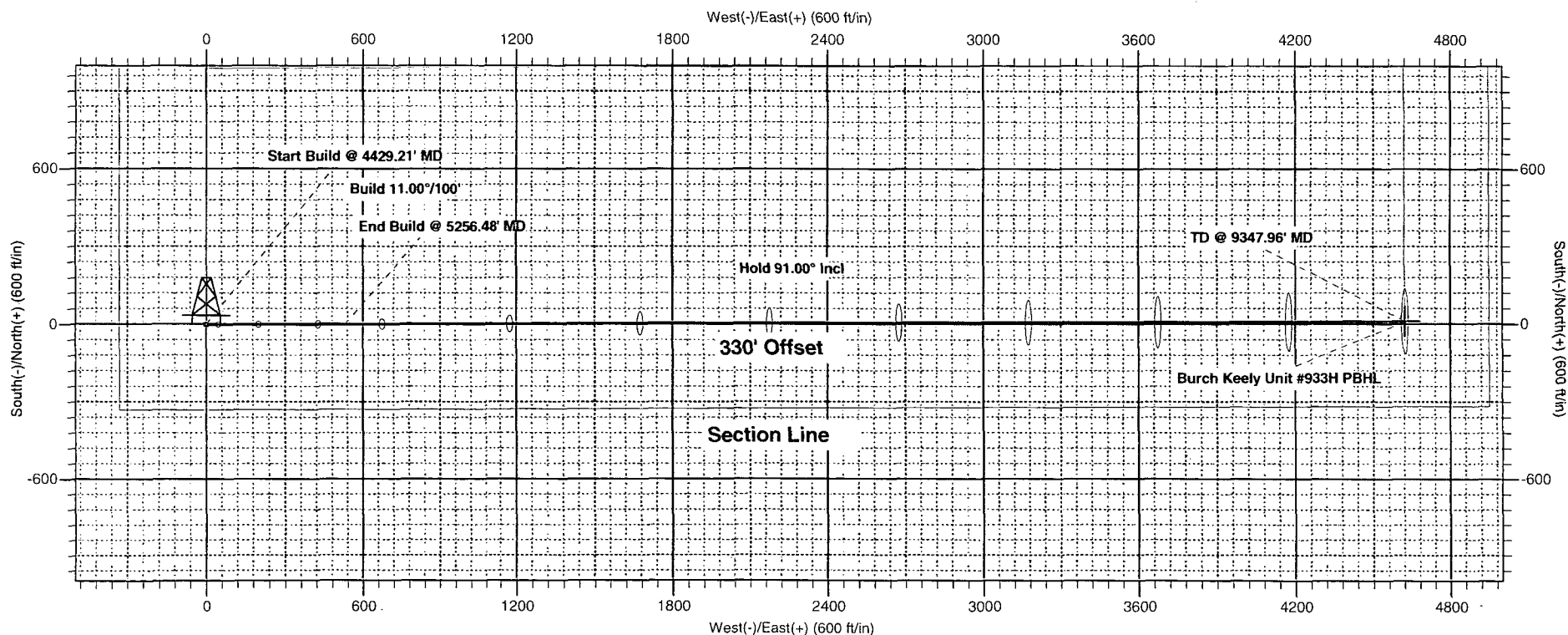
US State Plane 1927 (Exact solution)
 New Mexico East 3001
 Elevation: GE 3625' + KB 18' @ 3643.00ft (Silver Oak #3)
 Northing 667733.80 Easting 591551.30 Latitude 32° 50' 07.193 N Longitude 104° 02' 06.966 W

To convert a Magnetic Direction to a Grid Direction, Add 7.56°

Magnetic Model: BGGM2012 Date: 29-Apr-13
 Azimuths to Grid North

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Burch Keely Unit #933H PBHL	4878.59	10.60	4620.80	667744.40	596172.10	Point



Project: Eddy County, New Mexico
Site: Burch Keely Unit
Well: Burch Keely Unit 933H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: Silver Oak #3

SURFACE LOCATION

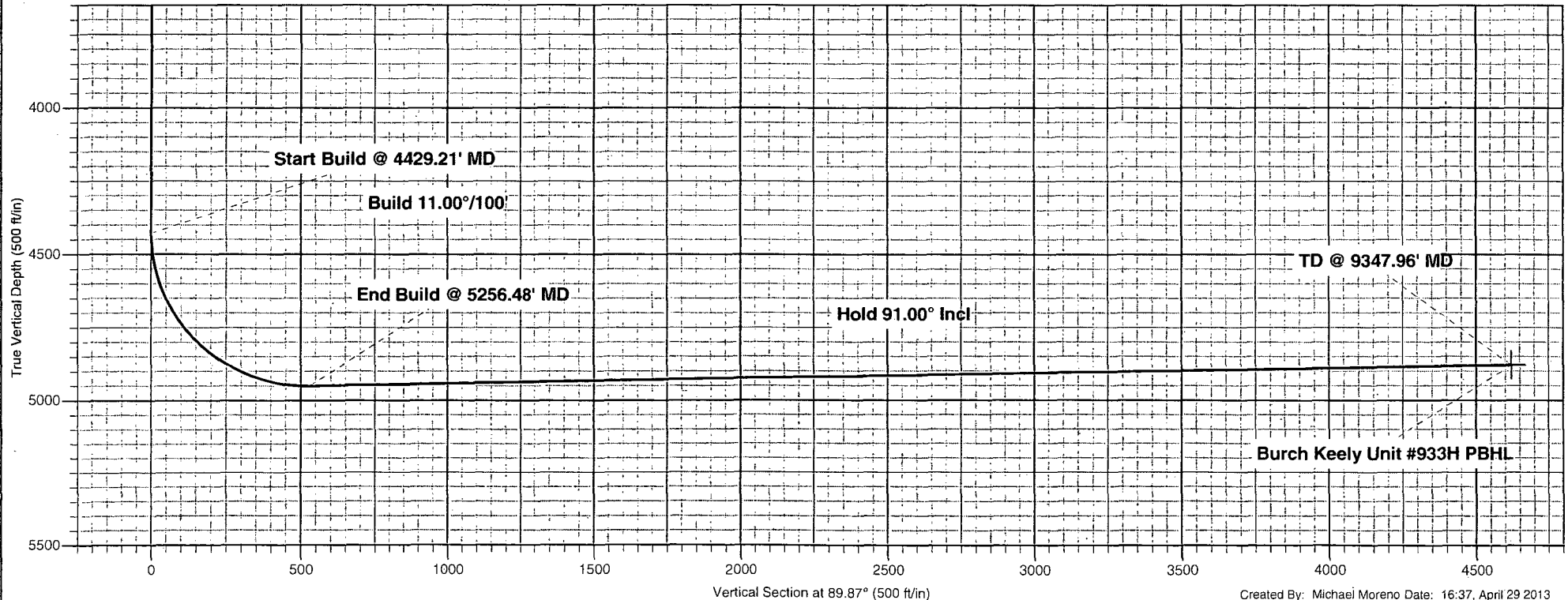
US State Plane 1927 (Exact solution)
 New Mexico East 3001
 Elevation: GE 3625' + KB 18' @ 3643.00ft (Silver Oak #3)
 Northing: 667733.80 Easting: 591551.30 Latitude: 32° 50' 7.193 N Longitude: 104° 02' 06.966 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4429.21	0.00	0.00	4429.21	0.00	0.00	0.00	0.00	0.00	Start Build
5256.48	91.00	89.87	4950.00	1.22	529.96	11.00	89.87	529.96	End Build
9347.96	91.00	89.87	4878.59	10.60	4620.80	0.00	0.00	4620.81	TD

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
Burch Keely Unit #933H PBHL	4878.59	10.60	4620.80	667744.40	596172.10	32° 50' 7.165 N	104° 1' 12.808 W



COG Operating LLC

Eddy County, New Mexico

Burch Keely Unit

Burch Keely Unit 933H

Wellbore #1

Plan: Plan #1

Sperry Drilling Services Standard Report

29 April, 2013

Well Coordinates: 667,733.80 N, 591,551.30 E (32° 50' 07.19" N, 104° 02' 06.97" W)
Ground Level: 3,625.00 ft

Local Coordinate Origin:	Centered on Well Burch Keely Unit 933H
Viewing Datum:	GE 3625' + KB 18' @ 3643.00ft (Silver Oak #3)
TVDs to System:	N
North Reference:	Grid
Unit System:	API - US Survey Feet

Version: 2003.16 Build: 431

HALLIBURTON

Plan Report for Burch Keely Unit 933H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00
4,429.21	0.00	0.00	4,429.21	0.00	0.00	0.00	0.00
Start Build @ 4429.21 MD Build 11.00/100							
4,450.00	2.29	89.87	4,449.99	0.00	0.41	0.41	11.00
4,500.00	7.79	89.87	4,499.78	0.01	4.80	4.80	11.00
4,550.00	13.29	89.87	4,548.92	0.03	13.94	13.94	11.00

Plan Report for Burch Keely Unit 933H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
4,600.00	18.79	89.87	4,596.96	0.06	27.75	27.75	11.00
4,650.00	24.29	89.87	4,643.45	0.11	46.10	46.10	11.00
4,700.00	29.79	89.87	4,687.97	0.16	68.82	68.82	11.00
4,750.00	35.29	89.87	4,730.10	0.22	95.70	95.70	11.00
4,800.00	40.79	89.87	4,769.47	0.29	126.50	126.50	11.00
4,850.00	46.29	89.87	4,805.70	0.37	160.92	160.92	11.00
4,900.00	51.79	89.87	4,838.47	0.46	198.67	198.67	11.00
4,950.00	57.29	89.87	4,867.46	0.55	239.37	239.38	11.00
5,000.00	62.79	89.87	4,892.43	0.65	282.68	282.68	11.00
5,050.00	68.29	89.87	4,913.12	0.75	328.17	328.17	11.00
5,100.00	73.79	89.87	4,929.37	0.86	375.44	375.44	11.00
5,150.00	79.29	89.87	4,941.00	0.97	424.04	424.05	11.00
5,200.00	84.79	89.87	4,947.93	1.09	473.54	473.54	11.00
5,250.00	90.29	89.87	4,950.07	1.20	523.48	523.48	11.00
5,256.48	91.00	89.87	4,950.00	1.22	529.96	529.96	11.00
End Build @ 5256.48 MD. Hold 91.00° Incl.							
5,300.00	91.00	89.87	4,949.24	1.32	573.47	573.47	0.00
5,400.00	91.00	89.87	4,947.50	1.54	673.45	673.46	0.00
5,500.00	91.00	89.87	4,945.75	1.77	773.44	773.44	0.00
5,600.00	91.00	89.87	4,944.01	2.00	873.42	873.43	0.00
5,700.00	91.00	89.87	4,942.26	2.23	973.41	973.41	0.00
5,800.00	91.00	89.87	4,940.52	2.46	1,073.39	1,073.40	0.00
5,900.00	91.00	89.87	4,938.77	2.69	1,173.38	1,173.38	0.00
6,000.00	91.00	89.87	4,937.02	2.92	1,273.36	1,273.37	0.00
6,100.00	91.00	89.87	4,935.28	3.15	1,373.35	1,373.35	0.00
6,200.00	91.00	89.87	4,933.53	3.38	1,473.33	1,473.33	0.00
6,300.00	91.00	89.87	4,931.79	3.61	1,573.32	1,573.32	0.00
6,400.00	91.00	89.87	4,930.04	3.84	1,673.30	1,673.30	0.00
6,500.00	91.00	89.87	4,928.30	4.07	1,773.28	1,773.29	0.00
6,600.00	91.00	89.87	4,926.55	4.30	1,873.27	1,873.27	0.00
6,700.00	91.00	89.87	4,924.81	4.53	1,973.25	1,973.26	0.00
6,800.00	91.00	89.87	4,923.06	4.76	2,073.24	2,073.24	0.00
6,900.00	91.00	89.87	4,921.32	4.99	2,173.22	2,173.23	0.00
7,000.00	91.00	89.87	4,919.57	5.21	2,273.21	2,273.21	0.00
7,100.00	91.00	89.87	4,917.83	5.44	2,373.19	2,373.20	0.00
7,200.00	91.00	89.87	4,916.08	5.67	2,473.18	2,473.18	0.00
7,300.00	91.00	89.87	4,914.33	5.90	2,573.16	2,573.17	0.00
7,400.00	91.00	89.87	4,912.59	6.13	2,673.14	2,673.15	0.00
7,500.00	91.00	89.87	4,910.84	6.36	2,773.13	2,773.14	0.00
7,600.00	91.00	89.87	4,909.10	6.59	2,873.11	2,873.12	0.00
7,700.00	91.00	89.87	4,907.35	6.82	2,973.10	2,973.11	0.00
7,800.00	91.00	89.87	4,905.61	7.05	3,073.08	3,073.09	0.00
7,900.00	91.00	89.87	4,903.86	7.28	3,173.07	3,173.08	0.00
8,000.00	91.00	89.87	4,902.12	7.51	3,273.05	3,273.06	0.00
8,100.00	91.00	89.87	4,900.37	7.74	3,373.04	3,373.05	0.00
8,200.00	91.00	89.87	4,898.63	7.97	3,473.02	3,473.03	0.00
8,300.00	91.00	89.87	4,896.88	8.20	3,573.01	3,573.01	0.00
8,400.00	91.00	89.87	4,895.14	8.43	3,672.99	3,673.00	0.00
8,500.00	91.00	89.87	4,893.39	8.66	3,772.97	3,772.98	0.00
8,600.00	91.00	89.87	4,891.64	8.88	3,872.96	3,872.97	0.00
8,700.00	91.00	89.87	4,889.90	9.11	3,972.94	3,972.95	0.00

Plan Report for Burch Keely Unit 933H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
8,800.00	91.00	89.87	4,888.15	9.34	4,072.93	4,072.94	0.00
8,900.00	91.00	89.87	4,886.41	9.57	4,172.91	4,172.92	0.00
9,000.00	91.00	89.87	4,884.66	9.80	4,272.90	4,272.91	0.00
9,100.00	91.00	89.87	4,882.92	10.03	4,372.88	4,372.89	0.00
9,200.00	91.00	89.87	4,881.17	10.26	4,472.87	4,472.88	0.00
9,300.00	91.00	89.87	4,879.43	10.49	4,572.85	4,572.86	0.00
9,347.96	91.00	89.87	4,878.59	10.60	4,620.80	4,620.81	0.00
TD @ 9347.96' MD							

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,429.21	4,429.21	0.00	0.00	Start Build @ 4429.21' MD
4,429.21	4,429.21	0.00	0.00	Build 11.00°/100'
5,256.48	4,950.00	1.22	529.96	End Build @ 5256.48' MD
5,256.48	4,950.00	1.22	529.96	Hold 91.00° Incl
9,347.96	4,878.59	10.60	4,620.80	TD @ 9347.96' MD

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	+N/-S (ft)	+E/-W (ft)	Start TVD (ft)
User	No Target (Freehand)	89.87	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	9,347.95	Plan #1	MWD

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Burch Keely Unit #9'	0.00	0.00	4,878.59	10.60	4,620.80	667,744.40	596,172.10	32° 50' 7.165 N	104° 1' 12.808 W
- plan hits target center									
- Point									

North Reference Sheet for Burch Keely Unit - Burch Keely Unit 933H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to GE 3625' + KB 18' @ 3643.00ft (Silver Oak #3). Northing and Easting are relative to Burch Keely Unit 933H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 3001 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is 104° 20' 0.000 W°, Longitude Origin:0° 0' 0.000 E°, Latitude Origin:0° 0' 0.000 N°

False Easting: 500,000.00ft, False Northing: 0.00ft, Scale Reduction: 0.99991869

Grid Coordinates of Well: 667,733.80 ft N, 591,551.30 ft E

Geographical Coordinates of Well: 32° 50' 07.19" N, 104° 02' 06.97" W

Grid Convergence at Surface is: 0.16°

Based upon Minimum Curvature type calculations, at a Measured Depth of 9,347.96ft the Bottom Hole Displacement is 4,620.81ft in the Direction of 89.87° (Grid).

Magnetic Convergence at surface is: -7.56° (29 April 2013, , BGGM2012)

