

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs
HOBBS OCD

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.

MAY 01 2014

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

RECEIVED

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM0315712
2. Name of Operator COG OPERATING LLC Contact: ROBYN M ODOM E-Mail: rodom@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701-4287	3b. Phone No. (include area code) Ph: 432-685-4385	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 9 T17S R32E NWNW 990FNL 150FWL		8. Well Name and No. SNEED-9 FEDERAL COM 2H
		9. API Well No. 30-025-41409-00-X1
		10. Field and Pool, or Exploratory MALJAMAR
		11. County or Parish, and State LEA COUNTY, NM

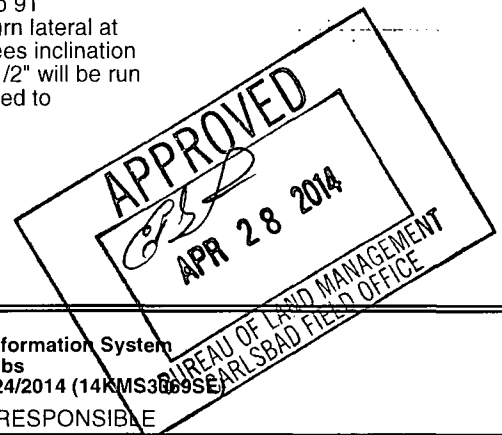
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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 production string as follows:
Drill 8-3/4" hole and kick off at +/-5204', building curve at 11 degrees/100' over +/-828' to 91 degrees inclination at 6031'MD/5725'TVD AZ 88 degrees. Reduce-hole size to 7-7/8", turn lateral at 3 degrees/100' to AZ 90.03 degrees at 6099'MD/5724'TVD. Continue lateral at 91 degrees inclination and 90.03 AZ for 4201' to TD of 10300'MD/5851'TVD. Run 5-1/2" production casing. 5-1/2" will be run from surface to TD and will be isolated with a single cement job. Cement will be calculated to surface (minimum tie-back is 200' into 9-5/8" intermediate).

Attached is the revised Directional Plan.



Original COA still Applies

14. I hereby certify that the foregoing is true and correct. Electronic Submission #240281 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Hobbs Committed to AFMSS for processing by KURT SIMMONS on 04/24/2014 (14KMS3069SE)	
Name (Printed/Typed) ROBYN M ODOM	Title PERSON RESPONSIBLE
Signature (Electronic Submission)	Date 03/27/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>EDWARD FERNANDEZ</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>04/28/2014</u>
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 Hobbs		

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

MAY 08 2014

Per Email:

Cement program as follows:

5 1/2" casing will be cemented in one stage with lead cement as follows: 550 sks 35:65:6 C: Poz Gel w/5% salt + 5 pps LCM + 0.2% SMS + 0.3% FL-52A + 0.125 pps CF (yield 2.01 cf/sk., wt. 12.5 ppg .) followed by tail cement as follows: 1400 sks 50:50:2 C:Poz Gel w/5% salt + 3 pps LCM + 0.6% SMS + 0.3% FL-52A + 0.125 pps CF + 1 % FL-25 + 1% BA-58 (yield 1.37 cf/sk., wt. 14.0 ppg .). Cement volume calculated to surface. Minimum tie-back 200' above 9 5/8" shoe. Combined Excess 20%.

Thank you,

Robyn Odom
(432) 685-4385
Rodom@concho.com

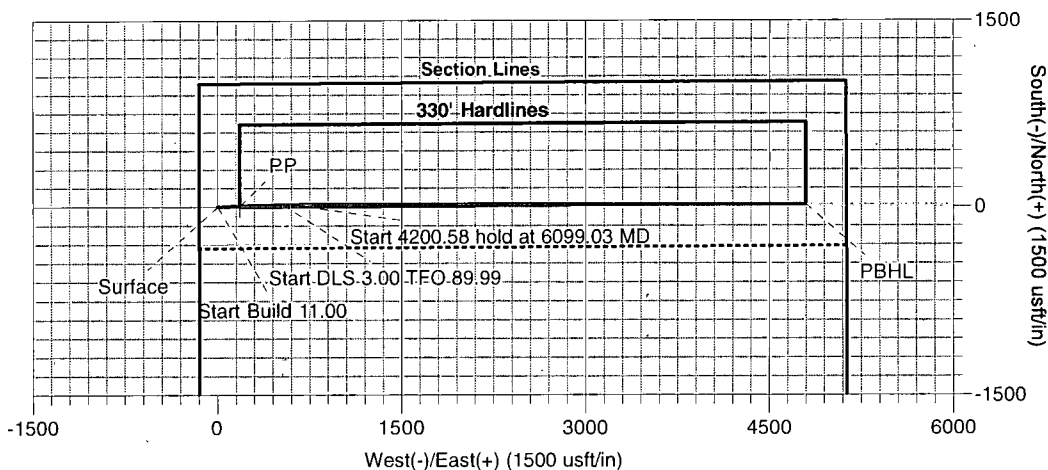
COG OPERATING, LLC

Field: Lea County, NM
Site: Sneed 9 Federal Com 2H
Well: 2H
Wellbore: Lateral
Plan: Plan #2



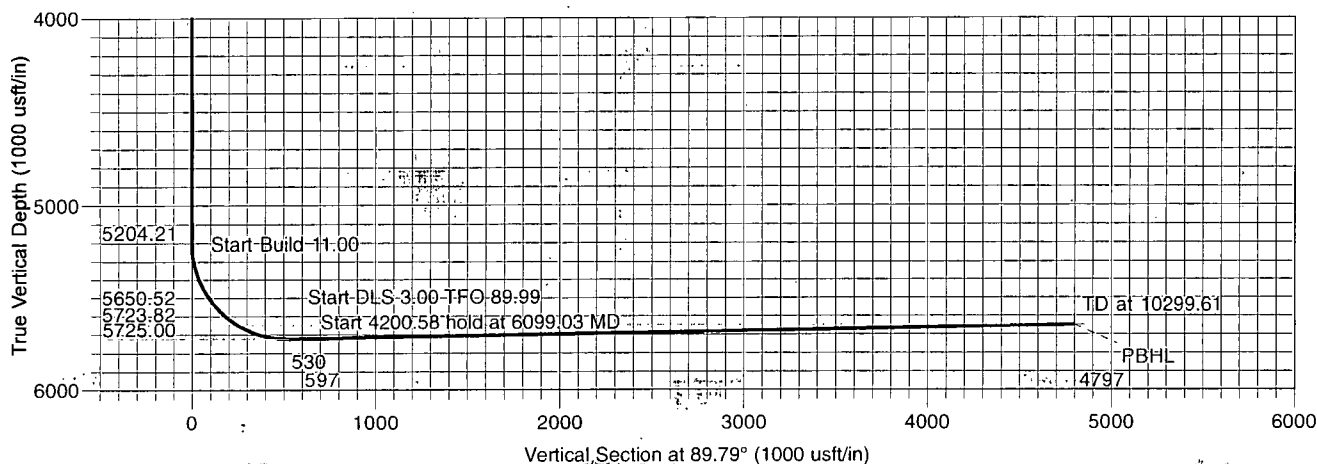
Section Distances

Sec9,T17S,R32E
SHL - Unit D
989.7'FNL, 149.9'FWL
PP
984.1'FNL, 330.0'FWL
PBHL - Unit A
990.6'FNL, 330.0'FEL



Azimuths to Grid North
True North: -0.30°
Magnetic North: 7.09°

Magnetic Field
Strength: 48691.4snT
Dip Angle: 60.66°
Date: 3/17/2014
Model: IGRF2010



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Sneed 9 2H PP	0.00	6.29	180.07	674694.79	670396.57	32° 51' 12.92 N	103° 46' 42.45 W	Point
Sneed 9 2H Surface	0.00	0.00	0.00	674688.50	670216.50	32° 51' 12.87 N	103° 46' 44.57 W	Point
Sneed 9 2H PBHL	5650.52	17.70	4797.10	674706.20	675013.60	32° 51' 12.79 N	103° 45' 48.33 W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5204.21	0.00	0.00	5204.21	0.00	0.00	0.00	0.00	0.00	
3	6031.48	91.00	88.00	5725.00	18.50	529.64	11.00	88.00	529.70	
4	6099.03	91.00	90.03	5723.82	19.66	597.16	3.00	89.99	597.23	
5	10299.61	91.00	90.03	5650.52	17.70	4797.10	0.00	0.00	4797.13	Sneed 9 2H PBHL



ARCHER DIRECTIONAL DRILLING SERVICES
12101 Cutten Rd. Houston, Texas 77066
Phone: 281-301-2600 Fax: 281-301-2795

Design: Plan #2 (2H/Lateral)
Created By: Ivonne Gonzalez
Date: 14:03, March 17 2014

COG OPERATING, LLC

Lea County, NM

Sneed 9 Federal Com 2H

2H

Lateral

Plan: Plan #2

Standard Planning Report

17 March, 2014

Section Distances

Sec9,T17S,R32E

SHL - Unit D

989.7'FNL, 149.9'FWL

PP

984.1'FNL, 330.0'FWL

PBHL - Unit A

990.6'FNL, 330.0'FEL

Archer

Planning Report

Database:	EDM, R5000.1 MULTI	Local Co-ordinate Reference:	Well 2H
Company:	COG OPERATING, LLC	TVD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Project:	Lea County, NM	MD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Site:	Sneed 9 Federal Com 2H	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

Project	Lea 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	Sneed 9 Federal Com 2H		
Site Position:		Northing:	674,688.50 usft
From:	Map	Easting:	670,216.50 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	32° 51' 12.87 N
		Longitude:	103° 46' 44.57 W
		Grid Convergence:	0.30 °

Well	2H		
Well Position	+N-S	0.00 usft	Northing:
	+E-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			4,082.00 usft

Wellbore	Lateral		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/17/2014	7.39	60.66	48,691

Design	Plan #2		
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Audit Notes: Lines were drawn by ARCHER with the X,Y, coordinates listed in the surface plat.

Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	89.79

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	0.00	0.00	0.00	0.00	
5,204.21	0.00	0.00	5,204.21	0.00	0.00	0.00	0.00	0.00	0.00	
6,031.48	91.00	88.00	5,725.00	18.50	529.64	11.00	11.00	0.00	88.00	
6,099.03	91.00	90.03	5,723.82	19.66	597.16	3.00	0.00	3.00	89.99	
10,299.61	91.00	90.03	5,650.52	17.70	4,797.10	0.00	0.00	0.00	0.00	Sneed 9 2H PBHL

Archer

Planning Report

Database:	EDM R5000.1 MULTI	Local Co-ordinate Reference:	Well 2H
Company:	COG OPERATING, LLC	TVD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Project:	Lea County, NM	MD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Site:	Sneed 9 Federal Com 2H	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

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	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	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	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	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	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	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	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	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	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	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	0.00	0.00	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	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	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	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	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	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	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	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	0.00	0.00	
2,700.00	0.00	0.00	2,700.00	0.00	0.00	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	0.00	0.00	
2,900.00	0.00	0.00	2,900.00	0.00	0.00	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	0.00	0.00	
3,100.00	0.00	0.00	3,100.00	0.00	0.00	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	0.00	0.00	
3,300.00	0.00	0.00	3,300.00	0.00	0.00	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	0.00	0.00	
3,500.00	0.00	0.00	3,500.00	0.00	0.00	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	0.00	0.00	
3,700.00	0.00	0.00	3,700.00	0.00	0.00	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	0.00	0.00	
3,900.00	0.00	0.00	3,900.00	0.00	0.00	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	0.00	0.00	
4,100.00	0.00	0.00	4,100.00	0.00	0.00	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	0.00	0.00	
4,300.00	0.00	0.00	4,300.00	0.00	0.00	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	0.00	0.00	
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,204.21	0.00	0.00	5,204.21	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 11.00										

Archer Planning Report

Database:	EDM R5000.1 MULTI	Local Co-ordinate Reference:	Well 2H
Company:	COG OPERATING, LLC	TVD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Project:	Lea County, NM	MD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Site:	Sneed 9 Federal Com 2H	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

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)
5,250.00	5.04	88.00	5,249.94	0.07	2.01	2.01	11.00	11.00	0.00
5,300.00	10.54	88.00	5,299.46	0.31	8.78	8.78	11.00	11.00	0.00
5,350.00	16.04	88.00	5,348.10	0.71	20.26	20.26	11.00	11.00	0.00
5,400.00	21.54	88.00	5,395.42	1.27	36.34	36.35	11.00	11.00	0.00
5,450.00	27.04	88.00	5,440.98	1.99	56.89	56.90	11.00	11.00	0.00
5,500.00	32.54	88.00	5,484.36	2.85	81.70	81.71	11.00	11.00	0.00
5,550.00	38.04	88.00	5,525.15	3.86	110.56	110.57	11.00	11.00	0.00
5,600.00	43.54	88.00	5,563.00	5.00	143.19	143.21	11.00	11.00	0.00
5,650.00	49.04	88.00	5,597.54	6.26	179.29	179.31	11.00	11.00	0.00
5,700.00	54.54	88.00	5,628.45	7.63	218.54	218.57	11.00	11.00	0.00
5,750.00	60.04	88.00	5,655.47	9.10	260.57	260.60	11.00	11.00	0.00
5,800.00	65.54	88.00	5,678.32	10.65	304.99	305.03	11.00	11.00	0.00
5,850.00	71.04	88.00	5,696.81	12.27	351.39	351.44	11.00	11.00	0.00
5,900.00	76.54	88.00	5,710.77	13.95	399.36	399.41	11.00	11.00	0.00
5,950.00	82.04	88.00	5,720.06	15.66	448.44	448.49	11.00	11.00	0.00
6,000.00	87.54	88.00	5,724.60	17.40	498.18	498.24	11.00	11.00	0.00
6,031.48	91.00	88.00	5,725.00	18.50	529.64	529.70	11.00	11.00	0.00
Start DLS 3.00 TFO 89.99									
6,099.03	91.00	90.03	5,723.82	19.66	597.16	597.23	3.00	0.00	3.00
Start 4200.58 hold at 6099.03 MD									
6,200.00	91.00	90.03	5,722.06	19.61	698.12	698.18	0.00	0.00	0.00
6,300.00	91.00	90.03	5,720.32	19.56	798.10	798.17	0.00	0.00	0.00
6,400.00	91.00	90.03	5,718.57	19.52	898.09	898.15	0.00	0.00	0.00
6,500.00	91.00	90.03	5,716.83	19.47	998.07	998.14	0.00	0.00	0.00
6,600.00	91.00	90.03	5,715.08	19.42	1,098.06	1,098.12	0.00	0.00	0.00
6,700.00	91.00	90.03	5,713.34	19.38	1,198.04	1,198.10	0.00	0.00	0.00
6,800.00	91.00	90.03	5,711.59	19.33	1,298.02	1,298.09	0.00	0.00	0.00
6,900.00	91.00	90.03	5,709.85	19.28	1,398.01	1,398.07	0.00	0.00	0.00
7,000.00	91.00	90.03	5,708.10	19.24	1,497.99	1,498.06	0.00	0.00	0.00
7,100.00	91.00	90.03	5,706.36	19.19	1,597.98	1,598.04	0.00	0.00	0.00
7,200.00	91.00	90.03	5,704.61	19.14	1,697.96	1,698.02	0.00	0.00	0.00
7,300.00	91.00	90.03	5,702.86	19.10	1,797.95	1,798.01	0.00	0.00	0.00
7,400.00	91.00	90.03	5,701.12	19.05	1,897.93	1,897.99	0.00	0.00	0.00
7,500.00	91.00	90.03	5,699.37	19.01	1,997.92	1,997.97	0.00	0.00	0.00
7,600.00	91.00	90.03	5,697.63	18.96	2,097.90	2,097.96	0.00	0.00	0.00
7,700.00	91.00	90.03	5,695.88	18.91	2,197.89	2,197.94	0.00	0.00	0.00
7,800.00	91.00	90.03	5,694.14	18.87	2,297.87	2,297.93	0.00	0.00	0.00
7,900.00	91.00	90.03	5,692.39	18.82	2,397.86	2,397.91	0.00	0.00	0.00
8,000.00	91.00	90.03	5,690.65	18.77	2,497.84	2,497.89	0.00	0.00	0.00
8,100.00	91.00	90.03	5,688.90	18.73	2,597.83	2,597.88	0.00	0.00	0.00
8,200.00	91.00	90.03	5,687.16	18.68	2,697.81	2,697.86	0.00	0.00	0.00
8,300.00	91.00	90.03	5,685.41	18.63	2,797.80	2,797.85	0.00	0.00	0.00
8,400.00	91.00	90.03	5,683.67	18.59	2,897.78	2,897.83	0.00	0.00	0.00
8,500.00	91.00	90.03	5,681.92	18.54	2,997.77	2,997.81	0.00	0.00	0.00
8,600.00	91.00	90.03	5,680.18	18.49	3,097.75	3,097.80	0.00	0.00	0.00
8,700.00	91.00	90.03	5,678.43	18.45	3,197.74	3,197.78	0.00	0.00	0.00
8,800.00	91.00	90.03	5,676.69	18.40	3,297.72	3,297.77	0.00	0.00	0.00
8,900.00	91.00	90.03	5,674.94	18.35	3,397.71	3,397.75	0.00	0.00	0.00
9,000.00	91.00	90.03	5,673.20	18.31	3,497.69	3,497.73	0.00	0.00	0.00
9,100.00	91.00	90.03	5,671.45	18.26	3,597.67	3,597.72	0.00	0.00	0.00
9,200.00	91.00	90.03	5,669.71	18.21	3,697.66	3,697.70	0.00	0.00	0.00
9,300.00	91.00	90.03	5,667.96	18.17	3,797.64	3,797.69	0.00	0.00	0.00
9,400.00	91.00	90.03	5,666.22	18.12	3,897.63	3,897.67	0.00	0.00	0.00
9,500.00	91.00	90.03	5,664.47	18.07	3,997.61	3,997.65	0.00	0.00	0.00

Archer Planning Report

Database:	EDM R5000.1 MULTI	Local Co-ordinate Reference:	Well 2H
Company:	COG OPERATING, LLC	TVD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Project:	Lea County, NM	MD Reference:	4082'GL+14'KB @ 4096.00usft (Planning)
Site:	Sneed 9 Federal Com 2H	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
Design:	Plan #2		

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)
9,600.00	91.00	90.03	5,662.73	18.03	4,097.60	4,097.64	0.00	0.00	0.00
9,700.00	91.00	90.03	5,660.98	17.98	4,197.58	4,197.62	0.00	0.00	0.00
9,800.00	91.00	90.03	5,659.24	17.93	4,297.57	4,297.60	0.00	0.00	0.00
9,900.00	91.00	90.03	5,657.49	17.89	4,397.55	4,397.59	0.00	0.00	0.00
10,000.00	91.00	90.03	5,655.75	17.84	4,497.54	4,497.57	0.00	0.00	0.00
10,100.00	91.00	90.03	5,654.00	17.79	4,597.52	4,597.56	0.00	0.00	0.00
10,200.00	91.00	90.03	5,652.26	17.75	4,697.51	4,697.54	0.00	0.00	0.00
10,299.61	91.00	90.03	5,650.52	17.70	4,797.10	4,797.13	0.00	0.00	0.00
TD at 10299.61									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Sneed 9 2H Surface	0.00	0.00	0.00	0.00	0.00	674,688.50	670,216.50	32° 51' 12.87 N	103° 46' 44.57 W
- plan hits target center									
- Point									
Sneed 9 2H PP	0.00	0.00	0.00	6.29	180.07	674,694.78	670,396.57	32° 51' 12.92 N	103° 46' 42.45 W
- plan misses target center by 180.18usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
Sneed 9 2H PBHL	0.00	0.00	5,650.52	17.70	4,797.10	674,708.20	675,013.60	32° 51' 12.79 N	103° 45' 48.33 W
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,204.21	5,204.21	0.00	0.00	Start Build 11.00
6,031.48	5,725.00	18.50	529.64	Start DLS 3.00 TFO 89.99
6,099.03	5,723.82	19.66	597.16	Start 4200.58 hold at 6099.03 MD
10,299.61	5,650.52	17.70	4,797.10	TD at 10299.61