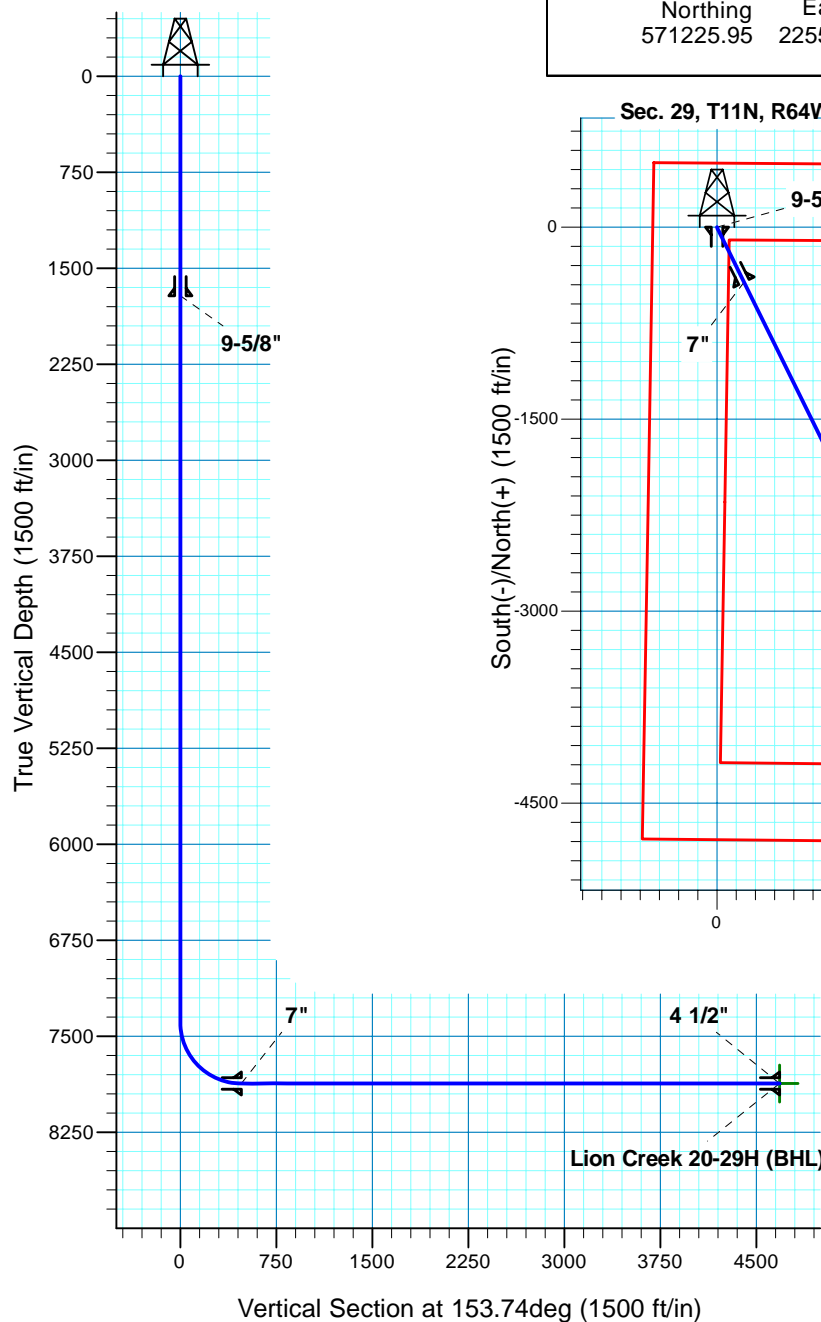


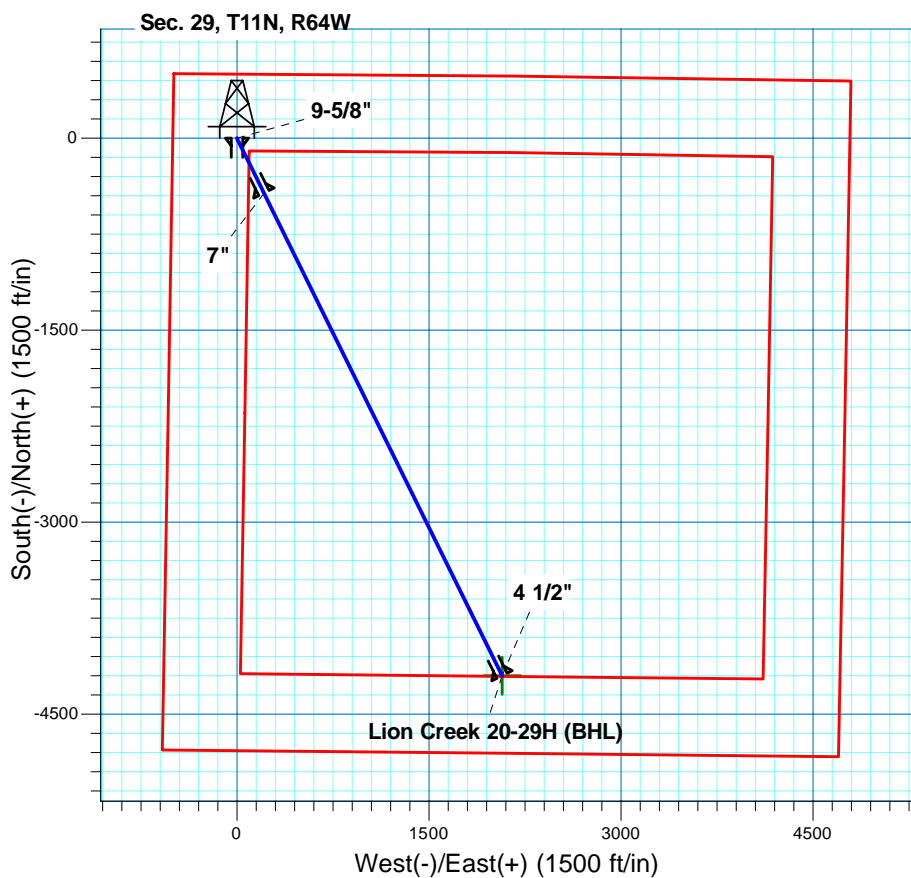
Lion Creek 20-29H

Section 29 T11N R64W

Weld County, CO



Surface Location					
NAD 1927 (NADCON CONUS) Colorado North 501					
Ground Elevation: 5512.00 RIG @ 5534.00ft (TBD)					
Northing	Easting	Latitude	Longitude		
571225.95	2255036.74	40° 53' 51.979 N	104° 34' 39.061 W		



T M

Azimuths to True North
Magnetic North: 8.74°

Magnetic Field
Strength: 53408.3nT
Dip Angle: 67.48°
Date: 8/16/2011
Model: IGRF200510

Project: DJ - Hereford Ranch
Site: Lion Creek 20-29H
Well: Lion Creek 20-29H
Plan: APD Directional Plan

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	7391.53	0.00	0.00	7391.53	0.00	0.00	0.00	0.00	0.00	
3	8141.54	90.00	153.74	7869.00	-428.19	211.26	12.00	153.74	477.47	
4	12346.31	90.00	153.74	7869.00	-4198.98	2071.69	0.00	0.00	4682.24	Lion Creek 20-29H (BHL)
TARGET DETAILS										
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape		
Lion Creek 20-29H (BHL)	7869.00	-4198.98	2071.69	567048.75	2257152.00	40° 53' 10.489 N	104° 34' 12.090 W	Point		

Denver Division- Colorado

DJ - Hereford Ranch

Lion Creek 20-29H

Lion Creek 20-29H

Original Wellbore

Plan: APD Direcitonal Plan

Standard Planning Report

16 August, 2011

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Lion Creek 20-29H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5534.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5534.00ft (TBD)
Site:	Lion Creek 20-29H	North Reference:	True
Well:	Lion Creek 20-29H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Direcitonal Plan		

Project	DJ - Hereford Ranch, Weld County		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado North 501		

Site	Lion Creek 20-29H				
Site Position:		Northing:	571,225.95 ft	Latitude:	40° 53' 51.979 N
From:	Lat/Long	Easting:	2,255,036.74 ft	Longitude:	104° 34' 39.061 W
Position Uncertainty:	0.00 ft	Slot Radius:	"	Grid Convergence:	0.60 deg

Well	Lion Creek 20-29H					
Well Position	+N-S	0.00 ft	Northing:	571,225.95 ft	Latitude:	40° 53' 51.979 N
	+E-W	0.00 ft	Easting:	2,255,036.74 ft	Longitude:	104° 34' 39.061 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,512.00 ft

Wellbore	Original Wellbore				
Magnetics	Model Name	Sample Date	Declination (deg)	Dip Angle (deg)	Field Strength (nT)
	IGRF200510	8/16/2011	8.74	67.48	53,408

Design	APD Direcitonal Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (deg)
	0.00	0.00	0.00	153.74

Plan Sections										
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)	TFO (deg)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,391.53	0.00	0.00	7,391.53	0.00	0.00	0.00	0.00	0.00	0.00	
8,141.54	90.00	153.74	7,869.00	-428.19	211.26	12.00	12.00	0.00	153.74	
12,346.31	90.00	153.74	7,869.00	-4,198.98	2,071.69	0.00	0.00	0.00	0.00	Lion Creek 20-29H

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Lion Creek 20-29H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5534.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5534.00ft (TBD)
Site:	Lion Creek 20-29H	North Reference:	True
Well:	Lion Creek 20-29H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Direcitonal Plan		

Planned Survey									
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)
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
1,715.00	0.00	0.00	1,715.00	0.00	0.00	0.00	0.00	0.00	0.00
9-5/8"									
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

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Lion Creek 20-29H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5534.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5534.00ft (TBD)
Site:	Lion Creek 20-29H	North Reference:	True
Well:	Lion Creek 20-29H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Direcitonal Plan		

Planned Survey									
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,391.53	0.00	0.00	7,391.53	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	1.02	153.74	7,400.00	-0.07	0.03	0.08	12.00	12.00	0.00
7,500.00	13.02	153.74	7,499.07	-11.00	5.43	12.27	12.00	12.00	0.00
7,600.00	25.02	153.74	7,593.44	-40.17	19.82	44.79	12.00	12.00	0.00
7,700.00	37.02	153.74	7,678.99	-86.29	42.58	96.22	12.00	12.00	0.00
7,800.00	49.02	153.74	7,751.97	-147.36	72.70	164.32	12.00	12.00	0.00
7,900.00	61.02	153.74	7,809.20	-220.70	108.89	246.10	12.00	12.00	0.00
8,000.00	73.02	153.74	7,848.18	-303.11	149.55	337.99	12.00	12.00	0.00
8,100.00	85.02	153.74	7,867.19	-390.98	192.90	435.98	12.00	12.00	0.00
8,141.54	90.00	153.74	7,869.00	-428.19	211.26	477.47	12.00	12.00	0.00
7"									
8,200.00	90.00	153.74	7,869.00	-480.62	237.13	535.93	0.00	0.00	0.00
8,300.00	90.00	153.74	7,869.00	-570.30	281.37	635.93	0.00	0.00	0.00
8,400.00	90.00	153.74	7,869.00	-659.97	325.62	735.93	0.00	0.00	0.00
8,500.00	90.00	153.74	7,869.00	-749.65	369.86	835.93	0.00	0.00	0.00
8,600.00	90.00	153.74	7,869.00	-839.33	414.11	935.93	0.00	0.00	0.00
8,700.00	90.00	153.74	7,869.00	-929.01	458.36	1,035.93	0.00	0.00	0.00
8,800.00	90.00	153.74	7,869.00	-1,018.69	502.60	1,135.93	0.00	0.00	0.00
8,900.00	90.00	153.74	7,869.00	-1,108.37	546.85	1,235.93	0.00	0.00	0.00
9,000.00	90.00	153.74	7,869.00	-1,198.05	591.09	1,335.93	0.00	0.00	0.00
9,100.00	90.00	153.74	7,869.00	-1,287.73	635.34	1,435.93	0.00	0.00	0.00
9,200.00	90.00	153.74	7,869.00	-1,377.41	679.58	1,535.93	0.00	0.00	0.00
9,300.00	90.00	153.74	7,869.00	-1,467.08	723.83	1,635.93	0.00	0.00	0.00
9,400.00	90.00	153.74	7,869.00	-1,556.76	768.08	1,735.93	0.00	0.00	0.00
9,500.00	90.00	153.74	7,869.00	-1,646.44	812.32	1,835.93	0.00	0.00	0.00
9,600.00	90.00	153.74	7,869.00	-1,736.12	856.57	1,935.93	0.00	0.00	0.00
9,700.00	90.00	153.74	7,869.00	-1,825.80	900.81	2,035.93	0.00	0.00	0.00
9,800.00	90.00	153.74	7,869.00	-1,915.48	945.06	2,135.93	0.00	0.00	0.00
9,900.00	90.00	153.74	7,869.00	-2,005.16	989.30	2,235.93	0.00	0.00	0.00
10,000.00	90.00	153.74	7,869.00	-2,094.84	1,033.55	2,335.93	0.00	0.00	0.00
10,100.00	90.00	153.74	7,869.00	-2,184.52	1,077.80	2,435.93	0.00	0.00	0.00

EOG Resources Inc

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Site Lion Creek 20-29H
Company:	Denver Division- Colorado	TVD Reference:	RIG @ 5534.00ft (TBD)
Project:	DJ - Hereford Ranch	MD Reference:	RIG @ 5534.00ft (TBD)
Site:	Lion Creek 20-29H	North Reference:	True
Well:	Lion Creek 20-29H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	APD Direcitonal Plan		

Planned Survey										
Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (?/100ft)	Build Rate (?/100ft)	Turn Rate (?/100ft)	
10,200.00	90.00	153.74	7,869.00	-2,274.20	1,122.04	2,535.93	0.00	0.00	0.00	
10,300.00	90.00	153.74	7,869.00	-2,363.87	1,166.29	2,635.93	0.00	0.00	0.00	
10,400.00	90.00	153.74	7,869.00	-2,453.55	1,210.53	2,735.93	0.00	0.00	0.00	
10,500.00	90.00	153.74	7,869.00	-2,543.23	1,254.78	2,835.93	0.00	0.00	0.00	
10,600.00	90.00	153.74	7,869.00	-2,632.91	1,299.02	2,935.93	0.00	0.00	0.00	
10,700.00	90.00	153.74	7,869.00	-2,722.59	1,343.27	3,035.93	0.00	0.00	0.00	
10,800.00	90.00	153.74	7,869.00	-2,812.27	1,387.52	3,135.93	0.00	0.00	0.00	
10,900.00	90.00	153.74	7,869.00	-2,901.95	1,431.76	3,235.93	0.00	0.00	0.00	
11,000.00	90.00	153.74	7,869.00	-2,991.63	1,476.01	3,335.93	0.00	0.00	0.00	
11,100.00	90.00	153.74	7,869.00	-3,081.31	1,520.25	3,435.93	0.00	0.00	0.00	
11,200.00	90.00	153.74	7,869.00	-3,170.98	1,564.50	3,535.93	0.00	0.00	0.00	
11,300.00	90.00	153.74	7,869.00	-3,260.66	1,608.74	3,635.93	0.00	0.00	0.00	
11,400.00	90.00	153.74	7,869.00	-3,350.34	1,652.99	3,735.93	0.00	0.00	0.00	
11,500.00	90.00	153.74	7,869.00	-3,440.02	1,697.24	3,835.93	0.00	0.00	0.00	
11,600.00	90.00	153.74	7,869.00	-3,529.70	1,741.48	3,935.93	0.00	0.00	0.00	
11,700.00	90.00	153.74	7,869.00	-3,619.38	1,785.73	4,035.93	0.00	0.00	0.00	
11,800.00	90.00	153.74	7,869.00	-3,709.06	1,829.97	4,135.93	0.00	0.00	0.00	
11,900.00	90.00	153.74	7,869.00	-3,798.74	1,874.22	4,235.93	0.00	0.00	0.00	
12,000.00	90.00	153.74	7,869.00	-3,888.42	1,918.47	4,335.93	0.00	0.00	0.00	
12,100.00	90.00	153.74	7,869.00	-3,978.10	1,962.71	4,435.93	0.00	0.00	0.00	
12,200.00	90.00	153.74	7,869.00	-4,067.77	2,006.96	4,535.93	0.00	0.00	0.00	
12,300.00	90.00	153.74	7,869.00	-4,157.45	2,051.20	4,635.93	0.00	0.00	0.00	
12,346.31	90.00	153.74	7,869.00	-4,198.98	2,071.69	4,682.24	0.00	0.00	0.00	
Lion Creek 20-29H (BHL)										

Design Targets										
Target Name	Dip Angle (deg)	Dip Dir. (deg)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Lion Creek 20-29H (B	0.00	0.00	7,869.00	-4,198.98	2,071.69	567,048.75	2,257,152.00	40° 53' 10.489 N	104° 34' 12.090 W	
- plan hits target center										
- Point										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")		
1,715.00	1,715.00	9-5/8"	9-5/8	13-1/2		
8,141.54	7,869.00	7"	7	8-3/4		
12,346.31	7,869.00	4 1/2"	4-1/2	6		