

ANSCHUTZ EXPLORATION CORP.

RIO BLANCO COUNTY, COLORADO (NAD-83)

MOHEE FED 0297-17-29

14NH - Slot Mohee Fed 0297-17-29-14NH

OH

Plan: PERMIT

Standard Planning Report

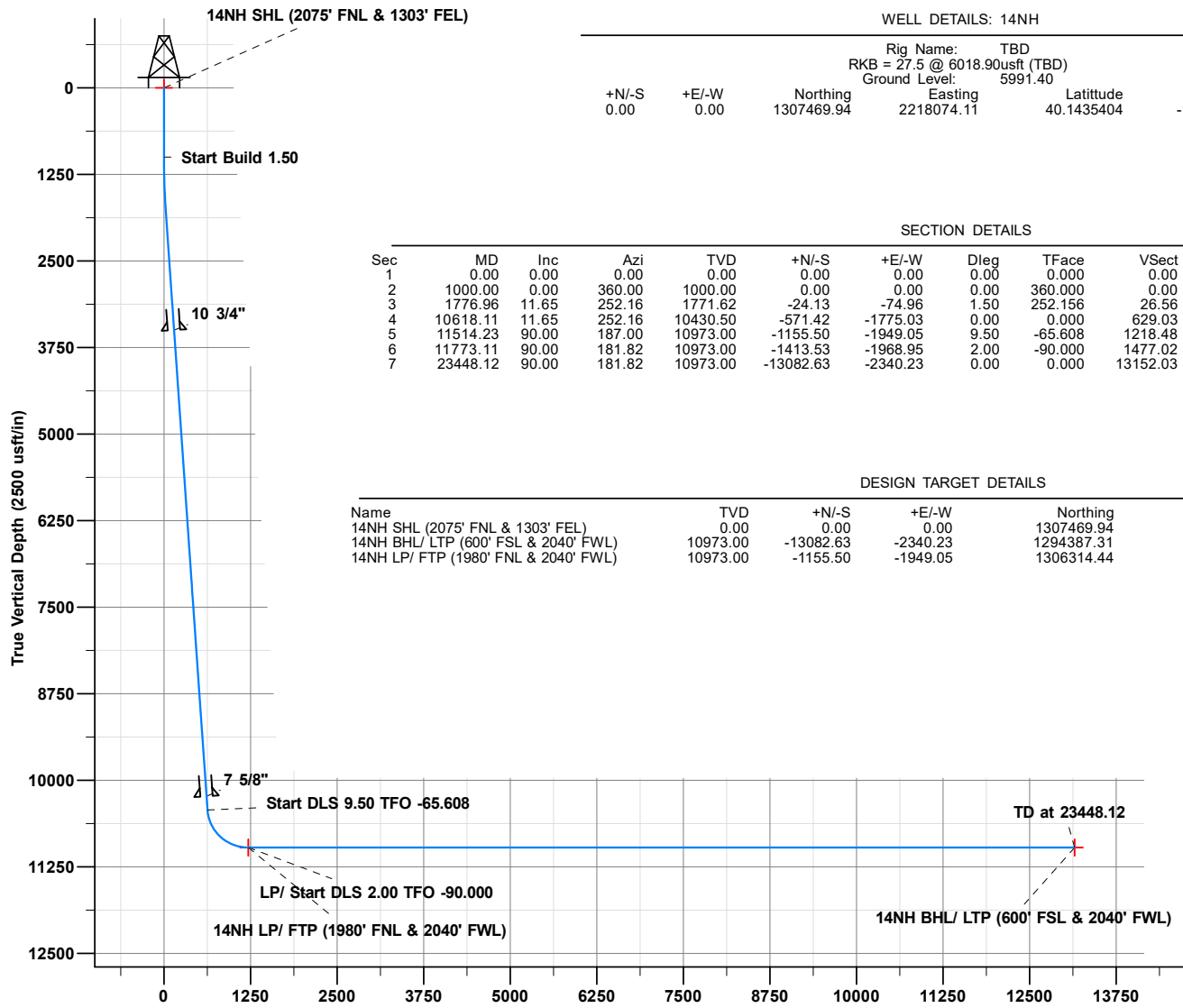
29 December, 2023



Project: RIO BLANCO COUNTY, COLORADO (NAD-83)
 Site: MOHEE FED 0297-17-29
 Well: 14NH
 Wellbore: OH
 Design: PERMIT
 Lat: 40.1435404
 Long: -108.2974124
 GL: Ground Level:
 RKB = 27.5 @ 6018.90usft (TBD)

PROJECT DETAILS: RIO BLANCO COUNTY, COLORADO (NAD-83)

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Northern Zone
 System Datum: Mean Sea Level



Vertical Section at 181.87° (2500 usft/in)

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WELL DETAILS: 14NH

Rig Name:	TBD				
RKB = 27.5 @ 6018.90usft (TBD)					
Ground Level:	5991.40				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1307469.94	2218074.11	40.1435404	-108.2974124

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	0.000	0.00	
2	1000.00	0.00	360.00	1000.00	0.00	0.00	0.00	360.000	0.00	
3	1776.96	11.65	252.16	1771.62	-24.13	-74.96	1.50	252.156	26.56	
4	10618.11	11.65	252.16	10430.50	-571.42	-1775.03	0.00	0.000	629.03	14NH LP/ FTP (1980' FNL & 2040' FWL)
5	11514.23	90.00	187.00	10973.00	-1155.50	-1949.05	9.50	-65.608	1218.48	14NH LP/ FTP (1980' FNL & 2040' FWL)
6	11773.11	90.00	181.82	10973.00	-1413.53	-1968.95	2.00	-90.000	1477.02	14NH BHL/ LTP (600' FSL & 2040' FWL)
7	23448.12	90.00	181.82	10973.00	-13082.63	-2340.23	0.00	0.000	13152.03	14NH BHL/ LTP (600' FSL & 2040' FWL)

DESIGN TARGET DETAILS

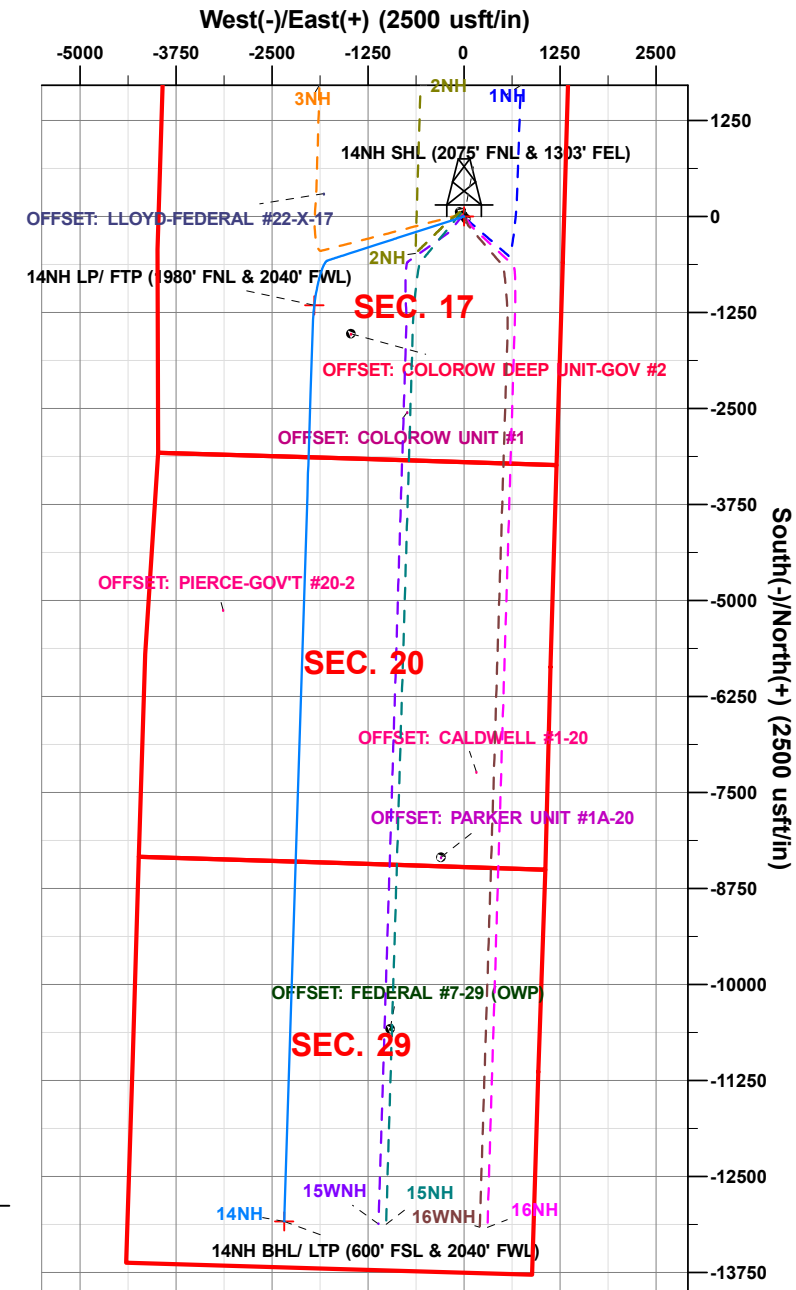
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
14NH SHL (2075' FNL & 1303' FEL)	0.00	0.00	0.00	1307469.94	2218074.11	40.1435404	-108.2974124
14NH BHL/ LTP (600' FSL & 2040' FWL)	10973.00	-13082.63	-2340.23	1294387.31	2215733.88	40.1074417	-108.3042996
14NH LP/ FTP (1980' FNL & 2040' FWL)	10973.00	-1155.50	-1949.05	1306314.44	2216125.06	40.1402010	-108.3042500

CASING DETAILS

TVD	MD	Name
3500.00	3541.73	10 3/4"
10234.62	10418.11	7 5/8"

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2906.00	2935.23	Mesaverde
6010.00	6104.57	Cameo Coals
6184.00	6282.23	Rollins
7331.00	7453.37	Mancos -Buck Tongue
7369.00	7492.17	Loyd
7456.00	7581.00	Loyd Shale
7566.00	7693.32	Lower Loyd
7723.00	7853.62	Lower Loyd Shale
7908.00	8042.52	Castlegate
8184.00	8324.33	Mancos- Bluegate Tongue
8734.00	8885.91	Mancos B
9362.00	9527.13	Lower Mancos
10435.00	10622.71	Niobrara
10762.00	10988.93	Tow Creek
10959.00	11382.90	top hz target
10973.00	11514.23	HZ target



Plan: PERMIT (14NH/OH)

Created By: Matthew May Date: 8:58, December 29 2023



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 14NH - Slot Mohee Fed 0297-17-29-14NH
Company:	ANSCHUTZ EXPLORATION CORP.	TVD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Project:	RIO BLANCO COUNTY, COLORADO (NAD-83)	MD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Site:	MOHEE FED 0297-17-29	North Reference:	Grid
Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Project	RIO BLANCO COUNTY, COLORADO (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	MOHEE FED 0297-17-29		
Site Position:		Northing:	1,307,514.47 usft
From:	Map	Easting:	2,218,033.93 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	40.1436591
		Longitude:	-108.2975611
		Grid Convergence:	-1.808 °

Well	14NH - Slot Mohee Fed 0297-17-29-14NH					
Well Position	+N/-S	-44.53 usft	Northing:	1,307,469.94 usft	Latitude:	40.1435404
	+E/-W	40.18 usft	Easting:	2,218,074.11 usft	Longitude:	-108.2974125
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,991.40 usft

Design	PERMIT			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	181.87

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	0.000	
1,000.00	0.00	360.00	1,000.00	0.00	0.00	0.00	0.00	0.00	360.000	
1,776.96	11.65	252.16	1,771.62	-24.13	-74.96	1.50	1.50	0.00	252.156	
10,618.11	11.65	252.16	10,430.50	-571.42	-1,775.03	0.00	0.00	0.00	0.000	
11,514.23	90.00	187.00	10,973.00	-1,155.50	-1,949.05	9.50	8.74	-7.27	-65.608	14NH LP/ FTP (198
11,773.11	90.00	181.82	10,973.00	-1,413.53	-1,968.95	2.00	0.00	-2.00	-90.000	
23,448.12	90.00	181.82	10,973.00	-13,082.63	-2,340.23	0.00	0.00	0.00	0.000	14NH BHL/ LTP (6C



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Site:	MOHEE FED 0297-17-29	North Reference:	Grid
Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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	0.00
14NH SHL (2075' FNL & 1303' FEL)										
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	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	0.00
700.00	0.00	0.00	700.00	0.00	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	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	360.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	1.50	252.16	1,099.99	-0.40	-1.25	0.44	1.50	1.50	1.50	0.00
1,200.00	3.00	252.16	1,199.91	-1.60	-4.98	1.77	1.50	1.50	1.50	0.00
1,300.00	4.50	252.16	1,299.69	-3.61	-11.21	3.97	1.50	1.50	1.50	0.00
1,400.00	6.00	252.16	1,399.27	-6.41	-19.92	7.06	1.50	1.50	1.50	0.00
1,500.00	7.50	252.16	1,498.57	-10.01	-31.11	11.02	1.50	1.50	1.50	0.00
1,600.00	9.00	252.16	1,597.54	-14.41	-44.76	15.86	1.50	1.50	1.50	0.00
1,700.00	10.50	252.16	1,696.09	-19.60	-60.88	21.58	1.50	1.50	1.50	0.00
1,776.96	11.65	252.16	1,771.62	-24.13	-74.96	26.56	1.50	1.50	1.50	0.00
1,800.00	11.65	252.16	1,794.18	-25.56	-79.39	28.13	0.00	0.00	0.00	0.00
1,900.00	11.65	252.16	1,892.12	-31.75	-98.62	34.95	0.00	0.00	0.00	0.00
2,000.00	11.65	252.16	1,990.06	-37.94	-117.85	41.76	0.00	0.00	0.00	0.00
2,100.00	11.65	252.16	2,087.99	-44.13	-137.08	48.58	0.00	0.00	0.00	0.00
2,200.00	11.65	252.16	2,185.93	-50.32	-156.31	55.39	0.00	0.00	0.00	0.00
2,300.00	11.65	252.16	2,283.87	-56.51	-175.53	62.21	0.00	0.00	0.00	0.00
2,400.00	11.65	252.16	2,381.81	-62.70	-194.76	69.02	0.00	0.00	0.00	0.00
2,500.00	11.65	252.16	2,479.75	-68.89	-213.99	75.83	0.00	0.00	0.00	0.00
2,600.00	11.65	252.16	2,577.69	-75.08	-233.22	82.65	0.00	0.00	0.00	0.00
2,700.00	11.65	252.16	2,675.62	-81.27	-252.45	89.46	0.00	0.00	0.00	0.00
2,800.00	11.65	252.16	2,773.56	-87.46	-271.68	96.28	0.00	0.00	0.00	0.00
2,900.00	11.65	252.16	2,871.50	-93.65	-290.91	103.09	0.00	0.00	0.00	0.00
2,935.23	11.65	252.16	2,906.00	-95.83	-297.68	105.49	0.00	0.00	0.00	0.00
Mesaverde										
3,000.00	11.65	252.16	2,969.44	-99.84	-310.14	109.91	0.00	0.00	0.00	0.00
3,100.00	11.65	252.16	3,067.38	-106.03	-329.37	116.72	0.00	0.00	0.00	0.00
3,200.00	11.65	252.16	3,165.32	-112.22	-348.60	123.54	0.00	0.00	0.00	0.00
3,300.00	11.65	252.16	3,263.25	-118.41	-367.82	130.35	0.00	0.00	0.00	0.00
3,400.00	11.65	252.16	3,361.19	-124.60	-387.05	137.16	0.00	0.00	0.00	0.00
3,500.00	11.65	252.16	3,459.13	-130.79	-406.28	143.98	0.00	0.00	0.00	0.00
3,541.73	11.65	252.16	3,500.00	-133.37	-414.31	146.82	0.00	0.00	0.00	0.00
10 3/4"										
3,600.00	11.65	252.16	3,557.07	-136.98	-425.51	150.79	0.00	0.00	0.00	0.00
3,700.00	11.65	252.16	3,655.01	-143.17	-444.74	157.61	0.00	0.00	0.00	0.00
3,800.00	11.65	252.16	3,752.95	-149.36	-463.97	164.42	0.00	0.00	0.00	0.00
3,900.00	11.65	252.16	3,850.88	-155.55	-483.20	171.24	0.00	0.00	0.00	0.00
4,000.00	11.65	252.16	3,948.82	-161.74	-502.43	178.05	0.00	0.00	0.00	0.00
4,100.00	11.65	252.16	4,046.76	-167.93	-521.66	184.86	0.00	0.00	0.00	0.00
4,200.00	11.65	252.16	4,144.70	-174.12	-540.89	191.68	0.00	0.00	0.00	0.00
4,300.00	11.65	252.16	4,242.64	-180.31	-560.12	198.49	0.00	0.00	0.00	0.00
4,400.00	11.65	252.16	4,340.58	-186.50	-579.34	205.31	0.00	0.00	0.00	0.00
4,500.00	11.65	252.16	4,438.51	-192.69	-598.57	212.12	0.00	0.00	0.00	0.00



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Site:	MOHEE FED 0297-17-29	North Reference:	Grid
Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)	
4,600.00	11.65	252.16	4,536.45	-198.88	-617.80	218.94	0.00	0.00	0.00	
4,700.00	11.65	252.16	4,634.39	-205.07	-637.03	225.75	0.00	0.00	0.00	
4,800.00	11.65	252.16	4,732.33	-211.26	-656.26	232.57	0.00	0.00	0.00	
4,900.00	11.65	252.16	4,830.27	-217.45	-675.49	239.38	0.00	0.00	0.00	
5,000.00	11.65	252.16	4,928.21	-223.64	-694.72	246.19	0.00	0.00	0.00	
5,100.00	11.65	252.16	5,026.14	-229.83	-713.95	253.01	0.00	0.00	0.00	
5,200.00	11.65	252.16	5,124.08	-236.02	-733.18	259.82	0.00	0.00	0.00	
5,300.00	11.65	252.16	5,222.02	-242.21	-752.41	266.64	0.00	0.00	0.00	
5,400.00	11.65	252.16	5,319.96	-248.40	-771.63	273.45	0.00	0.00	0.00	
5,500.00	11.65	252.16	5,417.90	-254.59	-790.86	280.27	0.00	0.00	0.00	
5,600.00	11.65	252.16	5,515.84	-260.78	-810.09	287.08	0.00	0.00	0.00	
5,700.00	11.65	252.16	5,613.78	-266.97	-829.32	293.90	0.00	0.00	0.00	
5,800.00	11.65	252.16	5,711.71	-273.17	-848.55	300.71	0.00	0.00	0.00	
5,900.00	11.65	252.16	5,809.65	-279.36	-867.78	307.52	0.00	0.00	0.00	
6,000.00	11.65	252.16	5,907.59	-285.55	-887.01	314.34	0.00	0.00	0.00	
6,100.00	11.65	252.16	6,005.53	-291.74	-906.24	321.15	0.00	0.00	0.00	
6,104.57	11.65	252.16	6,010.00	-292.02	-907.12	321.46	0.00	0.00	0.00	
Cameo Coals										
6,200.00	11.65	252.16	6,103.47	-297.93	-925.47	327.97	0.00	0.00	0.00	
6,282.23	11.65	252.16	6,184.00	-303.02	-941.28	333.57	0.00	0.00	0.00	
Rollins										
6,300.00	11.65	252.16	6,201.41	-304.12	-944.70	334.78	0.00	0.00	0.00	
6,400.00	11.65	252.16	6,299.34	-310.31	-963.92	341.60	0.00	0.00	0.00	
6,500.00	11.65	252.16	6,397.28	-316.50	-983.15	348.41	0.00	0.00	0.00	
6,600.00	11.65	252.16	6,495.22	-322.69	-1,002.38	355.22	0.00	0.00	0.00	
6,700.00	11.65	252.16	6,593.16	-328.88	-1,021.61	362.04	0.00	0.00	0.00	
6,800.00	11.65	252.16	6,691.10	-335.07	-1,040.84	368.85	0.00	0.00	0.00	
6,900.00	11.65	252.16	6,789.04	-341.26	-1,060.07	375.67	0.00	0.00	0.00	
7,000.00	11.65	252.16	6,886.97	-347.45	-1,079.30	382.48	0.00	0.00	0.00	
7,100.00	11.65	252.16	6,984.91	-353.64	-1,098.53	389.30	0.00	0.00	0.00	
7,200.00	11.65	252.16	7,082.85	-359.83	-1,117.76	396.11	0.00	0.00	0.00	
7,300.00	11.65	252.16	7,180.79	-366.02	-1,136.99	402.93	0.00	0.00	0.00	
7,400.00	11.65	252.16	7,278.73	-372.21	-1,156.21	409.74	0.00	0.00	0.00	
7,453.37	11.65	252.16	7,331.00	-375.51	-1,166.48	413.38	0.00	0.00	0.00	
Mancos -Buck Tongue										
7,492.17	11.65	252.16	7,369.00	-377.91	-1,173.94	416.02	0.00	0.00	0.00	
Loyd										
7,500.00	11.65	252.16	7,376.67	-378.40	-1,175.44	416.55	0.00	0.00	0.00	
7,581.00	11.65	252.16	7,456.00	-383.41	-1,191.02	422.07	0.00	0.00	0.00	
Loyd Shale										
7,600.00	11.65	252.16	7,474.60	-384.59	-1,194.67	423.37	0.00	0.00	0.00	
7,693.32	11.65	252.16	7,566.00	-390.37	-1,212.62	429.73	0.00	0.00	0.00	
Lower Loyd										
7,700.00	11.65	252.16	7,572.54	-390.78	-1,213.90	430.18	0.00	0.00	0.00	
7,800.00	11.65	252.16	7,670.48	-396.97	-1,233.13	437.00	0.00	0.00	0.00	
7,853.62	11.65	252.16	7,723.00	-400.29	-1,243.44	440.65	0.00	0.00	0.00	
Lower Loyd Shale										
7,900.00	11.65	252.16	7,768.42	-403.16	-1,252.36	443.81	0.00	0.00	0.00	
8,000.00	11.65	252.16	7,866.36	-409.35	-1,271.59	450.63	0.00	0.00	0.00	
8,042.52	11.65	252.16	7,908.00	-411.98	-1,279.76	453.52	0.00	0.00	0.00	
Castlegate										



Planning Report

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Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)
8,100.00	11.65	252.16	7,964.30	-415.54	-1,290.82	457.44	0.00	0.00	0.00
8,200.00	11.65	252.16	8,062.23	-421.73	-1,310.05	464.25	0.00	0.00	0.00
8,300.00	11.65	252.16	8,160.17	-427.92	-1,329.28	471.07	0.00	0.00	0.00
8,324.33	11.65	252.16	8,184.00	-429.43	-1,333.95	472.73	0.00	0.00	0.00
Mancos- Bluegate Tongue									
8,400.00	11.65	252.16	8,258.11	-434.11	-1,348.50	477.88	0.00	0.00	0.00
8,500.00	11.65	252.16	8,356.05	-440.30	-1,367.73	484.70	0.00	0.00	0.00
8,600.00	11.65	252.16	8,453.99	-446.49	-1,386.96	491.51	0.00	0.00	0.00
8,700.00	11.65	252.16	8,551.93	-452.68	-1,406.19	498.33	0.00	0.00	0.00
8,800.00	11.65	252.16	8,649.87	-458.87	-1,425.42	505.14	0.00	0.00	0.00
8,885.91	11.65	252.16	8,734.00	-464.19	-1,441.94	510.99	0.00	0.00	0.00
Mancos B									
8,900.00	11.65	252.16	8,747.80	-465.06	-1,444.65	511.96	0.00	0.00	0.00
9,000.00	11.65	252.16	8,845.74	-471.25	-1,463.88	518.77	0.00	0.00	0.00
9,100.00	11.65	252.16	8,943.68	-477.44	-1,483.11	525.58	0.00	0.00	0.00
9,200.00	11.65	252.16	9,041.62	-483.63	-1,502.34	532.40	0.00	0.00	0.00
9,300.00	11.65	252.16	9,139.56	-489.82	-1,521.57	539.21	0.00	0.00	0.00
9,400.00	11.65	252.16	9,237.50	-496.01	-1,540.80	546.03	0.00	0.00	0.00
9,500.00	11.65	252.16	9,335.43	-502.20	-1,560.02	552.84	0.00	0.00	0.00
9,527.13	11.65	252.16	9,362.00	-503.88	-1,565.24	554.69	0.00	0.00	0.00
Lower Mancos									
9,600.00	11.65	252.16	9,433.37	-508.39	-1,579.25	559.66	0.00	0.00	0.00
9,700.00	11.65	252.16	9,531.31	-514.58	-1,598.48	566.47	0.00	0.00	0.00
9,800.00	11.65	252.16	9,629.25	-520.77	-1,617.71	573.28	0.00	0.00	0.00
9,900.00	11.65	252.16	9,727.19	-526.96	-1,636.94	580.10	0.00	0.00	0.00
10,000.00	11.65	252.16	9,825.13	-533.15	-1,656.17	586.91	0.00	0.00	0.00
10,100.00	11.65	252.16	9,923.06	-539.34	-1,675.40	593.73	0.00	0.00	0.00
10,200.00	11.65	252.16	10,021.00	-545.53	-1,694.63	600.54	0.00	0.00	0.00
10,300.00	11.65	252.16	10,118.94	-551.72	-1,713.86	607.36	0.00	0.00	0.00
10,400.00	11.65	252.16	10,216.88	-557.91	-1,733.09	614.17	0.00	0.00	0.00
10,418.11	11.65	252.16	10,234.62	-559.04	-1,736.57	615.41	0.00	0.00	0.00
7 5/8"									
10,500.00	11.65	252.16	10,314.82	-564.10	-1,752.31	620.99	0.00	0.00	0.00
10,600.00	11.65	252.16	10,412.76	-570.29	-1,771.54	627.80	0.00	0.00	0.00
10,618.11	11.65	252.16	10,430.50	-571.42	-1,775.03	629.03	0.00	0.00	0.00
10,622.71	11.84	250.22	10,435.00	-571.72	-1,775.91	629.37	9.50	4.07	-42.17
Niobrara									
10,650.00	13.19	239.98	10,461.64	-574.22	-1,781.24	632.04	9.50	4.95	-37.50
10,700.00	16.45	226.35	10,509.99	-581.97	-1,791.31	640.11	9.50	6.51	-27.27
10,750.00	20.29	217.42	10,557.44	-593.75	-1,801.71	652.22	9.50	7.68	-17.85
10,800.00	24.44	211.32	10,603.67	-609.48	-1,812.36	668.29	9.50	8.30	-12.19
10,850.00	28.77	206.93	10,648.37	-629.05	-1,823.19	688.21	9.50	8.65	-8.78
10,900.00	33.20	203.62	10,691.23	-652.33	-1,834.13	711.83	9.50	8.87	-6.63
10,950.00	37.70	201.01	10,731.95	-679.16	-1,845.10	739.01	9.50	9.01	-5.21
10,988.93	41.24	199.33	10,762.00	-702.39	-1,853.62	762.50	9.50	9.09	-4.33
Tow Creek									
11,000.00	42.26	198.89	10,770.26	-709.36	-1,856.04	769.55	9.50	9.13	-3.94
11,050.00	46.84	197.11	10,805.89	-742.71	-1,866.85	803.23	9.50	9.17	-3.56
11,100.00	51.45	195.58	10,838.59	-778.99	-1,877.47	839.84	9.50	9.21	-3.06
11,150.00	56.07	194.23	10,868.14	-817.95	-1,887.83	879.12	9.50	9.25	-2.69
11,200.00	60.71	193.03	10,894.34	-859.32	-1,897.85	920.80	9.50	9.28	-2.41



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 14NH - Slot Mohee Fed 0297-17-29-14NH
Company:	ANSCHUTZ EXPLORATION CORP.	TVD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Project:	RIO BLANCO COUNTY, COLORADO (NAD-83)	MD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Site:	MOHEE FED 0297-17-29	North Reference:	Grid
Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)	
11,250.00	65.36	191.93	10,917.01	-902.82	-1,907.46	964.59	9.50	9.30	-2.20	
11,300.00	70.01	190.90	10,935.99	-948.15	-1,916.61	1,010.19	9.50	9.31	-2.04	
11,350.00	74.67	189.94	10,951.16	-995.00	-1,925.22	1,057.29	9.50	9.32	-1.93	
11,382.90	77.74	189.33	10,959.00	-1,026.49	-1,930.57	1,088.94	9.50	9.33	-1.85	
top hz target										
11,400.00	79.34	189.02	10,962.40	-1,043.04	-1,933.24	1,105.57	9.50	9.33	-1.82	
11,450.00	84.00	188.13	10,969.64	-1,091.94	-1,940.61	1,154.69	9.50	9.33	-1.79	
11,500.00	88.67	187.25	10,972.84	-1,141.38	-1,947.28	1,204.31	9.50	9.34	-1.76	
11,514.23	90.00	187.00	10,973.00	-1,155.50	-1,949.05	1,218.48	9.50	9.34	-1.75	
HZ target - 14NH LP/ FTP (1980' FNL & 2040' FWL)										
11,600.00	90.00	185.28	10,973.00	-1,240.77	-1,958.22	1,304.01	2.00	0.00	-2.00	
11,700.00	90.00	183.28	10,973.00	-1,340.49	-1,965.69	1,403.92	2.00	0.00	-2.00	
11,773.11	90.00	181.82	10,973.00	-1,413.53	-1,968.95	1,477.02	2.00	0.00	-2.00	
11,800.00	90.00	181.82	10,973.00	-1,440.40	-1,969.81	1,503.91	0.00	0.00	0.00	
11,900.00	90.00	181.82	10,973.00	-1,540.35	-1,972.99	1,603.91	0.00	0.00	0.00	
12,000.00	90.00	181.82	10,973.00	-1,640.30	-1,976.17	1,703.91	0.00	0.00	0.00	
12,100.00	90.00	181.82	10,973.00	-1,740.25	-1,979.35	1,803.91	0.00	0.00	0.00	
12,200.00	90.00	181.82	10,973.00	-1,840.20	-1,982.53	1,903.91	0.00	0.00	0.00	
12,300.00	90.00	181.82	10,973.00	-1,940.15	-1,985.71	2,003.91	0.00	0.00	0.00	
12,400.00	90.00	181.82	10,973.00	-2,040.10	-1,988.89	2,103.91	0.00	0.00	0.00	
12,500.00	90.00	181.82	10,973.00	-2,140.05	-1,992.07	2,203.91	0.00	0.00	0.00	
12,600.00	90.00	181.82	10,973.00	-2,239.99	-1,995.25	2,303.91	0.00	0.00	0.00	
12,700.00	90.00	181.82	10,973.00	-2,339.94	-1,998.43	2,403.91	0.00	0.00	0.00	
12,800.00	90.00	181.82	10,973.00	-2,439.89	-2,001.61	2,503.91	0.00	0.00	0.00	
12,900.00	90.00	181.82	10,973.00	-2,539.84	-2,004.79	2,603.91	0.00	0.00	0.00	
13,000.00	90.00	181.82	10,973.00	-2,639.79	-2,007.97	2,703.91	0.00	0.00	0.00	
13,100.00	90.00	181.82	10,973.00	-2,739.74	-2,011.15	2,803.91	0.00	0.00	0.00	
13,200.00	90.00	181.82	10,973.00	-2,839.69	-2,014.33	2,903.91	0.00	0.00	0.00	
13,300.00	90.00	181.82	10,973.00	-2,939.64	-2,017.51	3,003.91	0.00	0.00	0.00	
13,400.00	90.00	181.82	10,973.00	-3,039.59	-2,020.69	3,103.91	0.00	0.00	0.00	
13,500.00	90.00	181.82	10,973.00	-3,139.54	-2,023.87	3,203.91	0.00	0.00	0.00	
13,600.00	90.00	181.82	10,973.00	-3,239.49	-2,027.05	3,303.91	0.00	0.00	0.00	
13,700.00	90.00	181.82	10,973.00	-3,339.44	-2,030.23	3,403.91	0.00	0.00	0.00	
13,800.00	90.00	181.82	10,973.00	-3,439.39	-2,033.41	3,503.91	0.00	0.00	0.00	
13,900.00	90.00	181.82	10,973.00	-3,539.34	-2,036.59	3,603.91	0.00	0.00	0.00	
14,000.00	90.00	181.82	10,973.00	-3,639.29	-2,039.77	3,703.91	0.00	0.00	0.00	
14,100.00	90.00	181.82	10,973.00	-3,739.24	-2,042.95	3,803.91	0.00	0.00	0.00	
14,200.00	90.00	181.82	10,973.00	-3,839.19	-2,046.13	3,903.91	0.00	0.00	0.00	
14,300.00	90.00	181.82	10,973.00	-3,939.13	-2,049.31	4,003.91	0.00	0.00	0.00	
14,400.00	90.00	181.82	10,973.00	-4,039.08	-2,052.49	4,103.91	0.00	0.00	0.00	
14,500.00	90.00	181.82	10,973.00	-4,139.03	-2,055.67	4,203.91	0.00	0.00	0.00	
14,600.00	90.00	181.82	10,973.00	-4,238.98	-2,058.85	4,303.91	0.00	0.00	0.00	
14,700.00	90.00	181.82	10,973.00	-4,338.93	-2,062.03	4,403.91	0.00	0.00	0.00	
14,800.00	90.00	181.82	10,973.00	-4,438.88	-2,065.21	4,503.91	0.00	0.00	0.00	
14,900.00	90.00	181.82	10,973.00	-4,538.83	-2,068.39	4,603.91	0.00	0.00	0.00	
15,000.00	90.00	181.82	10,973.00	-4,638.78	-2,071.57	4,703.91	0.00	0.00	0.00	
15,100.00	90.00	181.82	10,973.00	-4,738.73	-2,074.75	4,803.91	0.00	0.00	0.00	
15,200.00	90.00	181.82	10,973.00	-4,838.68	-2,077.93	4,903.91	0.00	0.00	0.00	
15,300.00	90.00	181.82	10,973.00	-4,938.63	-2,081.11	5,003.91	0.00	0.00	0.00	
15,400.00	90.00	181.82	10,973.00	-5,038.58	-2,084.29	5,103.91	0.00	0.00	0.00	
15,500.00	90.00	181.82	10,973.00	-5,138.53	-2,087.47	5,203.91	0.00	0.00	0.00	
15,600.00	90.00	181.82	10,973.00	-5,238.48	-2,090.65	5,303.91	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 14NH - Slot Mohee Fed 0297-17-29-14NH
Company:	ANSCHUTZ EXPLORATION CORP.	TVD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Project:	RIO BLANCO COUNTY, COLORADO (NAD-83)	MD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Site:	MOHEE FED 0297-17-29	North Reference:	Grid
Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)
15,700.00	90.00	181.82	10,973.00	-5,338.43	-2,093.83	5,403.91	0.00	0.00	0.00
15,800.00	90.00	181.82	10,973.00	-5,438.38	-2,097.01	5,503.91	0.00	0.00	0.00
15,900.00	90.00	181.82	10,973.00	-5,538.33	-2,100.19	5,603.91	0.00	0.00	0.00
16,000.00	90.00	181.82	10,973.00	-5,638.27	-2,103.37	5,703.91	0.00	0.00	0.00
16,100.00	90.00	181.82	10,973.00	-5,738.22	-2,106.55	5,803.91	0.00	0.00	0.00
16,200.00	90.00	181.82	10,973.00	-5,838.17	-2,109.73	5,903.91	0.00	0.00	0.00
16,300.00	90.00	181.82	10,973.00	-5,938.12	-2,112.91	6,003.91	0.00	0.00	0.00
16,400.00	90.00	181.82	10,973.00	-6,038.07	-2,116.09	6,103.91	0.00	0.00	0.00
16,500.00	90.00	181.82	10,973.00	-6,138.02	-2,119.27	6,203.91	0.00	0.00	0.00
16,600.00	90.00	181.82	10,973.00	-6,237.97	-2,122.45	6,303.91	0.00	0.00	0.00
16,700.00	90.00	181.82	10,973.00	-6,337.92	-2,125.63	6,403.91	0.00	0.00	0.00
16,800.00	90.00	181.82	10,973.00	-6,437.87	-2,128.81	6,503.91	0.00	0.00	0.00
16,900.00	90.00	181.82	10,973.00	-6,537.82	-2,131.99	6,603.91	0.00	0.00	0.00
17,000.00	90.00	181.82	10,973.00	-6,637.77	-2,135.17	6,703.91	0.00	0.00	0.00
17,100.00	90.00	181.82	10,973.00	-6,737.72	-2,138.35	6,803.91	0.00	0.00	0.00
17,200.00	90.00	181.82	10,973.00	-6,837.67	-2,141.53	6,903.91	0.00	0.00	0.00
17,300.00	90.00	181.82	10,973.00	-6,937.62	-2,144.71	7,003.91	0.00	0.00	0.00
17,400.00	90.00	181.82	10,973.00	-7,037.57	-2,147.89	7,103.91	0.00	0.00	0.00
17,500.00	90.00	181.82	10,973.00	-7,137.52	-2,151.07	7,203.91	0.00	0.00	0.00
17,600.00	90.00	181.82	10,973.00	-7,237.47	-2,154.25	7,303.91	0.00	0.00	0.00
17,700.00	90.00	181.82	10,973.00	-7,337.42	-2,157.43	7,403.91	0.00	0.00	0.00
17,800.00	90.00	181.82	10,973.00	-7,437.36	-2,160.61	7,503.91	0.00	0.00	0.00
17,900.00	90.00	181.82	10,973.00	-7,537.31	-2,163.79	7,603.91	0.00	0.00	0.00
18,000.00	90.00	181.82	10,973.00	-7,637.26	-2,166.97	7,703.91	0.00	0.00	0.00
18,100.00	90.00	181.82	10,973.00	-7,737.21	-2,170.15	7,803.91	0.00	0.00	0.00
18,200.00	90.00	181.82	10,973.00	-7,837.16	-2,173.33	7,903.91	0.00	0.00	0.00
18,300.00	90.00	181.82	10,973.00	-7,937.11	-2,176.51	8,003.91	0.00	0.00	0.00
18,400.00	90.00	181.82	10,973.00	-8,037.06	-2,179.69	8,103.91	0.00	0.00	0.00
18,500.00	90.00	181.82	10,973.00	-8,137.01	-2,182.87	8,203.91	0.00	0.00	0.00
18,600.00	90.00	181.82	10,973.00	-8,236.96	-2,186.05	8,303.91	0.00	0.00	0.00
18,700.00	90.00	181.82	10,973.00	-8,336.91	-2,189.23	8,403.91	0.00	0.00	0.00
18,800.00	90.00	181.82	10,973.00	-8,436.86	-2,192.41	8,503.91	0.00	0.00	0.00
18,900.00	90.00	181.82	10,973.00	-8,536.81	-2,195.59	8,603.91	0.00	0.00	0.00
19,000.00	90.00	181.82	10,973.00	-8,636.76	-2,198.77	8,703.91	0.00	0.00	0.00
19,100.00	90.00	181.82	10,973.00	-8,736.71	-2,201.95	8,803.91	0.00	0.00	0.00
19,200.00	90.00	181.82	10,973.00	-8,836.66	-2,205.13	8,903.91	0.00	0.00	0.00
19,300.00	90.00	181.82	10,973.00	-8,936.61	-2,208.32	9,003.91	0.00	0.00	0.00
19,400.00	90.00	181.82	10,973.00	-9,036.56	-2,211.50	9,103.91	0.00	0.00	0.00
19,500.00	90.00	181.82	10,973.00	-9,136.50	-2,214.68	9,203.91	0.00	0.00	0.00
19,600.00	90.00	181.82	10,973.00	-9,236.45	-2,217.86	9,303.91	0.00	0.00	0.00
19,700.00	90.00	181.82	10,973.00	-9,336.40	-2,221.04	9,403.91	0.00	0.00	0.00
19,800.00	90.00	181.82	10,973.00	-9,436.35	-2,224.22	9,503.91	0.00	0.00	0.00
19,900.00	90.00	181.82	10,973.00	-9,536.30	-2,227.40	9,603.91	0.00	0.00	0.00
20,000.00	90.00	181.82	10,973.00	-9,636.25	-2,230.58	9,703.91	0.00	0.00	0.00
20,100.00	90.00	181.82	10,973.00	-9,736.20	-2,233.76	9,803.91	0.00	0.00	0.00
20,200.00	90.00	181.82	10,973.00	-9,836.15	-2,236.94	9,903.91	0.00	0.00	0.00
20,300.00	90.00	181.82	10,973.00	-9,936.10	-2,240.12	10,003.91	0.00	0.00	0.00
20,400.00	90.00	181.82	10,973.00	-10,036.05	-2,243.30	10,103.91	0.00	0.00	0.00
20,500.00	90.00	181.82	10,973.00	-10,136.00	-2,246.48	10,203.91	0.00	0.00	0.00
20,600.00	90.00	181.82	10,973.00	-10,235.95	-2,249.66	10,303.91	0.00	0.00	0.00
20,700.00	90.00	181.82	10,973.00	-10,335.90	-2,252.84	10,403.91	0.00	0.00	0.00
20,800.00	90.00	181.82	10,973.00	-10,435.85	-2,256.02	10,503.91	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well 14NH - Slot Mohee Fed 0297-17-29-14NH
Company:	ANSCHUTZ EXPLORATION CORP.	TVD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Project:	RIO BLANCO COUNTY, COLORADO (NAD-83)	MD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Site:	MOHEE FED 0297-17-29	North Reference:	Grid
Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)
20,900.00	90.00	181.82	10,973.00	-10,535.80	-2,259.20	10,603.91	0.00	0.00	0.00
21,000.00	90.00	181.82	10,973.00	-10,635.75	-2,262.38	10,703.91	0.00	0.00	0.00
21,100.00	90.00	181.82	10,973.00	-10,735.70	-2,265.56	10,803.91	0.00	0.00	0.00
21,200.00	90.00	181.82	10,973.00	-10,835.64	-2,268.74	10,903.91	0.00	0.00	0.00
21,300.00	90.00	181.82	10,973.00	-10,935.59	-2,271.92	11,003.91	0.00	0.00	0.00
21,400.00	90.00	181.82	10,973.00	-11,035.54	-2,275.10	11,103.91	0.00	0.00	0.00
21,500.00	90.00	181.82	10,973.00	-11,135.49	-2,278.28	11,203.91	0.00	0.00	0.00
21,600.00	90.00	181.82	10,973.00	-11,235.44	-2,281.46	11,303.91	0.00	0.00	0.00
21,700.00	90.00	181.82	10,973.00	-11,335.39	-2,284.64	11,403.91	0.00	0.00	0.00
21,800.00	90.00	181.82	10,973.00	-11,435.34	-2,287.82	11,503.91	0.00	0.00	0.00
21,900.00	90.00	181.82	10,973.00	-11,535.29	-2,291.00	11,603.91	0.00	0.00	0.00
22,000.00	90.00	181.82	10,973.00	-11,635.24	-2,294.18	11,703.91	0.00	0.00	0.00
22,100.00	90.00	181.82	10,973.00	-11,735.19	-2,297.36	11,803.91	0.00	0.00	0.00
22,200.00	90.00	181.82	10,973.00	-11,835.14	-2,300.54	11,903.91	0.00	0.00	0.00
22,300.00	90.00	181.82	10,973.00	-11,935.09	-2,303.72	12,003.91	0.00	0.00	0.00
22,400.00	90.00	181.82	10,973.00	-12,035.04	-2,306.90	12,103.91	0.00	0.00	0.00
22,500.00	90.00	181.82	10,973.00	-12,134.99	-2,310.08	12,203.91	0.00	0.00	0.00
22,600.00	90.00	181.82	10,973.00	-12,234.94	-2,313.26	12,303.91	0.00	0.00	0.00
22,700.00	90.00	181.82	10,973.00	-12,334.89	-2,316.44	12,403.91	0.00	0.00	0.00
22,800.00	90.00	181.82	10,973.00	-12,434.84	-2,319.62	12,503.91	0.00	0.00	0.00
22,900.00	90.00	181.82	10,973.00	-12,534.79	-2,322.80	12,603.91	0.00	0.00	0.00
23,000.00	90.00	181.82	10,973.00	-12,634.73	-2,325.98	12,703.91	0.00	0.00	0.00
23,100.00	90.00	181.82	10,973.00	-12,734.68	-2,329.16	12,803.91	0.00	0.00	0.00
23,200.00	90.00	181.82	10,973.00	-12,834.63	-2,332.34	12,903.91	0.00	0.00	0.00
23,300.00	90.00	181.82	10,973.00	-12,934.58	-2,335.52	13,003.91	0.00	0.00	0.00
23,400.00	90.00	181.82	10,973.00	-13,034.53	-2,338.70	13,103.91	0.00	0.00	0.00
23,448.12	90.00	181.82	10,973.00	-13,082.63	-2,340.23	13,152.03	0.00	0.00	0.00
14NH BHL/ LTP (600' FSL & 2040' FWL)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
14NH SHL (2075' FNL - plan hits target center - Point	0.00	360.00	0.00	0.00	0.00	1,307,469.94	2,218,074.11	40.1435404	-108.2974125
14NH LP/ FTP (1980' - plan hits target center - Point	0.00	360.00	10,973.00	-1,155.50	-1,949.05	1,306,314.44	2,216,125.06	40.1402010	-108.3042500
14NH BHL/ LTP (600' - plan hits target center - Point	0.00	360.00	10,973.00	-13,082.63	-2,340.23	1,294,387.31	2,215,733.88	40.1074417	-108.3042996



Planning Report

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Project:	RIO BLANCO COUNTY, COLORADO (NAD-83)	MD Reference:	RKB = 27.5 @ 6018.90usft (TBD)
Site:	MOHEE FED 0297-17-29	North Reference:	Grid
Well:	14NH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Casing Points					
	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
	3,541.73	3,500.00	10 3/4"	10-3/4	13-1/2
	10,418.11	10,234.62	7 5/8"	7-5/8	9-7/8

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	2,935.23	2,906.00	Mesaverde			
	6,104.57	6,010.00	Cameo Coals			
	6,282.23	6,184.00	Rollins			
	7,453.37	7,331.00	Mancos -Buck Tongue			
	7,492.17	7,369.00	Loyd			
	7,581.00	7,456.00	Loyd Shale			
	7,693.32	7,566.00	Lower Loyd			
	7,853.62	7,723.00	Lower Loyd Shale			
	8,042.52	7,908.00	Castlegate			
	8,324.33	8,184.00	Mancos- Bluegate Tongue			
	8,885.91	8,734.00	Mancos B			
	9,527.13	9,362.00	Lower Mancos			
	10,622.71	10,435.00	Niobrara			
	10,988.93	10,762.00	Tow Creek			
	11,382.90	10,959.00	top hz target			
	11,514.23	10,973.00	HZ target			