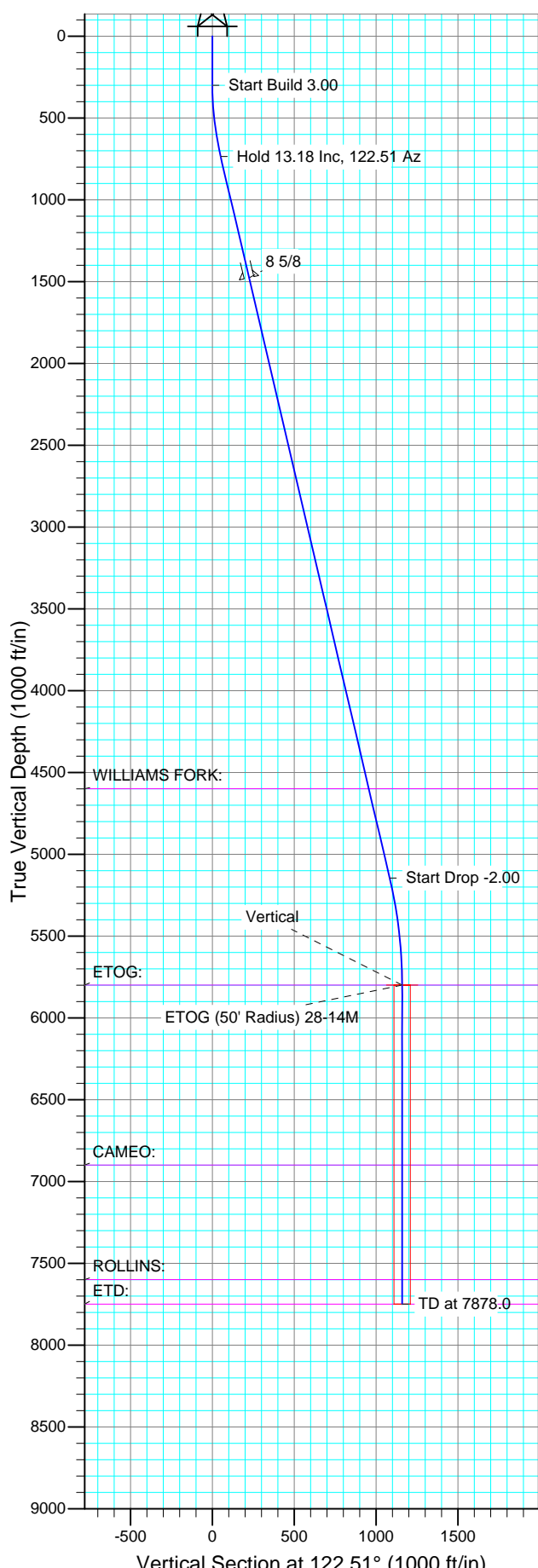




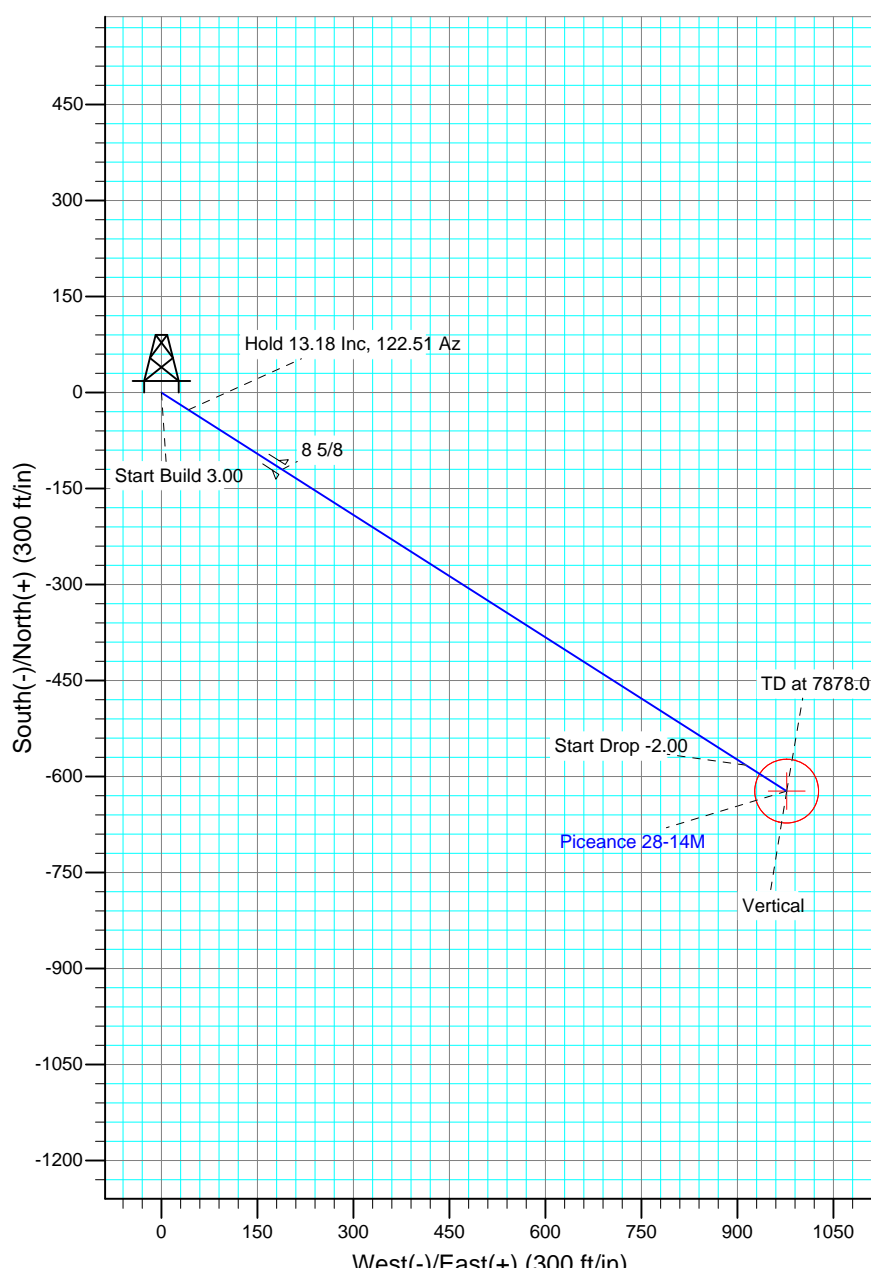
Well Name: Piceance 28-14M
Surface Location: Piceance 28-11 Pad
North American Datum 1983
US State Plane 1983 , Colorado Central Zone
Ground Elevation: 7580.0
WELL @ 7604.0ft (Original Well Elev)

Project: Mesa County, CO
Site: Piceance 28-11 Pad
Well: Piceance 28-14M
Wellbore: Wellbore #1
Design: Plan #1 10May14 kjs

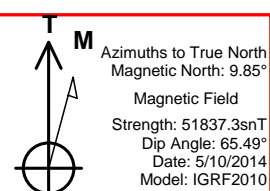
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1523215.78	2354924.98	39° 14' 51.900 N	107° 46' 41.088 W	



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	739.4	13.18	122.51	735.5	-27.0	42.4	3.00	122.51	50.3	
4	5268.9	13.18	122.51	5145.7	-582.2	913.4	0.00	0.00	1083.2	
5	5928.0	0.00	0.00	5799.0	-622.8	977.0	2.00	180.00	1158.7	ETOG (50' Radius) 28-14M
6	7878.0	0.00	0.00	7749.0	-622.8	977.0	0.00	0.00	1158.7	



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4599.0	4707.4	WILLIAMS FORK:
5799.0	5928.0	ETOG:
6899.0	7028.0	CAMEO:
7599.0	7728.0	ROLLINS:
7749.0	7878.0	ETD:



Piceance Energy, LLC

Mesa County, CO

Piceance 28-11 Pad

Piceance 28-14M

Wellbore #1

Plan: Plan #1 10May14 kjs

Standard Planning Report - Geographic

11 May, 2014

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well Piceance 28-14M
Company:	Piceance Energy, LLC	TVD Reference:	WELL @ 7604.0ft (Original Well Elev)
Project:	Mesa County, CO	MD Reference:	WELL @ 7604.0ft (Original Well Elev)
Site:	Piceance 28-11 Pad	North Reference:	True
Well:	Piceance 28-14M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 10May14 kjs		

Project	Mesa County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		Piceance 28-11 Pad			
Site Position:		Northing:	1,523,237.48 ft	Latitude:	39° 14' 52.116 N
From:	Lat/Long	Easting:	2,354,931.19 ft	Longitude:	107° 46' 41.016 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	-1.44 °

Well	Piceance 28-14M					
Well Position	+N/-S	0.0 ft	Northing:	1,523,215.78 ft	Latitude:	39° 14' 51.900 N
	+E/-W	0.0 ft	Easting:	2,354,924.98 ft	Longitude:	107° 46' 41.088 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,580.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	5/10/2014	9.85	65.50	51,837

Design	Plan #1 10May14 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	122.51

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
739.4	13.18	122.51	735.5	-27.0	42.4	3.00	3.00	0.00	122.51	
5,268.9	13.18	122.51	5,145.7	-582.2	913.4	0.00	0.00	0.00	0.00	
5,928.0	0.00	0.00	5,799.0	-622.8	977.0	2.00	-2.00	0.00	180.00	ETOG (50' Radius) 2%
7,878.0	0.00	0.00	7,749.0	-622.8	977.0	0.00	0.00	0.00	0.00	

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well Piceance 28-14M
Company:	Piceance Energy, LLC	TVD Reference:	WELL @ 7604.0ft (Original Well Elev)
Project:	Mesa County, CO	MD Reference:	WELL @ 7604.0ft (Original Well Elev)
Site:	Piceance 28-11 Pad	North Reference:	True
Well:	Piceance 28-14M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 10May14 kjs		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,523,215.78	2,354,924.98	39° 14' 51.900 N	107° 46' 41.088 W
200.0	0.00	0.00	200.0	0.0	0.0	1,523,215.78	2,354,924.98	39° 14' 51.900 N	107° 46' 41.088 W
300.0	0.00	0.00	300.0	0.0	0.0	1,523,215.78	2,354,924.98	39° 14' 51.900 N	107° 46' 41.088 W
Start Build 3.00									
400.0	3.00	122.51	400.0	-1.4	2.2	1,523,214.32	2,354,927.15	39° 14' 51.886 N	107° 46' 41.060 W
600.0	9.00	122.51	598.8	-12.6	19.8	1,523,202.65	2,354,944.49	39° 14' 51.775 N	107° 46' 40.836 W
739.4	13.18	122.51	735.5	-27.0	42.4	1,523,187.68	2,354,966.72	39° 14' 51.633 N	107° 46' 40.549 W
Hold 13.18 Inclination									
800.0	13.18	122.51	794.5	-34.5	54.1	1,523,179.96	2,354,978.19	39° 14' 51.559 N	107° 46' 40.400 W
1,000.0	13.18	122.51	989.3	-59.0	92.5	1,523,154.49	2,355,016.02	39° 14' 51.317 N	107° 46' 39.912 W
1,200.0	13.18	122.51	1,184.0	-83.5	131.0	1,523,129.02	2,355,053.85	39° 14' 51.075 N	107° 46' 39.423 W
1,400.0	13.18	122.51	1,378.7	-108.0	169.5	1,523,103.55	2,355,091.68	39° 14' 50.832 N	107° 46' 38.934 W
1,500.0	13.18	122.51	1,476.1	-120.3	188.7	1,523,090.81	2,355,110.60	39° 14' 50.711 N	107° 46' 38.689 W
8 5/8									
1,600.0	13.18	122.51	1,573.5	-132.5	207.9	1,523,078.08	2,355,129.51	39° 14' 50.590 N	107° 46' 38.445 W
1,800.0	13.18	122.51	1,768.2	-157.0	246.4	1,523,052.61	2,355,167.34	39° 14' 50.348 N	107° 46' 37.956 W
2,000.0	13.18	122.51	1,962.9	-181.6	284.8	1,523,027.14	2,355,205.17	39° 14' 50.105 N	107° 46' 37.467 W
2,200.0	13.18	122.51	2,157.7	-206.1	323.3	1,523,001.67	2,355,243.00	39° 14' 49.863 N	107° 46' 36.978 W
2,400.0	13.18	122.51	2,352.4	-230.6	361.7	1,522,976.20	2,355,280.83	39° 14' 49.621 N	107° 46' 36.490 W
2,600.0	13.18	122.51	2,547.1	-255.1	400.2	1,522,950.73	2,355,318.66	39° 14' 49.378 N	107° 46' 36.001 W
2,800.0	13.18	122.51	2,741.8	-279.6	438.7	1,522,925.26	2,355,356.49	39° 14' 49.136 N	107° 46' 35.512 W
3,000.0	13.18	122.51	2,936.6	-304.1	477.1	1,522,899.79	2,355,394.33	39° 14' 48.894 N	107° 46' 35.023 W
3,200.0	13.18	122.51	3,131.3	-328.6	515.6	1,522,874.32	2,355,432.16	39° 14' 48.652 N	107° 46' 34.534 W
3,400.0	13.18	122.51	3,326.0	-353.2	554.0	1,522,848.85	2,355,469.99	39° 14' 48.409 N	107° 46' 34.045 W
3,600.0	13.18	122.51	3,520.8	-377.7	592.5	1,522,823.38	2,355,507.82	39° 14' 48.167 N	107° 46' 33.556 W
3,800.0	13.18	122.51	3,715.5	-402.2	630.9	1,522,797.91	2,355,545.65	39° 14' 47.925 N	107° 46' 33.067 W
4,000.0	13.18	122.51	3,910.2	-426.7	669.4	1,522,772.44	2,355,583.48	39° 14' 47.682 N	107° 46' 32.579 W
4,200.0	13.18	122.51	4,105.0	-451.2	707.9	1,522,746.96	2,355,621.31	39° 14' 47.440 N	107° 46' 32.090 W
4,400.0	13.18	122.51	4,299.7	-475.7	746.3	1,522,721.49	2,355,659.14	39° 14' 47.198 N	107° 46' 31.601 W
4,600.0	13.18	122.51	4,494.4	-500.2	784.8	1,522,696.02	2,355,696.97	39° 14' 46.955 N	107° 46' 31.112 W
4,707.4	13.18	122.51	4,599.0	-513.4	805.4	1,522,682.35	2,355,717.29	39° 14' 46.825 N	107° 46' 30.850 W
WILLIAMS FORK:									
4,800.0	13.18	122.51	4,689.2	-524.7	823.2	1,522,670.55	2,355,734.80	39° 14' 46.713 N	107° 46' 30.623 W
5,000.0	13.18	122.51	4,883.9	-549.3	861.7	1,522,645.08	2,355,772.63	39° 14' 46.471 N	107° 46' 30.134 W
5,200.0	13.18	122.51	5,078.6	-573.8	900.1	1,522,619.61	2,355,810.46	39° 14' 46.228 N	107° 46' 29.646 W
5,268.9	13.18	122.51	5,145.7	-582.2	913.4	1,522,610.83	2,355,823.50	39° 14' 46.145 N	107° 46' 29.477 W
Start Drop -2.00									
5,400.0	10.56	122.51	5,274.0	-596.7	936.1	1,522,595.78	2,355,845.86	39° 14' 46.002 N	107° 46' 29.188 W
5,600.0	6.56	122.51	5,471.7	-612.7	961.2	1,522,579.16	2,355,870.55	39° 14' 45.844 N	107° 46' 28.869 W
5,800.0	2.56	122.51	5,671.0	-621.3	974.6	1,522,570.28	2,355,883.74	39° 14' 45.759 N	107° 46' 28.699 W
5,928.0	0.00	0.00	5,799.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
Vertical @ ETOG - ETOG: - ETOG (50' Radius) 28-14M									
6,000.0	0.00	0.00	5,871.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
6,200.0	0.00	0.00	6,071.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
6,400.0	0.00	0.00	6,271.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
6,600.0	0.00	0.00	6,471.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
6,800.0	0.00	0.00	6,671.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
7,000.0	0.00	0.00	6,871.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
7,028.0	0.00	0.00	6,899.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
CAMEO:									
7,200.0	0.00	0.00	7,071.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
7,400.0	0.00	0.00	7,271.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
7,600.0	0.00	0.00	7,471.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well Piceance 28-14M
Company:	Piceance Energy, LLC	TVD Reference:	WELL @ 7604.0ft (Original Well Elev)
Project:	Mesa County, CO	MD Reference:	WELL @ 7604.0ft (Original Well Elev)
Site:	Piceance 28-11 Pad	North Reference:	True
Well:	Piceance 28-14M	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 10May14 kjs		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
7,728.0	0.00	0.00	7,599.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
ROLLINS:									
7,800.0	0.00	0.00	7,671.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
7,878.0	0.00	0.00	7,749.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
TD at 7878.0 - ETD:									

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									
ETOG (50' Radius) 28-1	0.00	0.00	5,799.0	-622.8	977.0	1,522,568.68	2,355,886.11	39° 14' 45.744 N	107° 46' 28.668 W
- plan hits target									
- Circle (radius 50.0)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,500.0	1,476.1	8 5/8	8-5/8	8-5/8	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,878.0	7,749.0	ETD:			
7,028.0	6,899.0	CAMEO:			
7,728.0	7,599.0	ROLLINS:			
4,707.4	4,599.0	WILLIAMS FORK:			
5,928.0	5,799.0	ETOG:			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
300.0	300.0	0.0	0.0	Start Build 3.00
739.4	735.5	-27.0	42.4	Hold 13.18 Inclination
5,268.9	5,145.7	-582.2	913.4	Start Drop -2.00
5,928.0	5,799.0	-622.8	977.0	Vertical @ ETOG
7,878.0	7,749.0	-622.8	977.0	TD at 7878.0