

Company Name: Laramie Energy, LLC  
Sup & Shep 0993-25-16W  
Mesa County, CO  
Rig: H&P #522  
Created By: Will Jircik  
Date: 10:28, December 18 2018

Sup & Shep 0993-25-16W  
Mesa County, CO  
Q181753 & RM-181481  
ST01 Design #1

DESIGN ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation	
2553.0	12.70	192.90	2508.4	-415.0	-95.7	425.5	0.0	Last MWD Survey	
2600.0	12.70	193.54	2554.3	-425.0	-98.0	435.8	0.0	PTB / Build 3° / 100'	
2692.9	15.33	189.68	2644.4	-447.1	-102.5	458.3	22.5	EOB @ 15.33° Inc. / 189.68° Azm	
6528.1	15.33	189.68	6343.2	-1446.3	-272.9	1471.9	1036.2	Drop 3° / 100'	
7039.0	0.00	0.00	6848.0	-1513.3	-284.4	1539.8	1104.1	EOD @ Vertical	
8789.0	0.00	0.00	8598.0	-1513.3	-284.4	1539.8	1104.1	TD @ 8789.0' MD / 8598.0' TVD	

PROJECT DETAILS:		Mesa County, CO
Geodetic System:	US State Plane 1983	
Datum:	North American Datum 1983	
Ellipsoid:	GRS 1980	
Zone:	Colorado Central Zone	
System Datum:	Mean Sea Level	

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Sup & Shep 0993-25-16W	8598.0	-1513.3	-284.4	1520260.17	2370072.14	39.240668	-107.724354	Circle (Radius: 50.0)

WELL DETAILS: Sup & Shep 0993-25-16W						
+N/-S	+E/-W	Northing	Easting	GL: 8078.0	Latitude	Longitude
0.0	0.0	1521766.06	2370393.44		39.244823	-107.723350

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3298.0	3370.6	G Sand
5248.0	5392.5	Ohio Creek
5598.0	5755.4	Williams Fork
6848.0	7039.0	TOG
7648.0	7839.0	Cameo
8328.0	8519.0	Base Cameo Coal
8348.0	8539.0	Rollins

T

M

Azimuths to True North

Magnetic North: 9.33°

Strength: 51235.0snT

Dip Angle: 65.37°

Date: 12/7/2018

Model: USER DEFINED

