

GRMR Oil & Gas, LLC

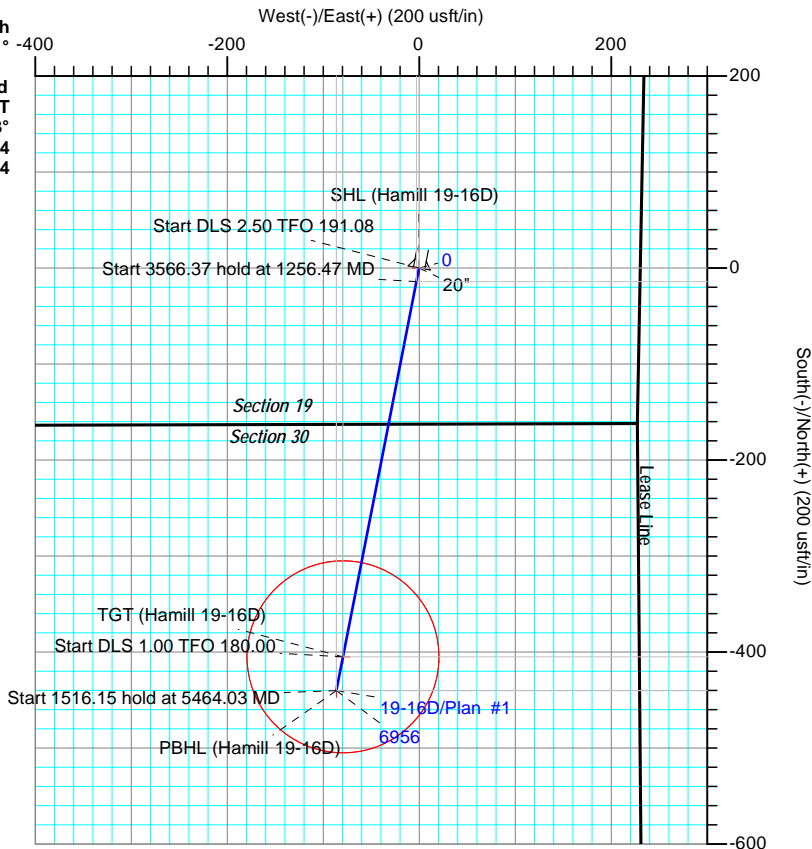
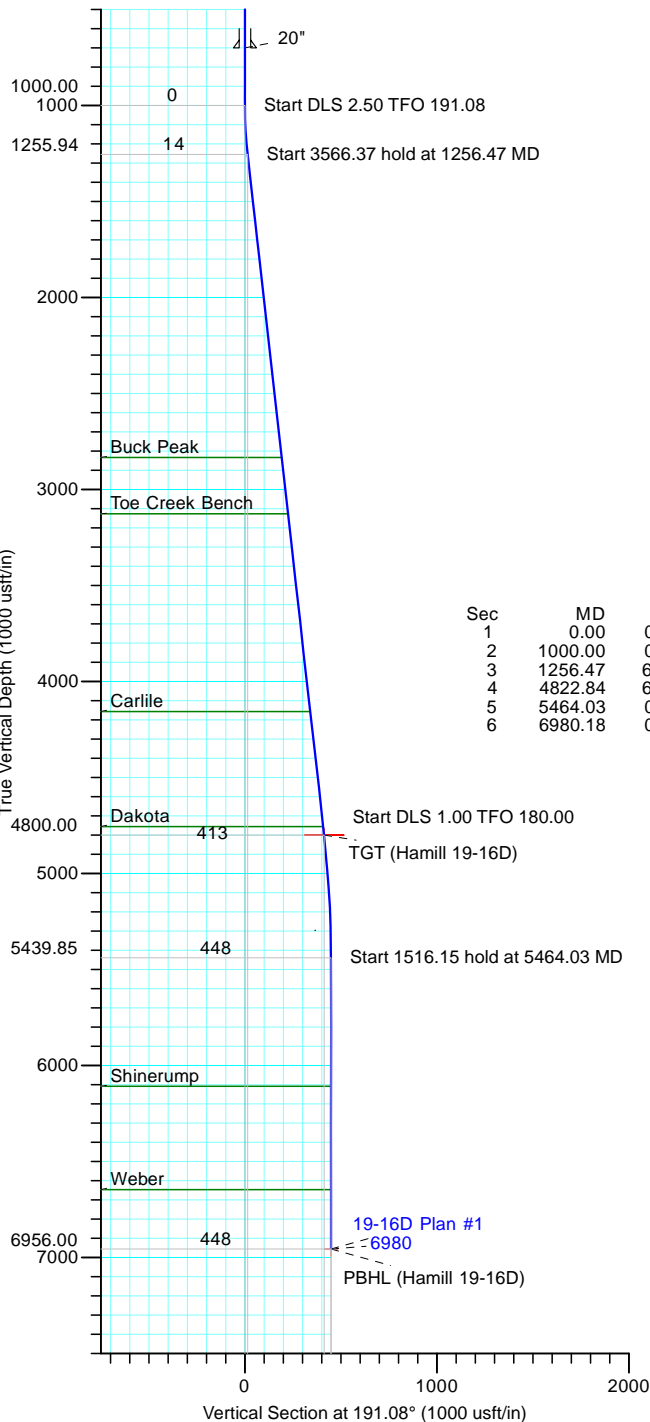
Project: Moffat County, CO
Site: Hamill
Well: 19-16D
Wellbore: OH
Design: Plan #1



Azimuths to True North
Magnetic North: 9.91°
Magnetic Field
Strength: 52317.3snT
Dip Angle: 66.43°
Date: 11/26/2014
Model: BGGM2014

PROJECT DETAILS: Moffat County, CO

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



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL (Hamill 19-16D)	0.00	0.00	0.00	1381998.90	2434530.90
TGT (Hamill 19-16D)	4800.00	-404.92	-79.27	1381595.90	2434442.38
PBHL (Hamill 19-16D)	6956.00	-440.09	-86.16	1381560.90	2434434.69

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	1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
3	1256.47	6.41	191.08	1255.94	-14.07	-2.75	2.50	191.08	14.34	
4	4822.84	6.41	191.08	4800.00	-404.92	-79.27	0.00	0.00	412.61	
5	5464.03	0.00	0.00	5439.85	-440.09	-86.16	1.00	180.00	448.45	
6	6980.18	0.00	0.00	6956.00	-440.09	-86.16	0.00	0.00	448.45	PBHL (Hamill 19-16D)

CASING DETAILS

TVD	MD	Name	Size
700.00	700.00	20"	20



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #1 (19-16D/OH)
Hamill

Created By: Elio Reyes
Date: 15:46, December 02 2014
Approved: _____ Date: _____

LEAM Drilling Systems LLC

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well 19-16D
Company:	GRMR Oil & Gas, LLC	TVD Reference:	GE 6446' + KB 18' @ 6464.00usft
Project:	Moffat County, CO	MD Reference:	GE 6446' + KB 18' @ 6464.00usft
Site:	Hamill	North Reference:	True
Well:	19-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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

Site		Hamill			
Site Position:		Northing:	1,381,998.90 usft	Latitude:	40° 21' 51.211 N
From:	Map	Easting:	2,434,530.90 usft	Longitude:	107° 31' 45.986 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.31 °

Well	19-16D					
Well Position	+N-S	0.00 usft	Northing:	1,381,998.90 usft	Latitude:	40° 21' 51.211 N
	+E-W	0.00 usft	Easting:	2,434,530.90 usft	Longitude:	107° 31' 45.986 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,446.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	11/26/2014	9.91	66.43	52,317

Design	Plan #1			
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	191.08

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	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,256.47	6.41	191.08	1,255.94	-14.07	-2.75	2.50	2.50	-65.86	191.08	
4,822.84	6.41	191.08	4,800.00	-404.92	-79.27	0.00	0.00	0.00	0.00	
5,464.03	0.00	0.00	5,439.85	-440.09	-86.16	1.00	-1.00	26.35	180.00	
6,980.18	0.00	0.00	6,956.00	-440.09	-86.16	0.00	0.00	0.00	0.00	PBHL (Hamill 19-16D)

LEAM Drilling Systems LLC

Planning Report

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Company:	GRMR Oil & Gas, LLC	TVD Reference:	GE 6446' + KB 18' @ 6464.00usft
Project:	Moffat County, CO	MD Reference:	GE 6446' + KB 18' @ 6464.00usft
Site:	Hamill	North Reference:	True
Well:	19-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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	2.50	191.08	1,099.97	-2.14	-0.42	2.18	2.50	2.50	0.00
1,200.00	5.00	191.08	1,199.75	-8.56	-1.68	8.72	2.50	2.50	0.00
1,256.47	6.41	191.08	1,255.94	-14.07	-2.75	14.34	2.50	2.50	0.00
1,300.00	6.41	191.08	1,299.19	-18.84	-3.69	19.20	0.00	0.00	0.00
1,400.00	6.41	191.08	1,398.57	-29.80	-5.83	30.36	0.00	0.00	0.00
1,500.00	6.41	191.08	1,497.94	-40.76	-7.98	41.53	0.00	0.00	0.00
1,600.00	6.41	191.08	1,597.32	-51.72	-10.13	52.70	0.00	0.00	0.00
1,700.00	6.41	191.08	1,696.69	-62.68	-12.27	63.87	0.00	0.00	0.00
1,800.00	6.41	191.08	1,796.07	-73.64	-14.42	75.03	0.00	0.00	0.00
1,900.00	6.41	191.08	1,895.44	-84.60	-16.56	86.20	0.00	0.00	0.00
2,000.00	6.41	191.08	1,994.81	-95.55	-18.71	97.37	0.00	0.00	0.00
2,100.00	6.41	191.08	2,094.19	-106.51	-20.85	108.54	0.00	0.00	0.00
2,200.00	6.41	191.08	2,193.56	-117.47	-23.00	119.70	0.00	0.00	0.00
2,300.00	6.41	191.08	2,292.94	-128.43	-25.14	130.87	0.00	0.00	0.00
2,400.00	6.41	191.08	2,392.31	-139.39	-27.29	142.04	0.00	0.00	0.00
2,500.00	6.41	191.08	2,491.69	-150.35	-29.44	153.21	0.00	0.00	0.00
2,600.00	6.41	191.08	2,591.06	-161.31	-31.58	164.37	0.00	0.00	0.00
2,700.00	6.41	191.08	2,690.44	-172.27	-33.73	175.54	0.00	0.00	0.00
2,800.00	6.41	191.08	2,789.81	-183.23	-35.87	186.71	0.00	0.00	0.00
2,900.00	6.41	191.08	2,889.18	-194.19	-38.02	197.88	0.00	0.00	0.00
3,000.00	6.41	191.08	2,988.56	-205.15	-40.16	209.04	0.00	0.00	0.00
3,100.00	6.41	191.08	3,087.93	-216.11	-42.31	220.21	0.00	0.00	0.00
3,200.00	6.41	191.08	3,187.31	-227.07	-44.45	231.38	0.00	0.00	0.00
3,300.00	6.41	191.08	3,286.68	-238.03	-46.60	242.54	0.00	0.00	0.00
3,400.00	6.41	191.08	3,386.06	-248.99	-48.75	253.71	0.00	0.00	0.00
3,500.00	6.41	191.08	3,485.43	-259.94	-50.89	264.88	0.00	0.00	0.00
3,600.00	6.41	191.08	3,584.81	-270.90	-53.04	276.05	0.00	0.00	0.00
3,700.00	6.41	191.08	3,684.18	-281.86	-55.18	287.21	0.00	0.00	0.00
3,800.00	6.41	191.08	3,783.56	-292.82	-57.33	298.38	0.00	0.00	0.00
3,900.00	6.41	191.08	3,882.93	-303.78	-59.47	309.55	0.00	0.00	0.00
4,000.00	6.41	191.08	3,982.30	-314.74	-61.62	320.72	0.00	0.00	0.00
4,100.00	6.41	191.08	4,081.68	-325.70	-63.77	331.88	0.00	0.00	0.00
4,200.00	6.41	191.08	4,181.05	-336.66	-65.91	343.05	0.00	0.00	0.00
4,300.00	6.41	191.08	4,280.43	-347.62	-68.06	354.22	0.00	0.00	0.00
4,400.00	6.41	191.08	4,379.80	-358.58	-70.20	365.39	0.00	0.00	0.00
4,500.00	6.41	191.08	4,479.18	-369.54	-72.35	376.55	0.00	0.00	0.00
4,600.00	6.41	191.08	4,578.55	-380.50	-74.49	387.72	0.00	0.00	0.00
4,700.00	6.41	191.08	4,677.93	-391.46	-76.64	398.89	0.00	0.00	0.00
4,800.00	6.41	191.08	4,777.30	-402.42	-78.78	410.06	0.00	0.00	0.00
4,822.84	6.41	191.08	4,800.00	-404.92	-79.27	412.61	0.00	0.00	0.00
4,900.00	5.64	191.08	4,876.73	-412.87	-80.83	420.71	1.00	-1.00	0.00
5,000.00	4.64	191.08	4,976.33	-421.66	-82.55	429.67	1.00	-1.00	0.00
5,100.00	3.64	191.08	5,076.06	-428.75	-83.94	436.89	1.00	-1.00	0.00

LEAM Drilling Systems LLC

Planning Report

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Company:	GRMR Oil & Gas, LLC	TVD Reference:	GE 6446' + KB 18' @ 6464.00usft
Project:	Moffat County, CO	MD Reference:	GE 6446' + KB 18' @ 6464.00usft
Site:	Hamill	North Reference:	True
Well:	19-16D	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

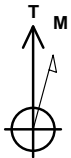
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,200.00	2.64	191.08	5,175.91	-434.12	-84.99	442.36	1.00	-1.00	0.00	
5,300.00	1.64	191.08	5,275.84	-437.79	-85.71	446.10	1.00	-1.00	0.00	
5,400.00	0.64	191.08	5,375.82	-439.74	-86.09	448.09	1.00	-1.00	0.00	
5,464.03	0.00	0.00	5,439.85	-440.09	-86.16	448.45	1.00	-1.00	263.83	
5,500.00	0.00	0.00	5,475.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,575.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,675.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,775.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,875.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,975.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,075.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,175.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,275.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,375.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,475.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,575.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,675.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,775.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,875.82	-440.09	-86.16	448.45	0.00	0.00	0.00	
6,980.18	0.00	0.00	6,956.00	-440.09	-86.16	448.45	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
SHL (Hamill 19-16D)	0.00	358.69	0.00	0.00	0.00	1,381,998.90	2,434,530.90	40° 21' 51.211 N	107° 31' 45.986 W	
- plan hits target center										
- Point										
TGT (Hamill 19-16D)	0.00	358.69	4,800.00	-404.92	-79.27	1,381,595.90	2,434,442.38	40° 21' 47.210 N	107° 31' 47.010 W	
- plan hits target center										
- Circle (radius 100.00)										
PBHL (Hamill 19-16D)	0.00	358.69	6,956.00	-440.09	-86.16	1,381,560.90	2,434,434.69	40° 21' 46.862 N	107° 31' 47.099 W	
- plan hits target center										
- Point										

Casing Points						
Measured Depth (usft)	Vertical Depth (usft)	Name			Casing Diameter (")	Hole Diameter (")
700.00	700.00	20"			20	26

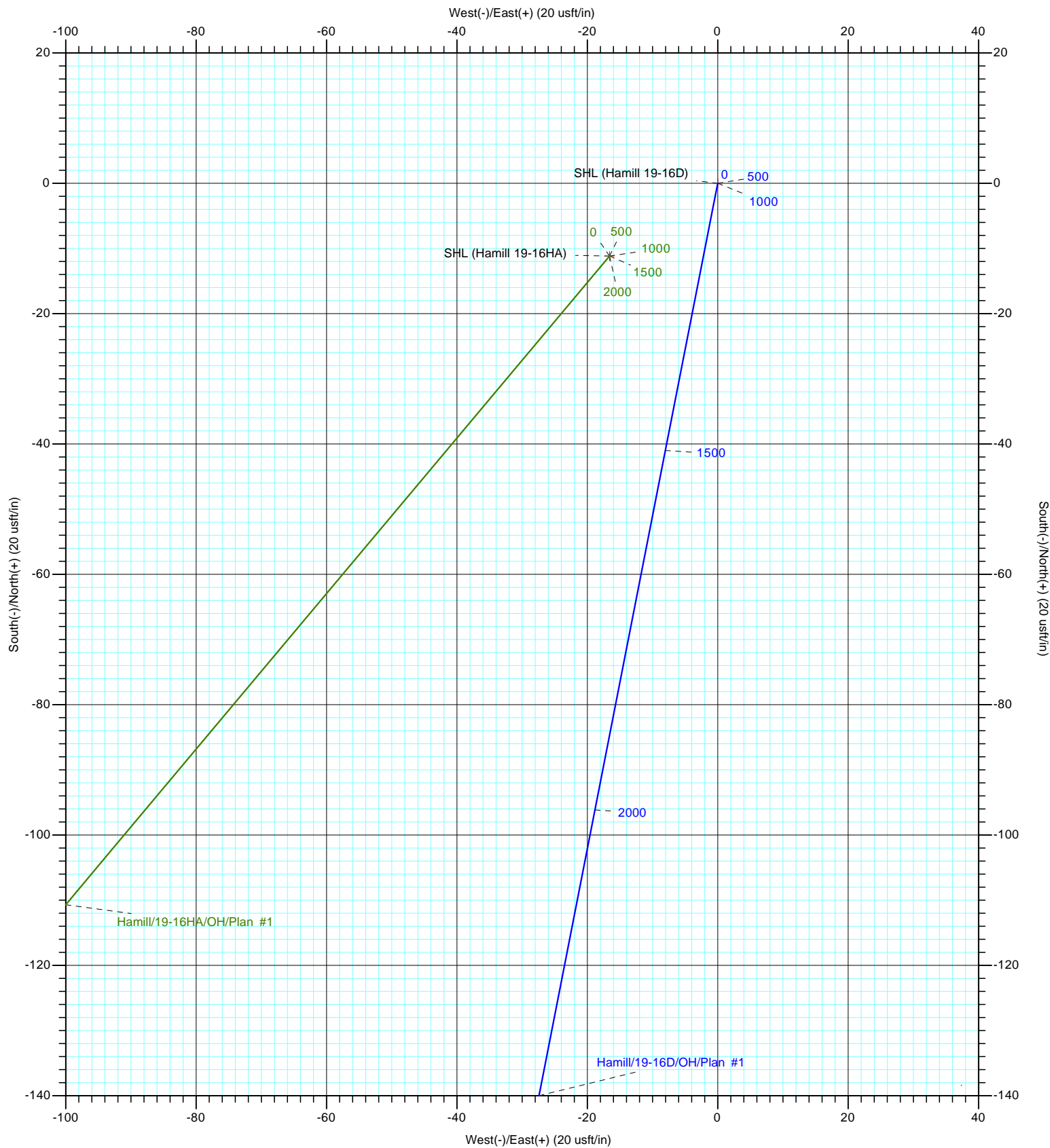
GRMR Oil & Gas, LLC

Project: Moffat County, CO
Site: Hamill
Well: 19-16D
Wellbore: OH
Design: Plan #1



Azimuths to True North
Magnetic North: 9.91°

Magnetic Field
Strength: 52317.3snT
Dip Angle: 66.43°
Date: 11/26/2014
Model: BGGM2014



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #1 (19-16D/OH)
Hamill

Created By: Elio Reyes
Date: _____
Approved: _____
Date: 15:48, December 02 2014

GRMR Oil & Gas, LLC

Moffat County, CO

Hamill

19-16D

OH

Plan #1

Anticollision Report

02 December, 2014

LEAM Drilling Systems LLC

Anticollision Report

Company:	GRMR Oil & Gas, LLC	Local Co-ordinate Reference:	Well 19-16D
Project:	Moffat County, CO	TVD Reference:	GE 6446' + KB 18' @ 6464.00usft
Reference Site:	Hamill	MD Reference:	GE 6446' + KB 18' @ 6464.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	19-16D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 us	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	12/2/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	6,980.18	Plan #1 (OH)	LEAM_MWD+HDGM	LEAM MWD + HDGM	

Summary						
Site Name	Reference	Offset	Distance		Separation	Warning
	Measured	Measured	Between	Between		
Offset Well - Wellbore - Design	Depth	Depth	Centres	Ellipses	Factor	
	(usft)	(usft)	(usft)	(usft)		
Hamill						
19-16HA - OH - Plan #1	1,254.64	1,254.52	14.14	5.63	1.662	CC
19-16HA - OH - Plan #1	1,256.47	1,256.34	14.14	5.62	1.659	ES, SF

Offset Design Hamill - 19-16HA - OH - Plan #1												Offset Site Error: 0.00 usft	
Survey Program: 0-LEAM_MWD+HDGM												Offset Well Error: 0.00 usft	
Reference		Offset		Semi Major Axis		Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft) +E/-W (usft)		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	0.40	0.40	0.00	0.00	-123.91	-11.15	-16.59	19.99				
100.00	100.00	100.40	100.40	0.15	0.15	-123.91	-11.15	-16.59	19.99	19.69	0.29	67.838	
200.00	200.00	200.40	200.40	0.51	0.51	-123.91	-11.15	-16.59	19.99	18.98	1.01	19.760	
300.00	300.00	300.40	300.40	0.86	0.86	-123.91	-11.15	-16.59	19.99	18.26	1.73	11.564	
400.00	400.00	400.40	400.40	1.22	1.22	-123.91	-11.15	-16.59	19.99	17.54	2.45	8.174	
500.00	500.00	500.40	500.40	1.58	1.58	-123.91	-11.15	-16.59	19.99	16.83	3.16	6.321	
600.00	600.00	600.40	600.40	1.94	1.94	-123.91	-11.15	-16.59	19.99	16.11	3.88	5.153	
700.00	700.00	700.40	700.40	2.30	2.30	-123.91	-11.15	-16.59	19.99	15.39	4.60	4.349	
800.00	800.00	800.40	800.40	2.66	2.66	-123.91	-11.15	-16.59	19.99	14.68	5.31	3.762	
900.00	900.00	900.40	900.40	3.01	3.02	-123.91	-11.15	-16.59	19.99	13.96	6.03	3.315	
1,000.00	1,000.00	1,000.40	1,000.40	3.37	3.37	-123.91	-11.15	-16.59	19.99	13.24	6.75	2.963	
1,100.00	1,099.97	1,100.37	1,100.37	3.71	3.73	49.82	-11.15	-16.59	18.51	11.06	7.45	2.484	
1,200.00	1,199.75	1,200.15	1,200.15	4.05	4.09	69.13	-11.15	-16.59	15.14	7.00	8.14	1.861	
1,254.64	1,254.12	1,254.52	1,254.52	4.23	4.28	90.00	-11.15	-16.59	14.14	5.63	8.51	1.662 CC	
1,256.47	1,255.94	1,256.34	1,256.34	4.24	4.29	90.82	-11.15	-16.59	14.14	5.62	8.52	1.659 ES, SF	
1,300.00	1,299.19	1,299.59	1,299.59	4.38	4.45	109.60	-11.15	-16.59	15.02	6.19	8.83	1.701	
1,400.00	1,398.57	1,398.97	1,398.97	4.72	4.80	138.77	-11.15	-16.59	21.53	11.98	9.55	2.255	
1,500.00	1,497.94	1,498.34	1,498.34	5.07	5.16	152.56	-11.15	-16.59	30.83	20.58	10.25	3.009	
1,600.00	1,597.32	1,597.72	1,597.72	5.43	5.52	159.75	-11.15	-16.59	41.08	30.13	10.94	3.753	
1,700.00	1,696.69	1,697.09	1,697.09	5.80	5.87	164.04	-11.15	-16.59	51.70	40.06	11.64	4.441	
1,800.00	1,796.07	1,796.47	1,796.47	6.17	6.23	166.85	-11.15	-16.59	62.52	50.18	12.34	5.066	
1,900.00	1,895.44	1,895.84	1,895.84	6.54	6.58	168.83	-11.15	-16.59	73.44	60.40	13.04	5.631	
2,000.00	1,994.81	1,995.21	1,995.21	6.91	6.94	170.30	-11.15	-16.59	84.43	70.68	13.75	6.142	
2,100.00	2,094.19	2,094.59	2,094.59	7.29	7.30	171.43	-11.15	-16.59	95.46	81.01	14.45	6.606	
2,200.00	2,193.56	2,211.45	2,210.60	7.67	7.70	168.45	-20.07	-24.06	98.82	83.63	15.19	6.504	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

LEAM Drilling Systems LLC

Anticollision Report

Company:	GRMR Oil & Gas, LLC	Local Co-ordinate Reference:	Well 19-16D
Project:	Moffat County, CO	TVD Reference:	GE 6446' + KB 18' @ 6464.00usft
Reference Site:	Hamill	MD Reference:	GE 6446' + KB 18' @ 6464.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	19-16D	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Multi User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Hamill - 19-16HA - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-LEAM_MWVD+HDGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,300.00	2,292.94	2,323.66	2,316.18	8.05	8.08	153.63	-48.57	-47.95	86.14	70.18	15.96	5.396	
2,399.81	2,392.12	2,419.14	2,397.14	8.43	8.45	123.68	-87.14	-80.27	74.55	57.74	16.81	4.435	
2,400.00	2,392.31	2,419.30	2,397.27	8.43	8.45	123.61	-87.21	-80.34	74.55	57.74	16.81	4.434	
2,500.00	2,491.69	2,495.97	2,453.99	8.81	8.85	91.87	-126.65	-113.39	95.19	77.60	17.59	5.413	
2,600.00	2,591.06	2,555.90	2,492.16	9.20	9.25	73.16	-162.02	-143.03	149.28	131.13	18.14	8.228	
2,700.00	2,690.44	2,602.66	2,517.75	9.59	9.62	63.37	-192.00	-168.17	220.05	201.44	18.61	11.825	
2,800.00	2,789.81	2,659.48	2,546.16	9.97	10.15	55.64	-229.71	-199.77	297.62	278.55	19.07	15.604	
2,900.00	2,889.18	2,717.63	2,575.24	10.36	10.75	50.66	-268.31	-232.12	376.80	357.28	19.52	19.306	
3,000.00	2,988.56	2,775.79	2,604.32	10.75	11.41	47.31	-306.91	-264.47	456.74	436.76	19.98	22.860	
3,100.00	3,087.93	2,833.94	2,633.40	11.14	12.12	44.91	-345.51	-296.82	537.11	516.66	20.45	26.264	
3,200.00	3,187.31	2,892.10	2,662.47	11.53	12.86	43.12	-384.11	-329.17	617.73	596.81	20.92	29.527	
3,300.00	3,286.68	2,950.25	2,691.55	11.92	13.64	41.73	-422.70	-361.52	698.53	677.11	21.41	32.620	
3,400.00	3,386.06	3,008.41	2,720.63	12.31	14.44	40.62	-461.30	-393.87	779.43	757.54	21.90	35.593	
3,500.00	3,485.43	3,066.56	2,749.71	12.70	15.27	39.72	-499.90	-426.22	860.43	838.02	22.40	38.408	
3,600.00	3,584.81	3,124.72	2,778.78	13.09	16.11	38.97	-538.50	-458.57	941.48	918.58	22.90	41.105	
3,700.00	3,684.18	3,182.87	2,807.86	13.48	16.98	38.34	-577.10	-490.93	1,022.58	999.17	23.41	43.678	
3,800.00	3,783.56	3,241.03	2,836.94	13.87	17.85	37.80	-615.70	-523.28	1,103.72	1,079.79	23.93	46.128	
3,900.00	3,882.93	3,299.18	2,866.02	14.27	18.74	37.33	-654.30	-555.63	1,184.89	1,160.45	24.44	48.483	
4,000.00	3,982.30	3,357.34	2,895.09	14.66	19.64	36.92	-692.90	-587.98	1,266.08	1,241.11	24.97	50.710	
4,100.00	4,081.68	3,415.49	2,924.17	15.05	20.55	36.56	-731.50	-620.33	1,347.29	1,321.80	25.49	52.855	
4,200.00	4,181.05	3,473.65	2,953.25	15.44	21.47	36.25	-770.10	-652.68	1,428.51	1,402.49	26.02	54.898	
4,300.00	4,280.43	3,531.80	2,982.33	15.84	22.39	35.96	-808.70	-685.03	1,509.75	1,483.20	26.55	56.855	
4,400.00	4,379.80	3,589.96	3,011.40	16.23	23.32	35.71	-847.30	-717.38	1,591.00	1,563.92	27.09	58.732	
4,500.00	4,479.18	3,648.11	3,040.48	16.62	24.25	35.48	-885.90	-749.73	1,672.27	1,644.63	27.63	60.522	
4,600.00	4,578.55	3,706.27	3,069.56	17.02	25.19	35.27	-924.50	-782.09	1,753.53	1,725.36	28.17	62.246	
4,700.00	4,677.93	3,764.42	3,098.64	17.41	26.14	35.08	-963.09	-814.44	1,834.81	1,806.09	28.72	63.889	
4,800.00	4,777.30	3,822.58	3,127.71	17.81	27.09	34.90	-1,001.69	-846.79	1,916.09	1,886.83	29.27	65.471	
4,822.84	4,800.00	3,835.86	3,134.36	17.90	27.30	34.86	-1,010.51	-854.18	1,934.66	1,905.27	29.39	65.822	
4,900.00	4,876.73	3,880.37	3,156.61	18.20	28.03	35.35	-1,040.05	-878.94	1,997.63	1,967.83	29.80	67.035	
5,000.00	4,976.33	3,936.96	3,184.91	18.58	28.96	35.99	-1,077.61	-910.42	2,079.97	2,049.64	30.33	68.588	
5,100.00	5,076.06	3,992.30	3,212.58	18.96	29.87	36.64	-1,114.35	-941.20	2,163.11	2,132.26	30.85	70.126	
5,200.00	5,175.91	4,046.38	3,239.62	19.32	30.76	37.29	-1,150.24	-971.29	2,247.03	2,215.66	31.37	71.631	
5,300.00	5,275.84	4,099.18	3,266.01	19.68	31.64	37.97	-1,185.28	-1,000.66	2,331.72	2,299.82	31.89	73.112	
5,400.00	5,375.82	4,150.67	3,291.76	20.03	32.49	38.66	-1,219.46	-1,029.31	2,417.14	2,384.72	32.43	74.543	
5,464.03	5,439.85	4,182.96	3,307.91	20.24	33.03	-129.80	-1,240.89	-1,047.27	2,472.22	2,439.46	32.76	75.457	
5,500.00	5,475.82	4,200.94	3,316.90	20.35	33.33	-129.93	-1,252.83	-1,057.27	2,503.25	2,470.34	32.91	76.054	
5,600.00	5,575.82	4,250.94	3,341.90	20.66	34.16	-130.26	-1,286.02	-1,085.09	2,589.52	2,556.18	33.34	77.666	
5,700.00	5,675.82	4,300.94	3,366.90	20.97	34.99	-130.57	-1,319.20	-1,112.90	2,675.82	2,642.05	33.77	79.236	
5,800.00	5,775.82	4,350.94	3,391.90	21.29	35.82	-130.86	-1,352.39	-1,140.71	2,762.13	2,727.92	34.21	80.751	
5,900.00	5,875.82	4,400.94	3,416.90	21.60	36.66	-131.14	-1,385.58	-1,168.53	2,848.46	2,813.82	34.64	82.225	
6,000.00	5,975.82	4,450.94	3,441.90	21.92	37.50	-131.40	-1,418.76	-1,196.34	2,934.81	2,899.72	35.09	83.648	
6,100.00	6,075.82	4,500.94	3,466.90	22.24	38.33	-131.64	-1,451.95	-1,224.16	3,021.17	2,985.64	35.53	85.034	
6,200.00	6,175.82	4,550.94	3,491.90	22.56	39.17	-131.87	-1,485.14	-1,251.97	3,107.54	3,071.56	35.98	86.373	
6,300.00	6,275.82	4,600.94	3,516.90	22.88	40.01	-132.09	-1,518.32	-1,279.79	3,193.93	3,157.50	36.43	87.677	
6,400.00	6,375.82	4,650.94	3,541.90	23.20	40.85	-132.30	-1,551.51	-1,307.60	3,280.33	3,243.44	36.88	88.938	
6,500.00	6,475.82	4,700.94	3,566.90	23.52	41.69	-132.50	-1,584.70	-1,335.42	3,366.74	3,329.40	37.34	90.166	
6,600.00	6,575.82	4,750.94	3,591.90	23.84	42.53	-132.68	-1,617.88	-1,363.23	3,453.15	3,415.35	37.80	91.354	
6,700.00	6,675.82	4,800.94	3,616.90	24.17	43.37	-132.86	-1,651.07	-1,391.05	3,539.58	3,501.32	38.26	92.512	
6,800.00	6,775.82	4,850.94	3,641.90	24.50	44.22	-133.03	-1,684.26	-1,418.86	3,626.02	3,587.29	38.73	93.632	
6,900.00	6,875.82	4,900.94	3,666.90	24.82	45.06	-133.19	-1,717.44	-1,446.67	3,712.46	3,673.27	39.19	94.725	
6,980.18	6,956.00	4,941.04	3,686.94	25.08	45.73	-133.32	-1,744.05	-1,468.98	3,781.78	3,742.21	39.57	95.575	