



CONFIDENTIAL

WELL COMPLETION FORM

Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34662
Name: Tug Hill Operating, LLC
Address 1: 550 BAILEY AVE, STE 510
Address 2:
City: FT. WORTH State: TX Zip: 76107
Contact Person: Winnie Scott
Phone: (817) 632-3400
CONTRACTOR: License # 34670
Name: Patterson-UTI Drilling Company LLC
Wellsite Geologist: NA
Purchaser:

API No. 15 - 15-007-23910-01-00
Spot Description:
NE NW NE NE Sec. 10 Twp. 34 S. R. 13 East West
313 Feet from North / South Line of Section
745 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Barber
Lease Name: Donovan Well #: 1-10H
Field Name:

Producing Formation: Mississippi
Elevation: Ground: 1641 Kelly Bushing: 23
Total Depth: 9301 Plug Back Total Depth: 9253
Amount of Surface Pipe Set and Cemented at: 800 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: _____ Feet
If Alternate II completion, cement circulated from: _____
feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 18000 ppm Fluid volume: 1300 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Permit #:

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil WSW SWD SIOW
 Gas D&A ENHR SIGW
 OG GSW Temp. Abd.
 CM (Coal Bed Methane)
 Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well info as follows:
Operator:
Well Name:
Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to ENHR Conv. to SWD
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____
11/2/2012 11/16/2012 12/16/2012
Spud Date or Date Reached TD Completion Date or Recompletion Date

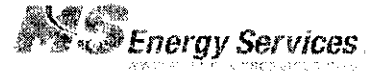
AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Letter of Confidentiality Received
Date: 12/19/2012
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: NAOMI JAMES Date: 12/20/2012



Company: Tug Hill Operating, LLC	Local Co-ordinate Reference: Well 1-10H
Project: Barber County, Kansas (NAD 83)	TVD Reference: WELL @ 1679.00usft (Patterson 421)
Site: Donovan	MD Reference: WELL @ 1679.00usft (Patterson 421)
Well: 1-10H	North Reference: Grid
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature
Design: Surveys	Database: Southern Region

Project	Barber County, Kansas (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Kansas Southern Zone		

Well	1-10H				
Well Position	+N-S	0.00 usft	Northing:	1,473,089.42 usft	Latitude: 37° 6' 28.6145 N
	+E-W	0.00 usft	Easting:	1,249,345.66 usft	Longitude: 98° 42' 57.548 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level: 1,656.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	11/03/12	4.98	65.16	51,767

Design	Surveys				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)	
	0.00	0.00	0.00	177.78	

Survey Program	Date	11/29/12			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	830.00	VES Gyro (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s	
878.00	9,301.00	MS MWD (Wellbore #1)	MWD	MWD - Standard	

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)	
830.00	0.81	157.31	829.78	-11.39	12.04	11.85	0.00	0.00	0.00	
Tie-in to VES Gyro-830.00' MD										
878.00	1.00	176.80	877.77	-12.12	12.19	12.59	0.75	0.40	40.60	
970.00	1.00	165.90	969.76	-13.70	12.43	14.18	0.21	0.00	-11.85	
1,082.00	1.20	317.70	1,061.75	-13.77	11.98	14.22	2.32	0.22	165.00	
1,154.00	1.50	325.00	1,153.73	-12.07	10.64	12.47	0.38	0.33	7.93	
1,247.00	1.10	349.70	1,246.70	-10.20	9.79	10.57	0.73	-0.43	26.56	
1,339.00	0.70	338.60	1,338.69	-8.80	9.42	9.16	0.47	-0.43	-12.07	
1,431.00	0.80	335.80	1,430.68	-7.69	8.95	8.04	0.12	0.11	-3.04	
1,521.00	0.90	357.00	1,520.67	-6.42	8.66	6.75	0.36	0.11	23.58	
1,615.00	0.80	329.30	1,614.66	-5.11	8.29	5.43	0.45	-0.11	-29.47	
1,707.00	0.90	318.20	1,706.65	-4.02	7.48	4.31	0.21	0.11	-12.07	
1,799.00	0.90	324.40	1,798.64	-2.90	6.57	3.15	0.11	0.00	6.74	
1,892.00	0.90	315.90	1,891.63	-1.78	5.64	2.00	0.14	0.00	-9.14	
1,987.00	1.10	319.20	1,986.62	-0.55	4.53	0.73	0.22	0.21	3.47	



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 Site: Donovan
 Well: 1-10H
 Wellbore: Wellbore #1
 Design: Surveys

Local Co-ordinate Reference: Well 1-10H
 TVD Reference: WELL @ 1679.00usft (Patterson 421)
 MD Reference: WELL @ 1679.00usft (Patterson 421)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: Southern Region

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)	
2,082.00	0.50	195.90	2,081.61	-0.26	3.82	0.41	1.51	-0.63	-129.79	
2,176.00	1.00	189.60	2,175.60	-1.46	3.57	1.80	0.54	0.53	-6.70	
2,271.00	0.60	172.80	2,270.59	-2.77	3.49	2.91	0.48	-0.42	-17.88	
2,366.00	0.80	190.20	2,365.59	-3.92	3.44	4.05	0.30	0.21	18.32	
2,461.00	0.70	173.90	2,460.58	-5.15	3.39	5.28	0.25	-0.11	-17.16	
2,556.00	0.00	169.90	2,555.57	-5.73	3.44	5.86	0.74	-0.74	0.00	
2,650.00	0.30	216.90	2,649.57	-5.92	3.29	6.05	0.32	0.32	0.00	
2,745.00	0.10	142.80	2,744.57	-6.19	3.19	6.31	0.30	-0.21	-78.00	
2,840.00	0.10	263.60	2,839.57	-6.28	3.16	6.38	0.18	0.00	127.16	
2,936.00	0.20	177.50	2,935.57	-6.44	3.09	6.56	0.23	0.10	-89.88	
3,031.00	0.40	148.60	3,030.57	-6.89	3.27	7.01	0.28	0.21	-30.42	
3,126.00	0.30	136.70	3,125.57	-7.35	3.81	7.49	0.13	-0.11	-12.53	
3,220.00	0.40	108.70	3,219.57	-7.64	4.09	7.79	0.21	0.11	-29.79	
3,315.00	0.30	105.50	3,314.57	-7.81	4.84	7.99	0.11	-0.11	-3.37	
3,411.00	0.40	93.60	3,410.57	-7.90	5.22	8.10	0.13	0.10	-12.40	
3,506.00	0.80	110.70	3,505.58	-8.15	6.17	8.39	0.46	0.42	18.00	
3,601.00	0.70	85.60	3,600.55	-8.34	7.37	8.62	0.36	-0.11	-26.42	
3,695.00	0.70	49.20	3,694.55	-7.93	8.38	8.24	0.47	0.00	-38.72	
3,790.00	0.90	45.60	3,789.54	-7.02	9.35	7.38	0.22	0.21	-3.79	
3,883.00	0.90	45.00	3,882.52	-6.00	10.39	6.39	0.01	0.00	-0.65	
3,978.00	0.40	258.90	3,977.52	-5.53	10.59	5.94	1.32	-0.53	-153.79	
4,073.00	1.10	258.90	4,072.51	-5.77	9.37	6.13	0.74	0.74	0.00	
4,167.00	1.00	253.00	4,166.50	-6.19	7.70	6.48	0.16	-0.11	-6.28	
4,230.00	0.90	243.40	4,229.49	-8.57	6.73	6.82	0.30	-0.16	-15.24	
4,261.00	1.90	201.60	4,260.48	-7.16	6.32	7.39	4.41	3.23	-134.84	
4,293.00	4.70	195.50	4,292.42	-8.91	5.78	9.13	8.81	8.75	-19.06	
4,324.00	8.00	200.70	4,323.23	-12.15	4.68	12.33	10.79	10.65	16.77	
4,354.27	11.22	200.80	4,353.07	-16.88	2.89	16.98	10.65	10.65	0.32	
330' Hardline intersect-4354.27' MD										
4,355.00	11.30	200.80	4,353.79	-17.01	2.84	17.11	10.65	10.65	0.23	
4,387.00	15.40	202.80	4,384.91	-23.86	0.07	23.85	12.89	12.81	6.25	
4,419.00	18.50	203.10	4,415.52	-32.45	-3.56	32.29	9.69	9.69	0.94	
4,450.00	22.50	203.10	4,444.55	-42.44	-7.82	42.10	12.90	12.90	0.00	
4,481.00	26.40	200.90	4,472.77	-54.34	-12.61	53.81	12.92	12.58	-7.10	
4,513.00	30.50	199.40	4,500.90	-68.65	-17.85	67.90	13.00	12.81	-4.69	
4,545.00	34.90	198.10	4,527.82	-85.02	-23.39	84.05	13.92	13.75	-4.06	
4,577.00	39.50	197.20	4,553.30	-103.45	-29.25	102.24	14.47	14.38	-2.81	
4,608.00	43.50	194.80	4,576.52	-123.19	-34.89	121.75	13.88	12.90	-7.74	
4,640.00	46.50	192.00	4,599.14	-145.20	-40.12	143.54	11.23	9.38	-8.75	
4,671.00	48.90	187.30	4,620.01	-167.79	-43.94	165.97	13.62	7.74	-15.16	
4,703.00	51.20	183.90	4,640.56	-192.20	-46.33	190.26	10.86	7.19	-10.63	
4,734.00	53.90	180.50	4,659.41	-216.79	-47.28	214.79	12.31	8.71	-10.97	
4,766.00	56.20	177.10	4,677.75	-243.00	-46.70	241.01	11.29	7.19	-10.63	



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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)
4,798.00	58.60	174.60	4,694.99	-269.88	-44.74	267.95	9.98	7.50	-7.81
4,829.00	59.70	173.20	4,710.89	-296.34	-41.91	294.50	5.26	3.55	-4.52
4,861.00	60.00	173.10	4,726.96	-323.82	-38.61	322.08	0.98	0.94	-0.31
4,893.00	60.20	171.80	4,742.91	-351.32	-34.96	349.70	3.58	0.63	-4.06
4,925.00	60.40	171.00	4,758.76	-378.80	-30.81	377.32	2.26	0.63	-2.50
4,957.00	62.70	169.10	4,774.01	-406.51	-25.94	405.20	8.88	7.19	-5.94
4,989.00	66.00	166.80	4,787.86	-434.71	-19.91	433.61	12.18	10.31	-7.19
5,021.00	68.90	165.90	4,800.13	-463.43	-12.94	462.58	9.43	9.06	-2.81
5,053.00	72.30	166.90	4,810.76	-492.76	-5.84	492.16	11.03	10.63	3.13
5,084.00	74.30	168.90	4,819.67	-521.79	0.38	521.41	8.93	6.45	6.45
5,116.00	77.30	171.10	4,827.52	-552.33	5.76	552.14	11.50	9.36	6.88
5,147.00	81.50	173.20	4,833.22	-582.51	9.92	582.46	15.10	13.55	6.77
5,179.00	85.00	173.00	4,836.98	-614.05	13.73	614.13	10.96	10.94	-0.63
5,211.00	86.80	173.00	4,839.27	-645.73	17.62	645.93	5.63	5.63	0.00
5,242.00	87.30	173.20	4,840.86	-676.47	21.34	676.79	1.74	1.61	0.65
5,274.00	89.00	172.90	4,841.90	-708.22	25.21	708.66	5.39	5.31	-0.94
5,301.00	90.80	172.80	4,841.94	-735.00	28.57	735.56	6.68	6.67	-0.37
5,332.00	91.50	175.30	4,841.32	-765.83	31.79	766.49	8.37	2.26	8.06
5,420.00	92.90	175.80	4,837.94	-853.50	38.61	854.35	1.69	1.59	0.57
5,514.00	89.80	176.30	4,835.73	-947.24	45.08	948.27	3.34	-3.30	0.53
5,609.00	88.70	178.50	4,836.97	-1,042.12	49.39	1,043.25	2.59	-1.16	2.32
5,704.00	88.50	177.60	4,839.29	-1,137.04	52.82	1,138.22	0.97	-0.21	-0.95
5,799.00	89.00	179.00	4,841.37	-1,231.97	55.44	1,233.19	1.56	0.53	1.47
5,894.00	87.50	178.80	4,844.27	-1,326.91	57.28	1,328.13	1.59	-1.58	-0.21
5,989.00	90.20	177.70	4,846.17	-1,421.83	60.16	1,423.10	3.07	2.84	-1.16
6,084.00	90.70	176.80	4,845.43	-1,516.72	64.72	1,518.09	1.08	0.53	-0.95
6,179.00	90.60	176.00	4,844.35	-1,611.52	70.69	1,613.05	0.85	-0.11	-0.84
6,274.00	88.40	176.40	4,845.18	-1,706.31	78.98	1,708.01	2.35	-2.32	0.42
6,369.00	89.50	179.10	4,846.92	-1,801.21	80.71	1,802.98	3.07	1.16	2.84
6,464.00	91.30	178.40	4,846.26	-1,896.18	82.78	1,897.96	2.03	1.89	-0.74
6,559.00	89.40	178.50	4,845.68	-1,991.14	85.35	1,992.95	2.00	-2.00	0.11
6,654.00	90.50	176.20	4,845.76	-2,086.03	89.74	2,087.94	2.68	1.16	-2.42
6,749.00	88.70	176.90	4,846.42	-2,180.85	95.46	2,182.91	2.03	-1.89	0.74
6,843.00	89.80	179.80	4,847.65	-2,274.78	98.17	2,276.88	3.30	1.17	3.09
6,938.00	91.10	179.80	4,846.91	-2,369.78	98.50	2,371.82	1.37	1.37	0.00
7,032.00	88.30	179.80	4,847.40	-2,463.77	98.82	2,465.75	2.98	-2.98	0.00
7,126.00	90.40	180.30	4,848.49	-2,559.76	98.74	2,561.66	2.25	2.19	0.52
7,222.00	91.00	179.70	4,847.34	-2,653.75	98.74	2,655.59	0.90	0.84	-0.64
7,317.00	90.50	179.70	4,846.10	-2,748.74	99.24	2,750.52	0.53	-0.53	0.00
7,412.00	87.70	177.60	4,847.59	-2,843.69	101.48	2,845.49	3.68	-2.95	-2.21
7,507.00	88.00	177.80	4,851.15	-2,938.54	105.45	2,940.42	0.32	0.32	0.00
7,601.00	90.80	176.90	4,852.14	-3,032.42	109.96	3,034.40	3.07	2.88	-0.74
7,696.00	90.20	177.40	4,851.31	-3,127.29	114.68	3,129.39	0.82	-0.63	0.53
7,790.00	88.80	176.40	4,852.13	-3,221.15	119.77	3,223.37	1.83	-1.49	-1.06



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Survey

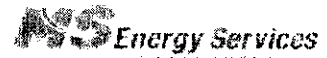
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,886.00	89.80	176.70	4,853.30	-3,316.97	125.54	3,319.34	1.09	1.04	0.31
7,980.00	89.00	177.10	4,854.29	-3,410.82	130.83	3,413.32	0.95	-0.85	0.43
8,075.00	89.80	178.00	4,855.28	-3,505.73	134.89	3,508.32	1.27	0.84	0.95
8,169.00	91.00	178.30	4,854.62	-3,599.88	137.72	3,602.31	1.32	1.28	0.32
8,264.00	88.50	178.40	4,855.04	-3,694.63	140.46	3,697.30	2.63	-2.83	0.11
8,359.00	89.10	178.60	4,857.03	-3,789.58	142.94	3,792.27	0.67	0.63	0.21
8,454.00	89.30	179.60	4,858.35	-3,884.55	144.43	3,887.23	1.07	0.21	1.05
8,549.00	89.60	178.80	4,859.27	-3,979.54	145.76	3,982.20	0.90	0.32	-0.84
8,642.00	89.20	176.10	4,860.24	-4,072.43	149.90	4,075.18	2.93	-0.43	-2.90
8,738.00	89.40	176.00	4,861.41	-4,168.20	156.51	4,171.13	0.23	0.21	-0.10
8,833.00	89.20	177.00	4,862.57	-4,263.01	162.31	4,266.10	1.07	-0.21	1.05
8,928.00	88.10	177.60	4,864.81	-4,357.88	166.78	4,361.07	1.32	-1.16	0.63
9,023.00	89.50	176.60	4,866.80	-4,452.73	171.59	4,456.04	1.81	1.47	-1.05
9,094.00	88.30	175.10	4,868.16	-4,523.53	176.73	4,528.98	2.71	-1.69	-2.11
9,190.00	88.70	176.30	4,870.68	-4,619.22	183.92	4,622.88	1.32	0.42	1.25
9,242.00	88.70	177.10	4,871.86	-4,671.12	186.91	4,674.86	1.54	0.00	1.54
9,261.43	88.70	177.10	4,872.30	-4,690.52	187.90	4,694.28	0.00	0.00	0.00
330' Hardline Intersect-9261.43' MD									
9,301.00	88.70	177.10	4,873.20	-4,730.03	189.90	4,733.84	0.00	0.00	0.00
Projection to TD-9301.00' MD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
830.00	829.78	-11.39	12.04	Tie-In to VES Gyro-830.00' MD
4,354.27	4,353.07	-16.88	2.89	330' Hardline Intersect-4354.27' MD
9,261.43	4,872.30	-4,690.52	187.90	330' Hardline Intersect-9261.43' MD
9,301.00	4,873.20	-4,730.03	189.90	Projection to TD-9301.00' MD



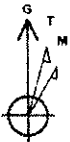
Company: Tug Hill Operating, LLC
 Site: Donovan
 Well: 1-10H
 Project: Barber County, Kansas (NAD 83)
 Rig Name: Patterson 421



Planning: 936.442.2510 Fax: 936.442.2515
 Operations: 936.442.2500 Fax: 936.442.2599

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	V Sect	Departure	Annotation
4296.89	0.00	0.00	4296.89	0.00	0.00	0.00	0.00	KOP, 12.00°/100' Build
4798.89	60.00	177.78	4710.38	-238.55	9.25	238.73	238.73	Hold 60.00° Inc, 177.78° Azm
4916.89	60.00	177.78	4770.38	-342.40	13.28	342.66	342.66	Begin 12.00°/100' Build
5163.30	89.57	177.78	4834.34	-577.37	22.39	577.80	577.80	Begin 89.57° Lateral
9319.70	89.57	177.78	4865.53	-4730.53	183.41	4734.08	4734.08	PBHL

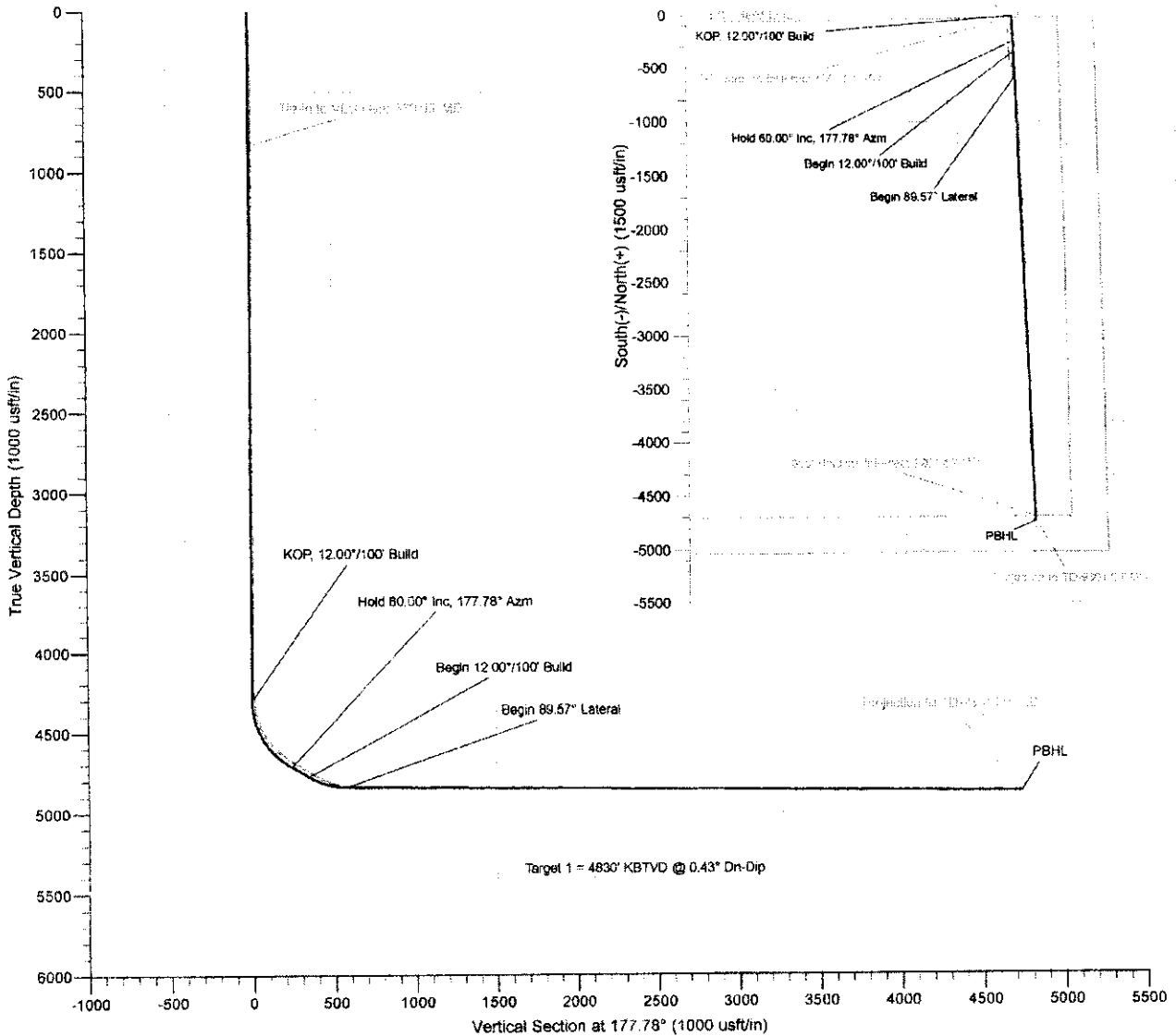


Azimuths to Grid North
 True North: 0.13°
 Magnetic North: 5.12°

Magnetic Field
 Strength: 51766.8nT
 Dip Angle: 65.18°
 Date: 11/03/2012
 Model: WMM_2010

Created By: Hunter Heseman
 Date: 9-37, November 29 2012
 Plan: Design #2

US State Plane 1983
 Kansas Southern Zone



The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer. MS Energy is not responsible for the accuracy of this schematic or the information contained herein.