

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER GMBU M-31-8-18				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT EIGHT MILE FLAT				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME GMBU (GRRV)				
6. NAME OF OPERATOR NEWFIELD PRODUCTION COMPANY						7. OPERATOR PHONE 435 646-4825				
8. ADDRESS OF OPERATOR Rt 3 Box 3630 , Myton, UT, 84052						9. OPERATOR E-MAIL mcrozier@newfield.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU-74872			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE		2023 FNL 1876 FEL		SWNE	31	8.0 S	18.0 E	S		
Top of Uppermost Producing Zone		2481 FNL 2386 FEL		SWNE	31	8.0 S	18.0 E	S		
At Total Depth		2424 FSL 2381 FWL		NESW	31	8.0 S	18.0 E	S		
21. COUNTY UINTAH			22. DISTANCE TO NEAREST LEASE LINE (Feet) 216			23. NUMBER OF ACRES IN DRILLING UNIT 20				
27. ELEVATION - GROUND LEVEL 5035			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1320			26. PROPOSED DEPTH MD: 6577 TVD: 6430				
28. BOND NUMBER WYB000493			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 437478							
Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	8.625	0 - 300	24.0	J-55 ST&C	8.3	Class G	138	1.17	15.8
Prod	7.875	5.5	0 - 6577	15.5	J-55 LT&C	8.3	Premium Lite High Strength	316	3.26	11.0
							50/50 Poz	363	1.24	14.3
ATTACHMENTS										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Mandie Crozier				TITLE Regulatory Tech				PHONE 435 646-4825		
SIGNATURE				DATE 07/10/2014				EMAIL mcrozier@newfield.com		
API NUMBER ASSIGNED 43047546240000				APPROVAL				 Permit Manager		

NEWFIELD PRODUCTION COMPANY
 GMBU M-31-8-18
 AT SURFACE: SW/NE SECTION 31, T8S R18E
 UINTAH COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 1,663'
Green River	1,663'
Wasatch	6,408'
Proposed TD	6,577' (MD) 6,430' (TVD)

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation (Oil) 1,663' – 6,408'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval	Date Sampled
Flow Rate	Temperature
Hardness	pH
Water Classification (State of Utah)	Dissolved Calcium (Ca) (mg/l)
Dissolved Iron (Fe) (ug/l)	Dissolved Sodium (Na) (mg/l)
Dissolved Magnesium (Mg) (mg/l)	Dissolved Carbonate (CO ₃) (mg/l)
Dissolved Bicarbonate (NaHCO ₃) (mg/l)	Dissolved Chloride (Cl) (mg/l)
Dissolved Sulfate (SO ₄) (mg/l)	Dissolved Total Solids (TDS) (mg/l)

4. **PROPOSED CASING PROGRAM**

a. **Casing Design: GMBU M-31-8-18**

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	300'	24.0	J-55	STC	2,950 17.53	1,370 14.35	244,000 33.89
Prod casing 5-1/2"	0'	6,577'	15.5	J-55	LTC	4,810 2.30	4,040 1.93	217,000 2.13

Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient – gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure – gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe =	13.0 ppg
Pore pressure at surface casing shoe =	8.33 ppg
Pore pressure at prod casing shoe =	8.33 ppg
Gas gradient =	0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. **Cementing Design: GMBU M-31-8-18**

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft ³ /sk)
			ft ³			
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17
			161			
Prod casing Lead	4,577'	Prem Lite II w/ 10% gel + 3% KCl	316	30%	11.0	3.26
			1031			
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363	30%	14.3	1.24
			451			

*Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours

- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

5. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to ± 300 feet will be drilled with an air/mist system. The air rig is equipped with a 6 1/2" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about ± 300 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +/- . A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated

bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

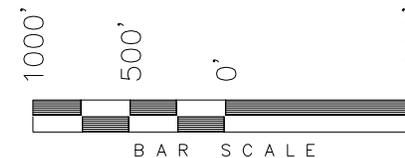
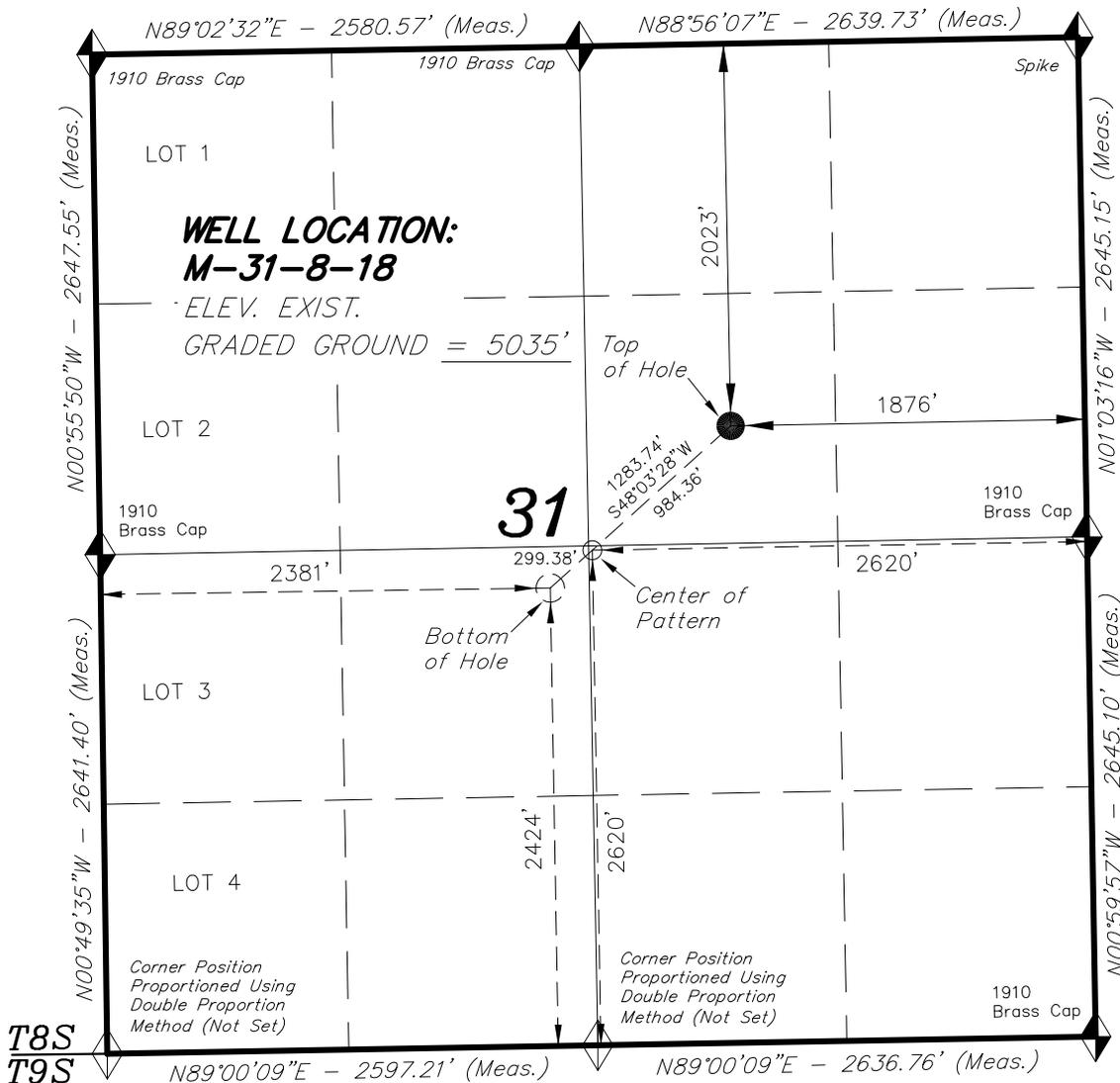
It is anticipated that the drilling operations will commence the first quarter of 2015, and take approximately seven (7) days from spud to rig release.

T8S, R18E, S.L.B.&M.

NEWFIELD EXPLORATION COMPANY

WELL LOCATION, M-31-8-18, LOCATED AS SHOWN IN THE SW 1/4 NE 1/4 OF SECTION 31, T8S, R18E, S.L.B.&M. UTAH COUNTY, UTAH.

TARGET BOTTOM HOLE, M-31-8-18, LOCATED AS SHOWN IN THE NE 1/4 SW 1/4 OF SECTION 31, T8S, R18E, S.L.B.&M. UTAH COUNTY, UTAH.



NOTES:

- Well footages are measured at right angles to the Section Lines.
- Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
 REGISTRATION No. 189377
 06-27-14
 STACY W. STEWART
 REGISTERED LAND SURVEYOR
 REGISTRATION No. 189377
 STATE OF UTAH

◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

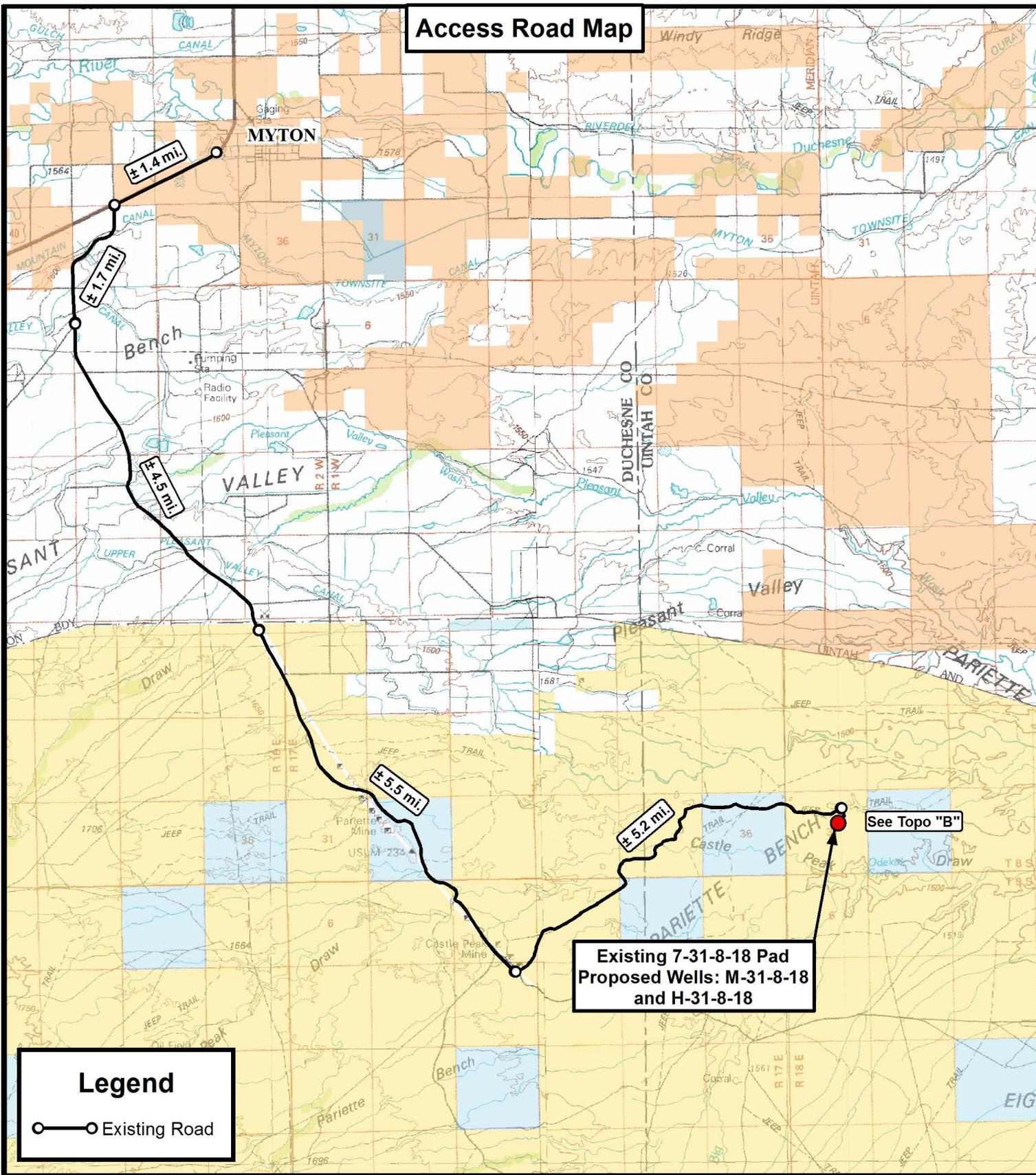
NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°04'34.07"	
LONGITUDE = 109°56'00.69"	
NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°04'34.21"	
LONGITUDE = 109°55'58.16"	
NAD 83 (CENTER OF PATTERN)	NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 40°04'27.70"	LATITUDE = 40°04'25.76"
LONGITUDE = 109°56'10.25"	LONGITUDE = 109°56'13.16"
NAD 27 (CENTER OF PATTERN)	NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 40°04'27.83"	LATITUDE = 40°04'25.90"
LONGITUDE = 109°56'07.72"	LONGITUDE = 109°56'10.63"

TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED: 08-04-11	SURVEYED BY: S.H.	VERSION:
DATE DRAWN: 11-25-13	DRAWN BY: L.C.S.	V3
REVISED: 06-27-14 F.T.M.	SCALE: 1" = 1000'	

Access Road Map



**Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18
and H-31-8-18**

See Topo "B"

Legend

○—○ Existing Road

Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

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NEWFIELD EXPLORATION COMPANY

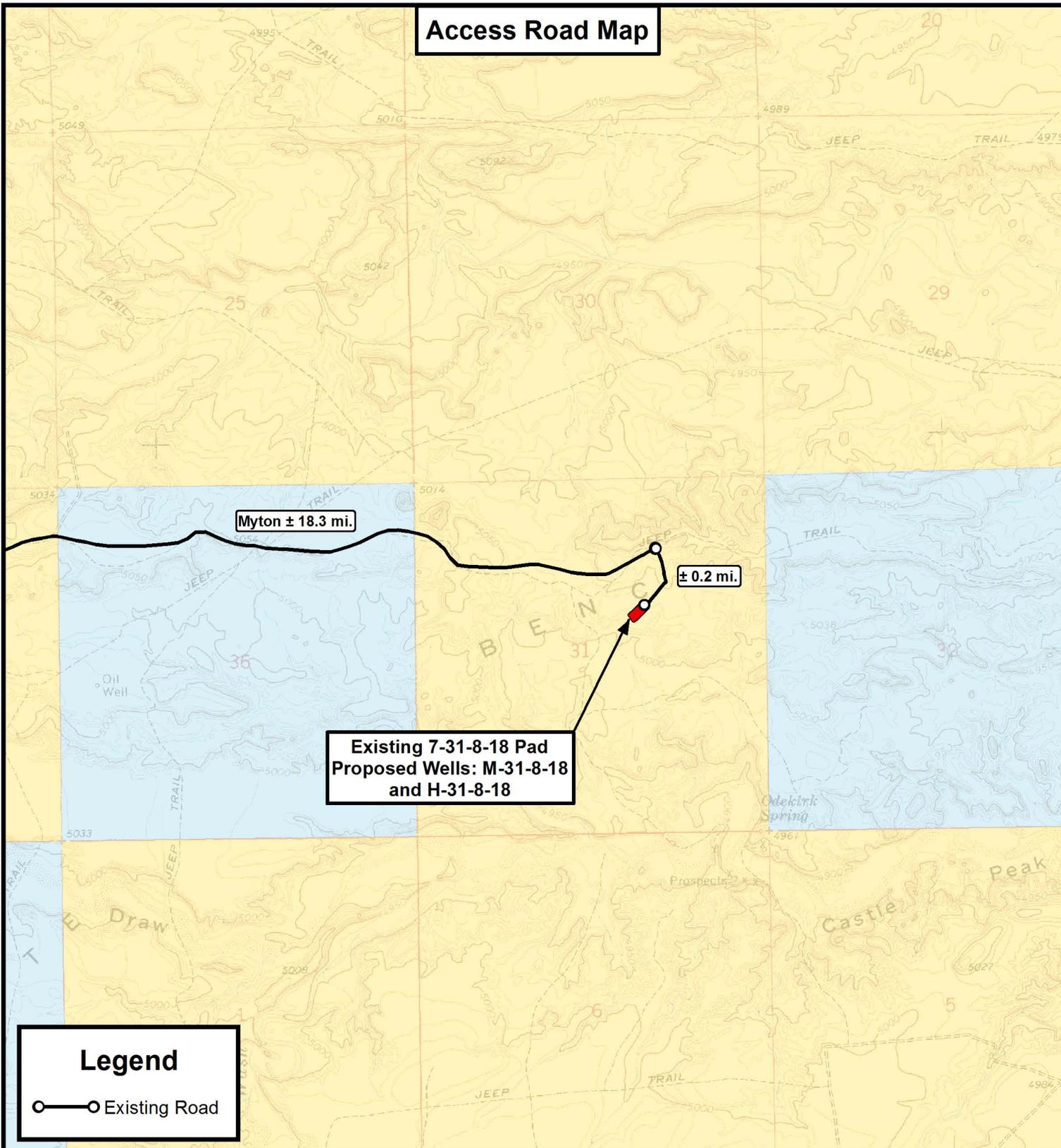
Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18 and H-31-8-18
Sec. 31, T8S, R18E, S.L.B.&M.
Uintah County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	11-25-2013			V3
SCALE:	1:100,000			

TOPOGRAPHIC MAP

SHEET
A

Access Road Map



Legend

○—○ Existing Road

THE PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY TRI-STATE LAND SURVEYING, INC. - TRI-STATE DOES NOT WARRANTY PROPERTY PARCEL DATA OR ANY ASSOCIATED INFORMATION. A PROPERTY SURVEY IS REQUIRED TO DETERMINE THE ACTUAL LOCATION OF PROPERTY LINES AND SHOW ACCURATE DISTANCES ACROSS PARCELS.

**Tri State
Land Surveying, Inc.**
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NEWFIELD EXPLORATION COMPANY

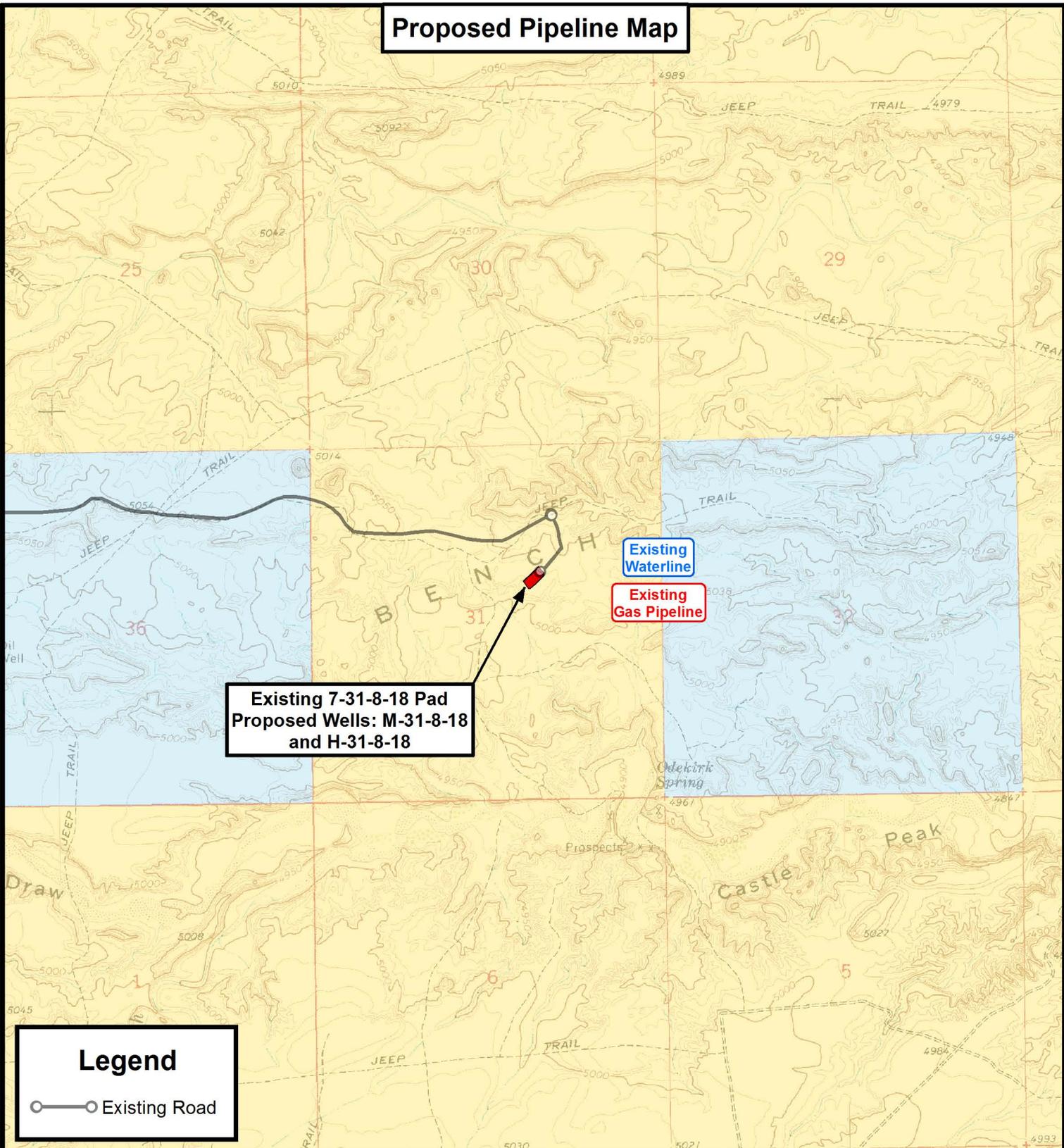
Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18 and H-31-8-18
Sec. 31, T8S, R18E, S.L.B.&M.
Uintah County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	02-09-2012			V3
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET
B

Proposed Pipeline Map



**Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18
and H-31-8-18**

Existing
Waterline

Existing
Gas Pipeline

Legend

○—○ Existing Road

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NEWFIELD EXPLORATION COMPANY

Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18 and H-31-8-18
Sec. 31, T8S, R18E, S.L.B.&M.
Uintah County, UT.

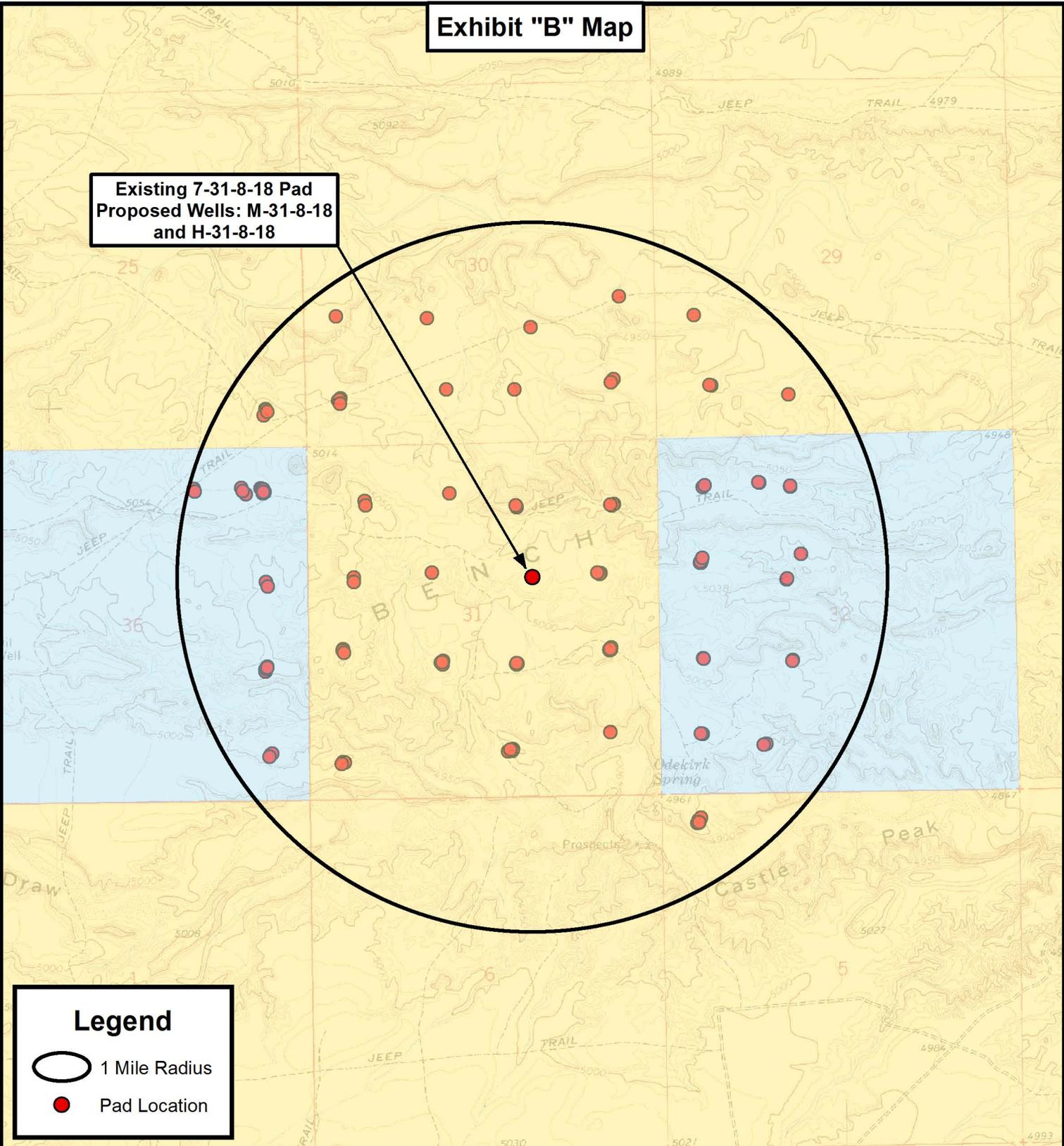
DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	02-09-2012			V3
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET
C

Exhibit "B" Map

**Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18
and H-31-8-18**



Legend

-  1 Mile Radius
-  Pad Location

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NEWFIELD EXPLORATION COMPANY

Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18 and H-31-8-18
Sec. 31, T8S, R18E, S.L.B.&M.
Uintah County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	11-25-2013			V3
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET **D**

Coordinate Report

Well Number	Feature Type	Latitude (NAD 83) (DMS)	Longitude (NAD 83) (DMS)
7-31-8-18	Surface Hole	40° 04' 33.86" N	109° 56' 00.70" W
M-31-8-18	Surface Hole	40° 04' 34.07" N	109° 56' 00.69" W
H-31-8-18	Surface Hole	40° 04' 34.28" N	109° 56' 00.68" W
M-31-8-18	Center of Pattern	40° 04' 27.70" N	109° 56' 10.25" W
H-31-8-18	Center of Pattern	40° 04' 39.28" N	109° 56' 09.43" W
M-31-8-18	Bottom of Hole	40° 04' 25.76" N	109° 56' 13.16" W
H-31-8-18	Bottom of Hole	40° 04' 40.83" N	109° 56' 12.14" W
Well Number	Feature Type	Latitude (NAD 83) (DD)	Longitude (NAD 83) (DD)
7-31-8-18	Surface Hole	40.076073	109.933528
M-31-8-18	Surface Hole	40.076131	109.933525
H-31-8-18	Surface Hole	40.076189	109.933522
M-31-8-18	Center of Pattern	40.074361	109.936181
H-31-8-18	Center of Pattern	40.077578	109.935953
M-31-8-18	Bottom of Hole	40.073823	109.936989
H-31-8-18	Bottom of Hole	40.078008	109.936706
Well Number	Feature Type	Northing (NAD 83) (UTM Meters)	Longitude (NAD 83) (UTM Meters)
7-31-8-18	Surface Hole	4436745.524	590933.552
M-31-8-18	Surface Hole	4436751.984	590933.724
H-31-8-18	Surface Hole	4436758.444	590933.896
M-31-8-18	Center of Pattern	4436552.796	590709.573
H-31-8-18	Center of Pattern	4436910.106	590724.783
M-31-8-18	Bottom of Hole	4436492.216	590641.400
H-31-8-18	Bottom of Hole	4436957.076	590660.021
Well Number	Feature Type	Latitude (NAD 27) (DMS)	Longitude (NAD 27) (DMS)
7-31-8-18	Surface Hole	40° 04' 34.00" N	109° 55' 58.17" W
M-31-8-18	Surface Hole	40° 04' 34.21" N	109° 55' 58.16" W
H-31-8-18	Surface Hole	40° 04' 34.42" N	109° 55' 58.15" W
M-31-8-18	Center of Pattern	40° 04' 27.83" N	109° 56' 07.72" W
H-31-8-18	Center of Pattern	40° 04' 39.42" N	109° 56' 06.90" W
M-31-8-18	Bottom of Hole	40° 04' 25.90" N	109° 56' 10.63" W
H-31-8-18	Bottom of Hole	40° 04' 40.96" N	109° 56' 09.61" W



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NEWFIELD EXPLORATION COMPANY

Existing 7-31-8-18 Pad
Proposed Wells: M-31-8-18 and H-31-8-18
Sec. 31, T8S, R18E, S.L.B.&M.
Uintah County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.
DATE:	11-25-2013		
VERSION:	V3		

COORDINATE REPORT

SHEET

1

RECEIVED: July 10, 2014



NEWFIELD EXPLORATION

**USGS Myton SW (UT)
SECTION 31 T8S, R18E
M-31-8-18**

Wellbore #1

Plan: Design #1

Standard Planning Report

24 June, 2014





Payzone Directional
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well M-31-8-18
Company:	NEWFIELD EXPLORATION	TVD Reference:	M-31-8-18 @ 5045.0usft
Project:	USGS Myton SW (UT)	MD Reference:	M-31-8-18 @ 5045.0usft
Site:	SECTION 31 T8S, R18E	North Reference:	True
Well:	M-31-8-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site	SECTION 31 T8S, R18E				
Site Position:	Northing:	7,201,349.38 usft	Latitude:	40° 4' 44.300 N	
From: Lat/Long	Easting:	2,079,946.44 usft	Longitude:	109° 55' 44.860 W	
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.01 °

Well	M-31-8-18, SHL: 40°04'34.07" -109°56'00.69"					
Well Position	+N/-S	-1,035.1 usft	Northing:	7,200,292.85 usft	Latitude:	40° 4' 34.070 N
	+E/-W	-1,230.5 usft	Easting:	2,078,734.36 usft	Longitude:	109° 56' 0.690 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	5,045.0 usft	Ground Level:	5,035.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/2/2013	10.95	65.78	52,065

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	228.06

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,494.6	13.42	228.06	1,486.5	-69.7	-77.6	1.50	1.50	-14.75	228.06	
5,286.7	13.42	228.06	5,175.0	-657.9	-732.2	0.00	0.00	0.00	0.00	M-31-8-18 TGT
6,576.9	13.42	228.06	6,430.0	-858.0	-954.9	0.00	0.00	0.00	0.00	



Payzone Directional
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well M-31-8-18
Company:	NEWFIELD EXPLORATION	TVD Reference:	M-31-8-18 @ 5045.0usft
Project:	USGS Myton SW (UT)	MD Reference:	M-31-8-18 @ 5045.0usft
Site:	SECTION 31 T8S, R18E	North Reference:	True
Well:	M-31-8-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	228.06	700.0	-0.9	-1.0	1.3	1.50	1.50	0.00
800.0	3.00	228.06	799.9	-3.5	-3.9	5.2	1.50	1.50	0.00
900.0	4.50	228.06	899.7	-7.9	-8.8	11.8	1.50	1.50	0.00
1,000.0	6.00	228.06	999.3	-14.0	-15.6	20.9	1.50	1.50	0.00
1,100.0	7.50	228.06	1,098.6	-21.8	-24.3	32.7	1.50	1.50	0.00
1,200.0	9.00	228.06	1,197.5	-31.4	-35.0	47.0	1.50	1.50	0.00
1,300.0	10.50	228.06	1,296.1	-42.7	-47.6	64.0	1.50	1.50	0.00
1,400.0	12.00	228.06	1,394.2	-55.8	-62.1	83.5	1.50	1.50	0.00
1,494.6	13.42	228.06	1,486.5	-69.7	-77.6	104.3	1.50	1.50	0.00
1,500.0	13.42	228.06	1,491.7	-70.5	-78.5	105.5	0.00	0.00	0.00
1,600.0	13.42	228.06	1,589.0	-86.0	-95.8	128.7	0.00	0.00	0.00
1,700.0	13.42	228.06	1,686.2	-101.6	-113.0	152.0	0.00	0.00	0.00
1,800.0	13.42	228.06	1,783.5	-117.1	-130.3	175.2	0.00	0.00	0.00
1,900.0	13.42	228.06	1,880.8	-132.6	-147.6	198.4	0.00	0.00	0.00
2,000.0	13.42	228.06	1,978.0	-148.1	-164.8	221.6	0.00	0.00	0.00
2,100.0	13.42	228.06	2,075.3	-163.6	-182.1	244.8	0.00	0.00	0.00
2,200.0	13.42	228.06	2,172.6	-179.1	-199.3	268.0	0.00	0.00	0.00
2,300.0	13.42	228.06	2,269.9	-194.6	-216.6	291.2	0.00	0.00	0.00
2,400.0	13.42	228.06	2,367.1	-210.1	-233.9	314.4	0.00	0.00	0.00
2,500.0	13.42	228.06	2,464.4	-225.6	-251.1	337.6	0.00	0.00	0.00
2,600.0	13.42	228.06	2,561.7	-241.2	-268.4	360.8	0.00	0.00	0.00
2,700.0	13.42	228.06	2,658.9	-256.7	-285.7	384.0	0.00	0.00	0.00
2,800.0	13.42	228.06	2,756.2	-272.2	-302.9	407.2	0.00	0.00	0.00
2,900.0	13.42	228.06	2,853.5	-287.7	-320.2	430.5	0.00	0.00	0.00
3,000.0	13.42	228.06	2,950.7	-303.2	-337.5	453.7	0.00	0.00	0.00
3,100.0	13.42	228.06	3,048.0	-318.7	-354.7	476.9	0.00	0.00	0.00
3,200.0	13.42	228.06	3,145.3	-334.2	-372.0	500.1	0.00	0.00	0.00
3,300.0	13.42	228.06	3,242.5	-349.7	-389.2	523.3	0.00	0.00	0.00
3,400.0	13.42	228.06	3,339.8	-365.2	-406.5	546.5	0.00	0.00	0.00
3,500.0	13.42	228.06	3,437.1	-380.8	-423.8	569.7	0.00	0.00	0.00
3,600.0	13.42	228.06	3,534.4	-396.3	-441.0	592.9	0.00	0.00	0.00
3,700.0	13.42	228.06	3,631.6	-411.8	-458.3	616.1	0.00	0.00	0.00
3,800.0	13.42	228.06	3,728.9	-427.3	-475.6	639.3	0.00	0.00	0.00
3,900.0	13.42	228.06	3,826.2	-442.8	-492.8	662.5	0.00	0.00	0.00
4,000.0	13.42	228.06	3,923.4	-458.3	-510.1	685.7	0.00	0.00	0.00
4,100.0	13.42	228.06	4,020.7	-473.8	-527.3	708.9	0.00	0.00	0.00
4,200.0	13.42	228.06	4,118.0	-489.3	-544.6	732.2	0.00	0.00	0.00
4,300.0	13.42	228.06	4,215.2	-504.9	-561.9	755.4	0.00	0.00	0.00
4,400.0	13.42	228.06	4,312.5	-520.4	-579.1	778.6	0.00	0.00	0.00
4,500.0	13.42	228.06	4,409.8	-535.9	-596.4	801.8	0.00	0.00	0.00
4,600.0	13.42	228.06	4,507.1	-551.4	-613.7	825.0	0.00	0.00	0.00
4,700.0	13.42	228.06	4,604.3	-566.9	-630.9	848.2	0.00	0.00	0.00
4,800.0	13.42	228.06	4,701.6	-582.4	-648.2	871.4	0.00	0.00	0.00
4,900.0	13.42	228.06	4,798.9	-597.9	-665.5	894.6	0.00	0.00	0.00
5,000.0	13.42	228.06	4,896.1	-613.4	-682.7	917.8	0.00	0.00	0.00
5,100.0	13.42	228.06	4,993.4	-628.9	-700.0	941.0	0.00	0.00	0.00
5,200.0	13.42	228.06	5,090.7	-644.5	-717.2	964.2	0.00	0.00	0.00



Payzone Directional
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well M-31-8-18
Company:	NEWFIELD EXPLORATION	TVD Reference:	M-31-8-18 @ 5045.0usft
Project:	USGS Myton SW (UT)	MD Reference:	M-31-8-18 @ 5045.0usft
Site:	SECTION 31 T8S, R18E	North Reference:	True
Well:	M-31-8-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

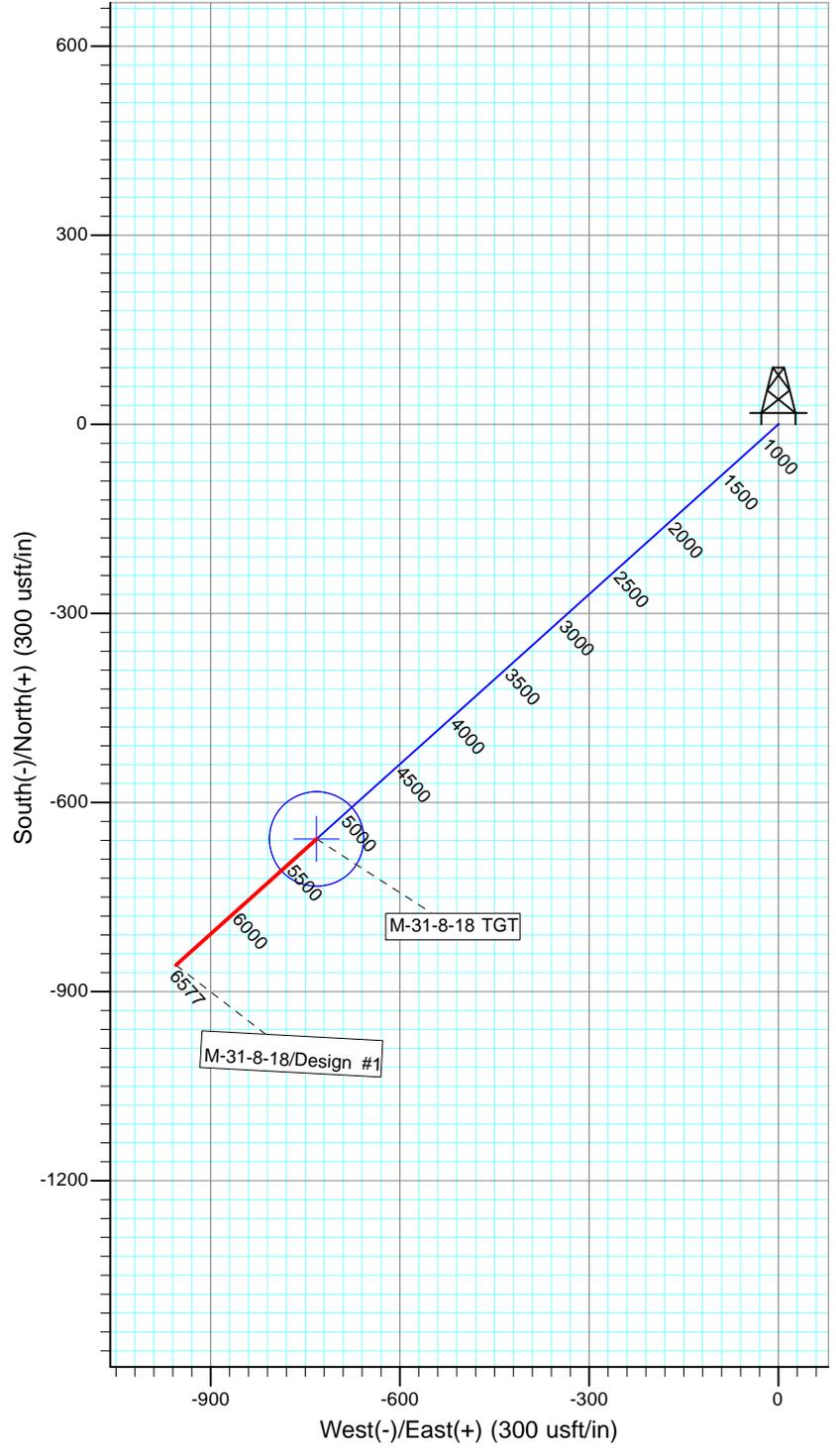
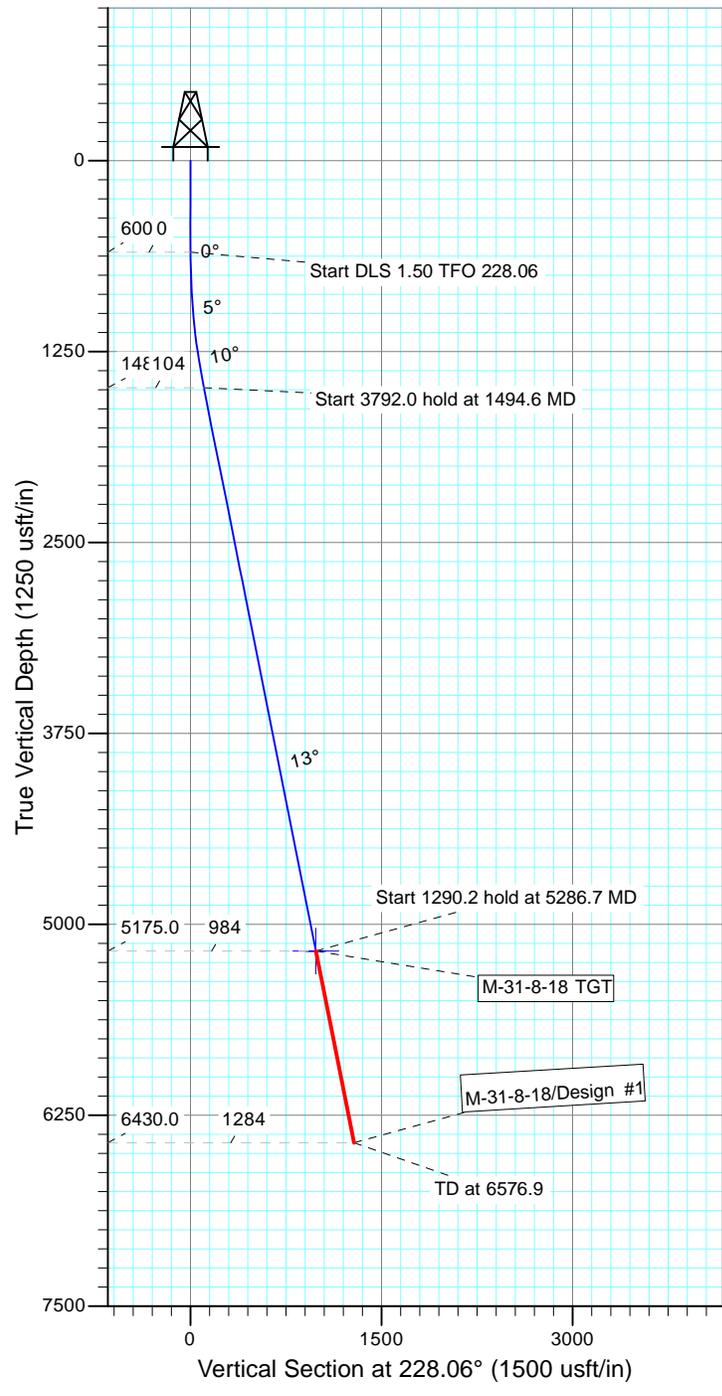
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,286.7	13.42	228.06	5,175.0	-657.9	-732.2	984.4	0.00	0.00	0.00
5,300.0	13.42	228.06	5,187.9	-660.0	-734.5	987.4	0.00	0.00	0.00
5,400.0	13.42	228.06	5,285.2	-675.5	-751.8	1,010.7	0.00	0.00	0.00
5,500.0	13.42	228.06	5,382.5	-691.0	-769.0	1,033.9	0.00	0.00	0.00
5,600.0	13.42	228.06	5,479.8	-706.5	-786.3	1,057.1	0.00	0.00	0.00
5,700.0	13.42	228.06	5,577.0	-722.0	-803.6	1,080.3	0.00	0.00	0.00
5,800.0	13.42	228.06	5,674.3	-737.5	-820.8	1,103.5	0.00	0.00	0.00
5,900.0	13.42	228.06	5,771.6	-753.0	-838.1	1,126.7	0.00	0.00	0.00
6,000.0	13.42	228.06	5,868.8	-768.5	-855.4	1,149.9	0.00	0.00	0.00
6,100.0	13.42	228.06	5,966.1	-784.1	-872.6	1,173.1	0.00	0.00	0.00
6,200.0	13.42	228.06	6,063.4	-799.6	-889.9	1,196.3	0.00	0.00	0.00
6,300.0	13.42	228.06	6,160.6	-815.1	-907.1	1,219.5	0.00	0.00	0.00
6,400.0	13.42	228.06	6,257.9	-830.6	-924.4	1,242.7	0.00	0.00	0.00
6,500.0	13.42	228.06	6,355.2	-846.1	-941.7	1,265.9	0.00	0.00	0.00
6,576.9	13.42	228.06	6,430.0	-858.0	-954.9	1,283.8	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
M-31-8-18 TGT - hit/miss target - Shape - plan hits target center - Circle (radius 75.0)	0.00	0.00	5,175.0	-657.9	-732.2	7,199,622.23	2,078,013.78	40° 4' 27.568 N	109° 56' 10.110 W



Project: USGS Myton SW (UT)
 Site: SECTION 31 T8S, R18E
 Well: M-31-8-18
 Wellbore: Wellbore #1
 Design: Design #1

T Azimuths to True North
M Magnetic North: 10.95°
 Magnetic Field
 Strength: 52065.4snT
 Dip Angle: 65.78°
 Date: 12/2/2013
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
M-31-8-18 TGT	5175.0	-657.9	-732.2	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1494.6	13.42	228.06	1486.5	-69.7	-77.6	1.50	228.06	104.3	
4	5286.7	13.42	228.06	5175.0	-657.9	-732.2	0.00	0.00	984.4	M-31-8-18 TGT
5	6576.9	13.42	228.06	6430.0	-858.0	-954.9	0.00	0.00	1283.8	



**NEWFIELD PRODUCTION COMPANY
GMBU M-31-8-18
AT SURFACE: SW/NE SECTION 31, T8S R18E
UINTAH COUNTY, UTAH**

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU M-31-8-18 located in the SW 1/4 NE 1/4 Section 31, T8S, R18E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 – 1.4 miles \pm to the junction of this highway and UT State Hwy 53; proceed in a southeasterly direction – 11.7 miles \pm to it's junction with an existing road to the northeast; proceed in a northeasterly direction – 5.2 miles \pm to it's junction with an existing road to the south; proceed in a southerly direction – 0.2 miles \pm to it's junction with the beginning of the access road to the existing 7-31-8-18 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing 7-31-8-18 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District
Water Right : 43-7478

Maurice Harvey Pond
Water Right: 47-1358

Neil Moon Pond
Water Right: 43-11787

Newfield Collector Well
Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

8. **ANCILLARY FACILITIES**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. WELL SITE LAYOUT

See attached Location Layout Sheet.

Fencing Requirements

- a) All pits will be fenced or have panels installed consistent with the following minimum standards:
 1. The wire shall be no more than two (2) inches above the ground. If barbed wire is utilized it will be installed three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
 2. Corner posts shall be centered and/or braced in such a manner to keep tight and upright at all times
 3. Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

10. PLANS FOR RESTORATION OF SURFACE:

- a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

- b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. SURFACE OWNERSHIP – Bureau of Land Management.

12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. State of Utah Antiquities Project Permit # U-14-MQ-0172b, 4/16/14, prepared by Montgomery Archaeological Consultants. Paleontological Resource Survey prepared by, SWCA. Report # UT14-14273-24, April 2014. See attached report cover pages, Exhibit "D".

Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

Additional Surface Stipulations

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

Hazardous Material Declaration

Newfield Production Company guarantees that during the drilling and completion of the GMBU M-31-8-18, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU M-31-8-18, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

13. **LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION:**
Representative

Name: Corie Miller
Address: Newfield Production Company
Route 3, Box 3630
Myton, UT 84052
Telephone: (435) 646-3721

Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #M-31-8-18, Section 31, Township 8S, Range 18E: Lease UTU-74872, Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

7/10/14
Date

Mandie Crozier
Regulatory Specialist
Newfield Production Company

Typical 2M BOP stack configuration



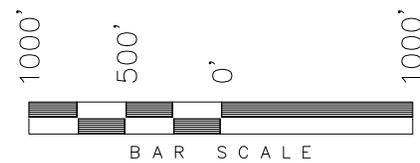
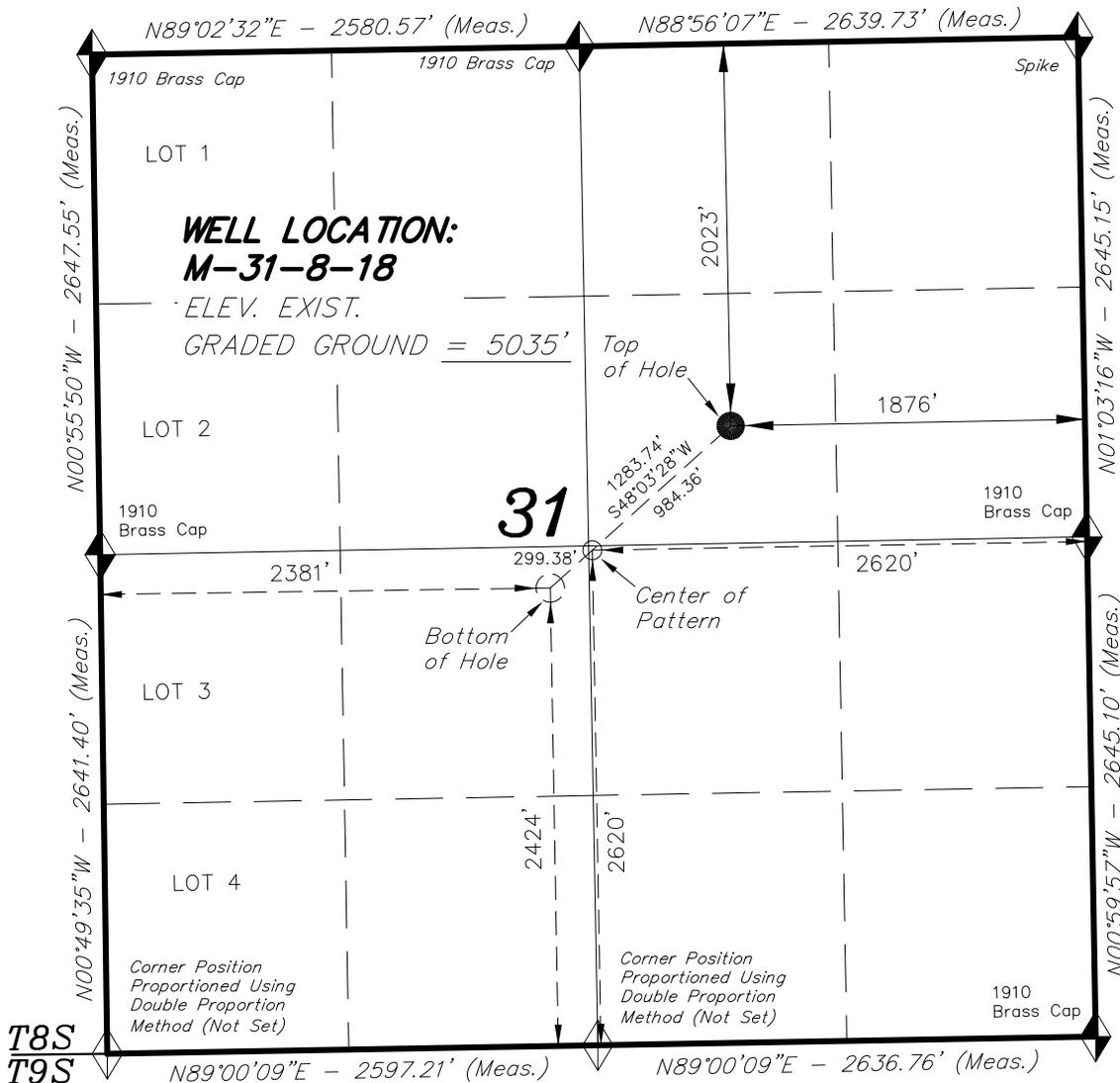
2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

T8S, R18E, S.L.B.&M.

NEWFIELD EXPLORATION COMPANY

WELL LOCATION, M-31-8-18, LOCATED AS SHOWN IN THE SW 1/4 NE 1/4 OF SECTION 31, T8S, R18E, S.L.B.&M. UTAH COUNTY, UTAH.

TARGET BOTTOM HOLE, M-31-8-18, LOCATED AS SHOWN IN THE NE 1/4 SW 1/4 OF SECTION 31, T8S, R18E, S.L.B.&M. UTAH COUNTY, UTAH.



NOTES:

1. Well footages are measured at right angles to the Section Lines.
2. Bearings are based on Global Positioning Satellite observations.

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
 No. 189377
 06-27-14
 STACY W. STEWART
 REGISTERED LAND SURVEYOR
 REGISTRATION No. 000373
 STATE OF UTAH

T8S
T9S

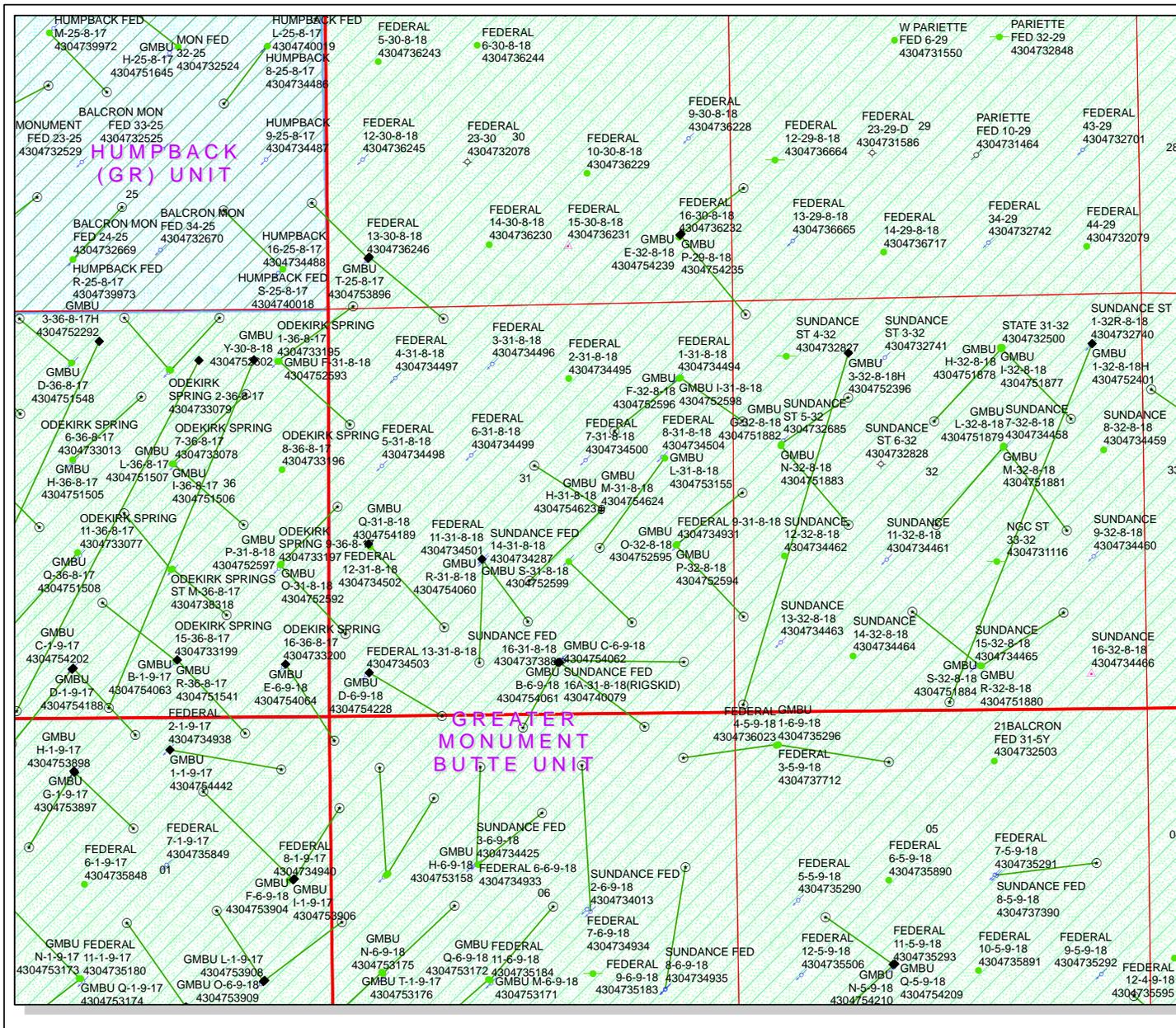
◆ = SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°04'34.07"	
LONGITUDE = 109°56'00.69"	
NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°04'34.21"	
LONGITUDE = 109°55'58.16"	
NAD 83 (CENTER OF PATTERN)	NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 40°04'27.70"	LATITUDE = 40°04'25.76"
LONGITUDE = 109°56'10.25"	LONGITUDE = 109°56'13.16"
NAD 27 (CENTER OF PATTERN)	NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 40°04'27.83"	LATITUDE = 40°04'25.90"
LONGITUDE = 109°56'07.72"	LONGITUDE = 109°56'10.63"

TRI STATE LAND SURVEYING & CONSULTING
 180 NORTH VERNAL AVE. - VERNAL, UTAH 84078
 (435) 781-2501

DATE SURVEYED: 08-04-11	SURVEYED BY: S.H.	VERSION:
DATE DRAWN: 11-25-13	DRAWN BY: L.C.S.	V3
REVISED: 06-27-14 F.T.M.	SCALE: 1" = 1000'	



API Number: 4304754624

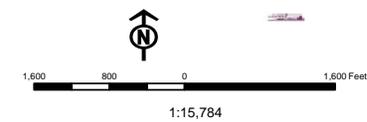
Well Name: GMBU M-31-8-18

Township: T08.0S Range: R18.0E Section: 31 Meridian: S

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared: 7/18/2014
Map Produced by Diana Mason

Wells Query		Units STATUS	
	APD - Approved Permit		ACTIVE
	DRL - Spudded (Drilling Commenced)		EXPLORATORY
	GIW - Gas Injection		GAS STORAGE
	GS - Gas Storage		NF PP OIL
	LOC - New Location		PI OIL
	OPS - Operation Suspended		PP GAS
	PA - Plugged Abandoned		PP GEOTHERMAL
	PGW - Producing Gas Well		PP OIL
	POW - Producing Oil Well		SECONDARY
	SGW - Shut-in Gas Well		TERMINATED
	SOW - Shut-in Oil Well		
	TA - Temp. Abandoned		
	TW - Test Well		
	WOW - Water Disposal		
	WW - Water Injection Well		
	WSW - Water Supply Well		



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
440 West 200 South, Suite 500
Salt Lake City, UT 84101

IN REPLY REFER TO:

**3160
(UT-922)**

July 21, 2014

Memorandum

To: Assistant Field Office Manager Minerals,
Vernal Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2014 Plan of Development Greater Monument
Butte Unit, Duchesne and Uintah Counties,
Utah.

Pursuant to email between Diana Mason, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2014 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-013-53031	GMBU B-21-9-16	Sec 16 T09S R16E 0614 FSL 0672 FEL
		BHL Sec 21 T09S R16E 0134 FNL 1544 FEL
43-013-53032	GMBU N-19-8-17	Sec 19 T08S R17E 1994 FNL 0643 FWL
		BHL Sec 19 T08S R17E 2396 FSL 1476 FWL
43-013-53033	GMBU K-24-8-16	Sec 19 T08S R17E 2008 FNL 0627 FWL
		BHL Sec 24 T08S R16E 2436 FSL 0161 FEL
43-013-53042	GMBU S-16-9-16	Sec 16 T09S R16E 0634 FSL 0665 FEL
		BHL Sec 16 T09S R16E 1512 FSL 1532 FEL
43-013-53043	GMBU A-21-9-16	Sec 15 T09S R16E 0685 FSL 0489 FWL
		BHL Sec 21 T09S R16E 0155 FNL 0114 FEL
43-013-53044	GMBU T-16-9-16	Sec 15 T09S R16E 0707 FSL 0487 FWL
		BHL Sec 16 T09S R16E 1502 FSL 0092 FEL
43-013-53045	GMBU S-21-9-17	Sec 21 T09S R17E 0632 FSL 1866 FEL
		BHL Sec 21 T09S R17E 1561 FSL 1203 FEL
43-013-53046	GMBU B-28-9-17	Sec 21 T09S R17E 0614 FSL 1877 FEL
		BHL Sec 28 T09S R17E 0225 FNL 1143 FEL
43-013-53047	GMBU D-28-9-17	Sec 21 T09S R17E 0680 FSL 2189 FWL
		BHL Sec 28 T09S R17E 0260 FNL 1015 FWL
43-013-53048	GMBU C-28-9-17	Sec 21 T09S R17E 0699 FSL 2199 FWL
		BHL Sec 28 T09S R17E 0252 FNL 2474 FEL

RECEIVED: July 23, 2014

API #	WELL NAME			LOCATION						
(Proposed PZ GREEN RIVER)										
43-013-53049	GMBU D-29-9-17	Sec	20	T09S	R17E	0370	FSL	2032	FWL	
		BHL	Sec	29	T09S	R17E	0126	FNL	1064	FWL
43-013-53050	GMBU Q-20-9-17	Sec	20	T09S	R17E	1833	FSL	0655	FWL	
		BHL	Sec	20	T09S	R17E	1143	FSL	1486	FWL
43-013-53051	GMBU V-14-9-16	Sec	23	T09S	R16E	0604	FNL	0467	FEL	
		BHL	Sec	14	T09S	R16E	0207	FSL	1586	FEL
43-013-53052	GMBU H-23-9-16	Sec	23	T09S	R16E	0803	FNL	2006	FEL	
		BHL	Sec	23	T09S	R16E	1464	FNL	2371	FEL
43-013-53053	GMBU I-23-9-16	Sec	23	T09S	R16E	0784	FNL	2015	FEL	
		BHL	Sec	23	T09S	R16E	1444	FNL	1167	FEL
43-013-53054	GMBU F-24-9-16	Sec	23	T09S	R16E	0584	FNL	0460	FEL	
		BHL	Sec	24	T09S	R16E	1565	FNL	0154	FWL
43-013-53055	GMBU 1-26-9-15	Sec	25	T09S	R15E	0357	FNL	0596	FWL	
		BHL	Sec	26	T09S	R15E	0660	FNL	0660	FEL
43-047-54623	GMBU H-31-8-18	Sec	31	T08S	R18E	2002	FNL	1875	FEL	
		BHL	Sec	31	T08S	R18E	1338	FNL	2458	FWL
43-047-54624	GMBU M-31-8-18	Sec	31	T08S	R18E	2023	FNL	1876	FEL	
		BHL	Sec	31	T08S	R18E	2424	FSL	2381	FWL
43-047-54626	GMBU 14-26-8-17	Sec	35	T08S	R17E	0813	FNL	2024	FWL	
		BHL	Sec	26	T08S	R17E	0663	FSL	1980	FWL

This office has no objection to permitting the wells at this time.

**Michael
Coulthard**

Digitally signed by Michael Coulthard
 DN: cn=Michael Coulthard, o=Bureau of
 Land Management, ou=Division of
 Minerals, email=mcoultha@blm.gov, c=US
 Date: 2014.07.21 10:52:22 -06'00'

bcc: File - Greater Monument Butte Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron
 Fluid Chron

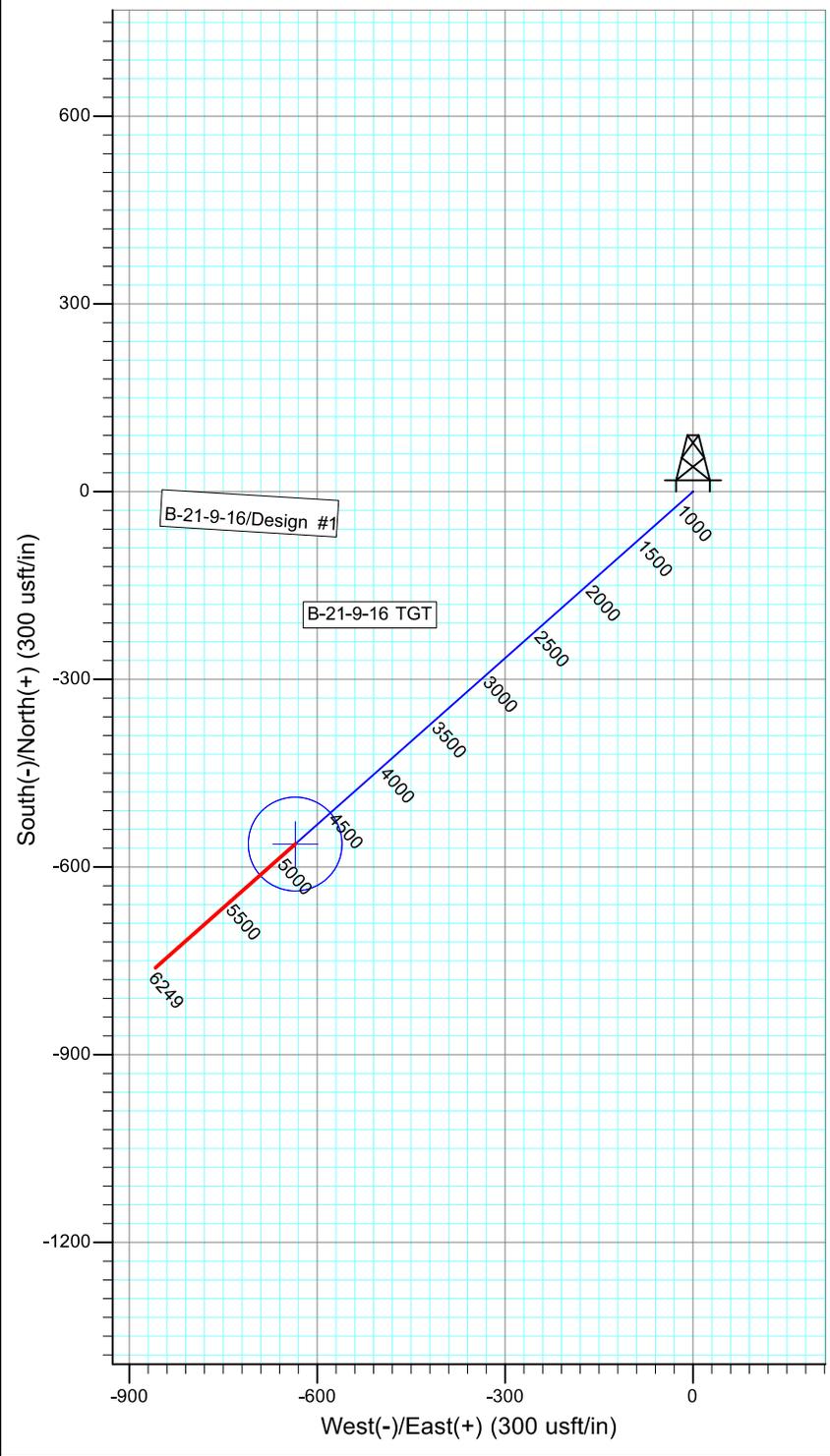
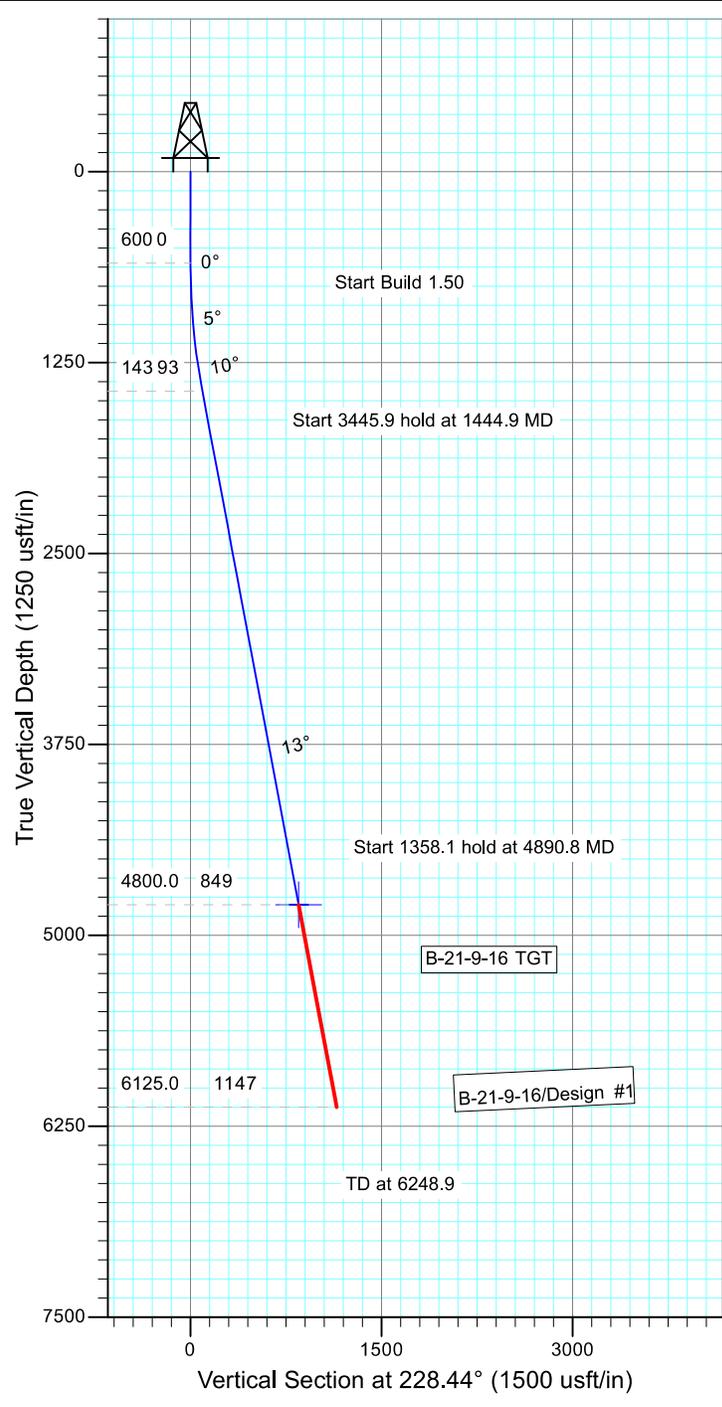
MCoulthard:mc:7-21-14

RECEIVED: July 23, 2014



Project: USGS Myton SW (UT)
 Site: SECTION 16 T9S, R16E
 Well: B-21-9-16
 Wellbore: Wellbore #1
 Design: Design #1

T Azimuths to True North
M Magnetic North: 10.95°
 Magnetic Field
 Strength: 51950.6snT
 Dip Angle: 65.69°
 Date: 6/24/2014
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
B-21-9-16 TGT	4800.0	-563.3	-635.3	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1444.9	12.67	228.44	1438.0	-61.7	-69.6	1.50	228.44	93.1	
4	4890.8	12.67	228.44	4800.0	-563.3	-635.3	0.00	0.00	849.1	B-21-9-16 TGT
5	6248.9	12.67	228.44	6125.0	-760.9	-858.3	0.00	0.00	1147.0	





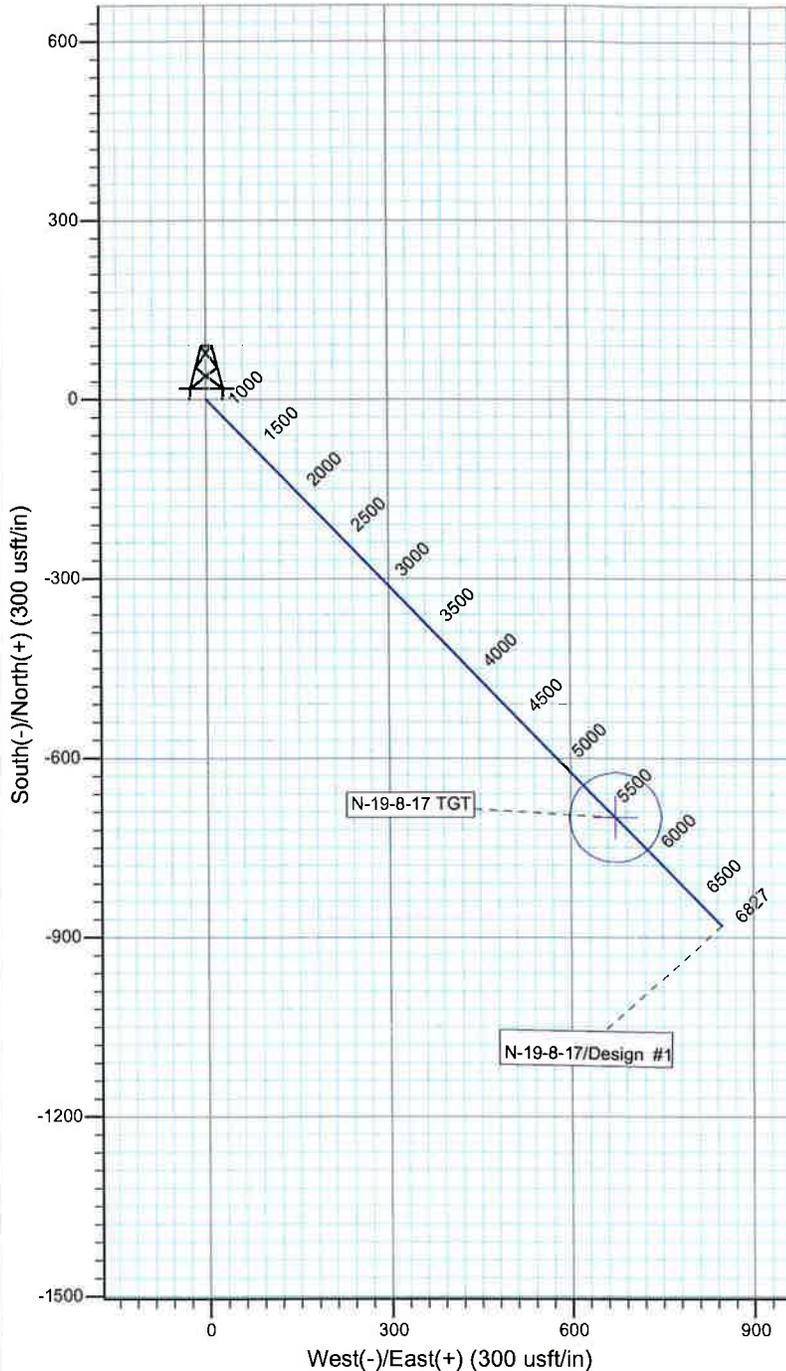
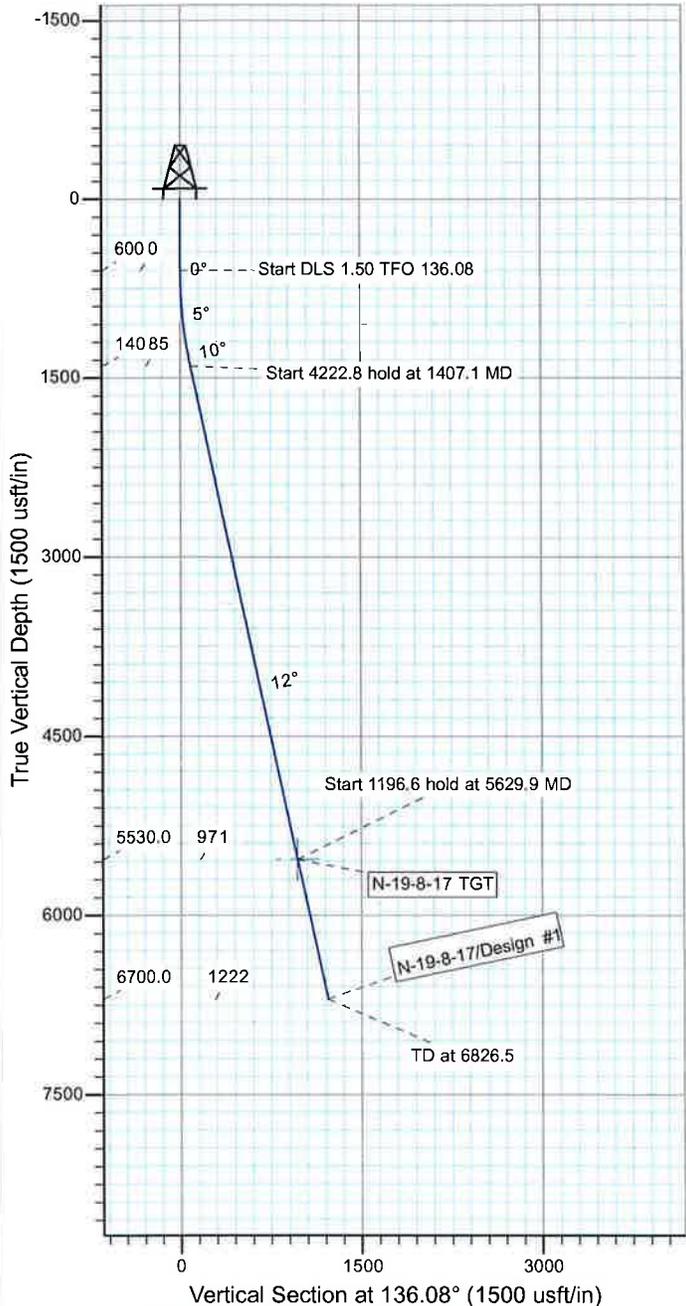
Project: USGS Myton SW (UT)
 Site: SECTION 19 T8S R17E
 Well: N-19-8-17
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.99°

Magnetic Field
 Strength: 52053.2snT
 Dip Angle: 65.78°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
N-19-8-17 TGT	5530.0	-699.1	673.2	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1407.1	12.11	136.08	1401.1	-61.2	58.9	1.50	136.08	84.9	
4	5629.9	12.11	136.08	5530.0	-699.1	673.2	0.00	0.00	970.6	N-19-8-17 TGT
5	6826.5	12.11	136.08	6700.0	-879.9	847.3	0.00	0.00	1221.5	





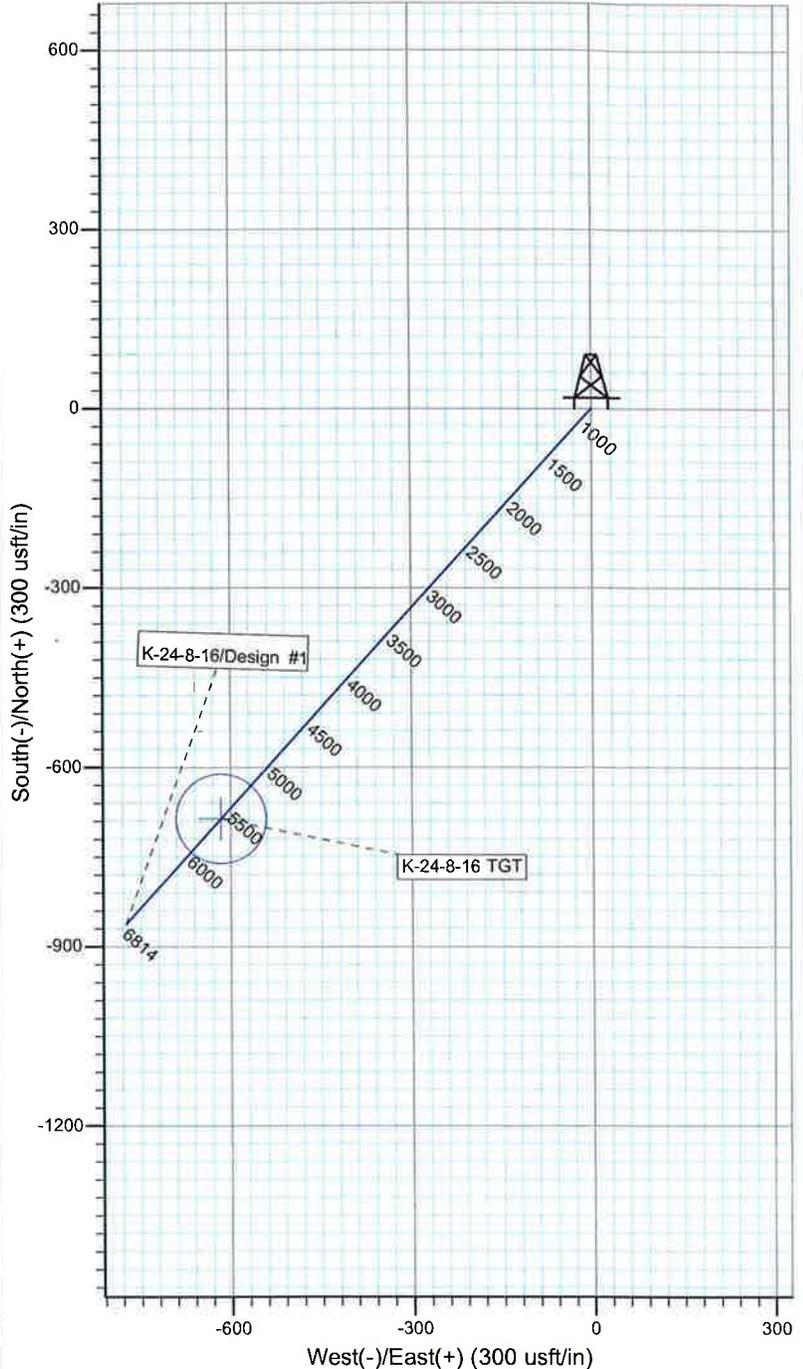
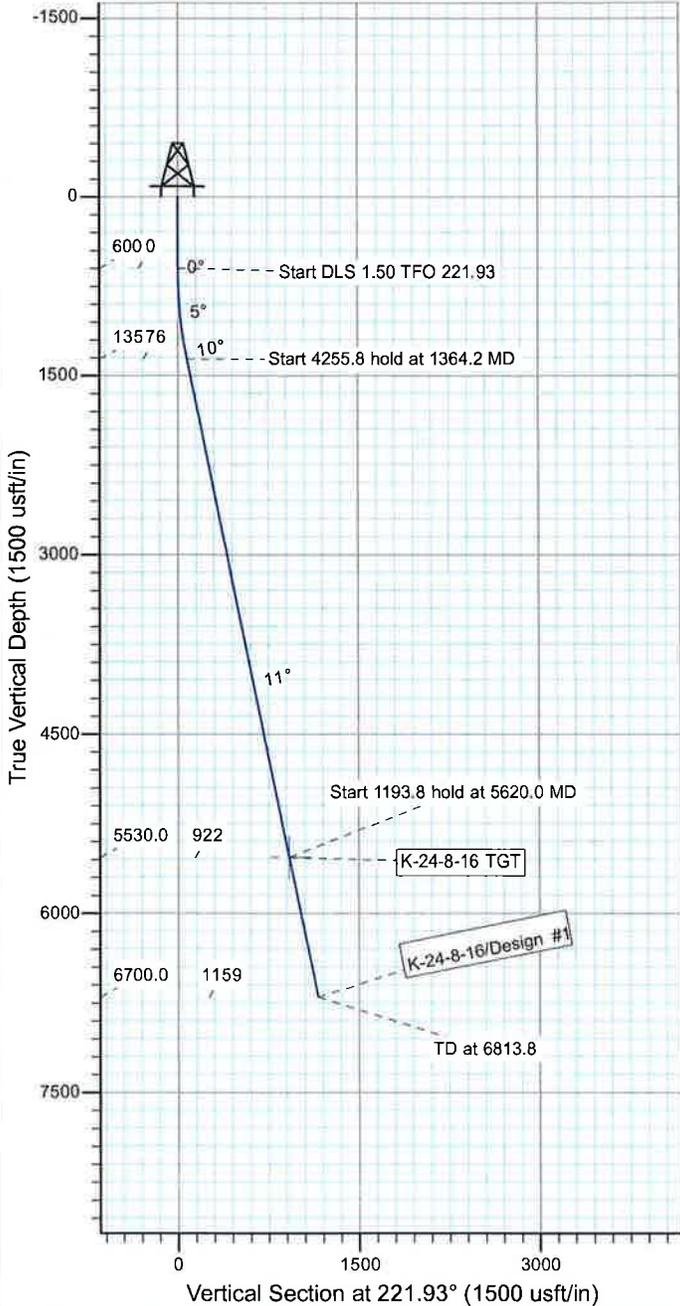
Project: USGS Myton SW (UT)
 Site: SECTION 19 T8S R17E
 Well: K-24-8-16
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.99°

Magnetic Field
 Strength: 52053.2snT
 Dip Angle: 65.78°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
K-24-8-16 TGT	5530.0	-685.9	-616.0	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSEct	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1364.2	11.46	221.93	1359.1	-56.7	-50.9	1.50	221.93	76.2	
4	5620.0	11.46	221.93	5530.0	-685.9	-616.0	0.00	0.00	921.9	K-24-8-16 TGT
5	6813.8	11.46	221.93	6700.0	-862.4	-774.6	0.00	0.00	1159.1	





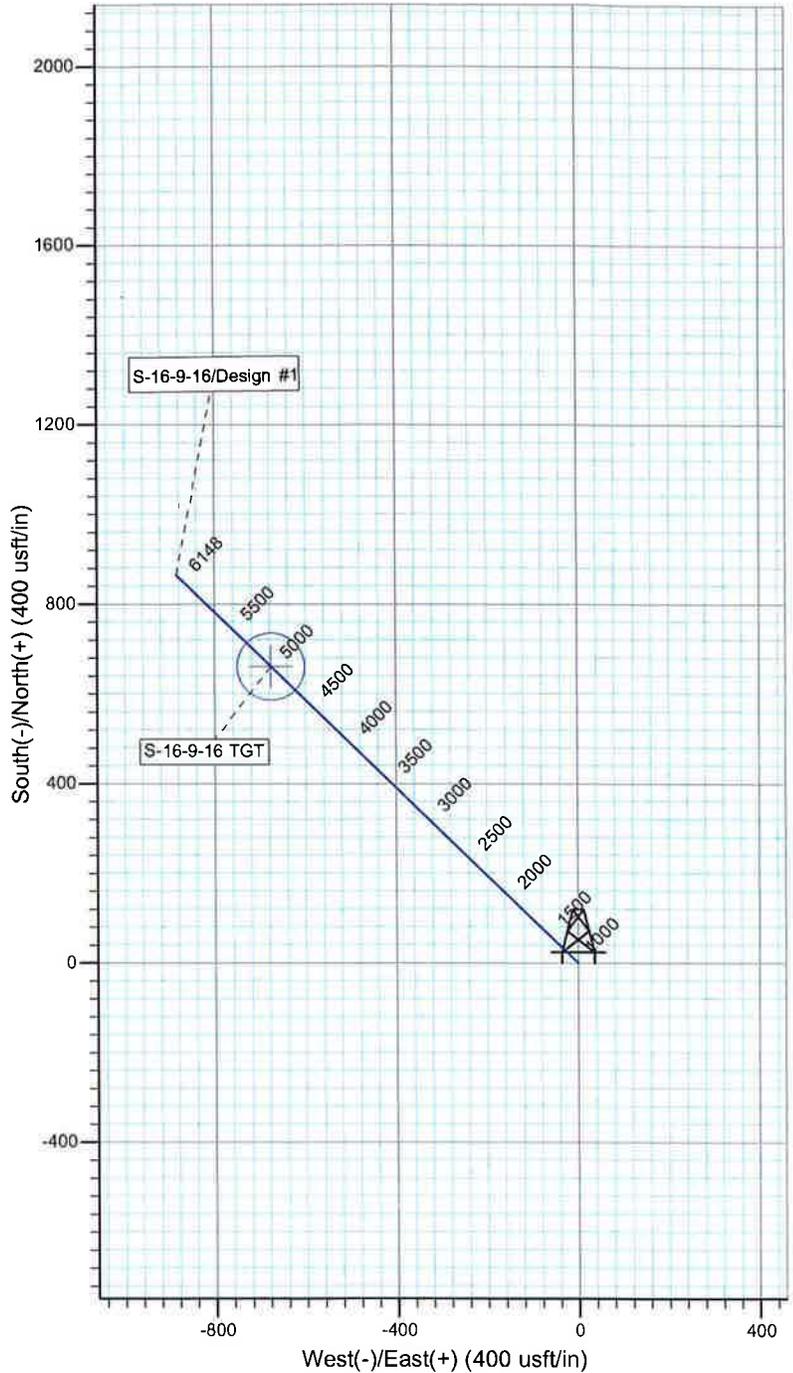
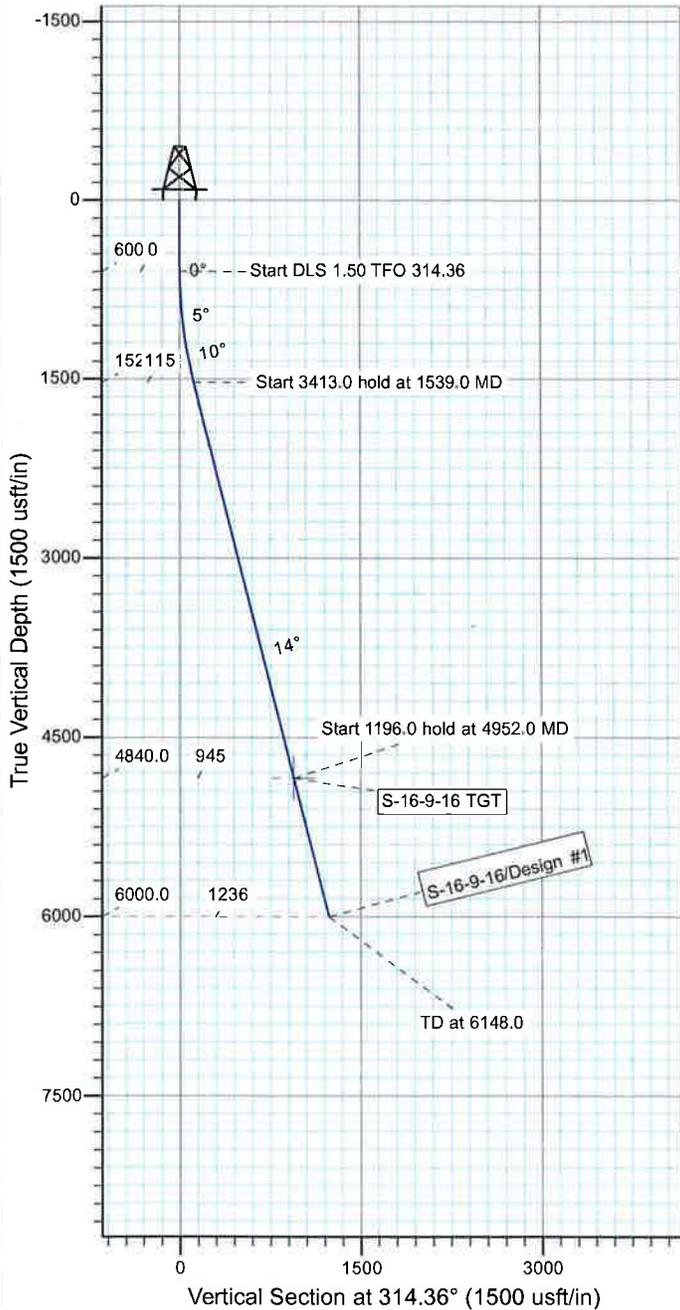
Project: USGS Myton SW (UT)
 Site: SECTION 16 T9S, R16E
 Well: S-16-9-16
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 11.01°

Magnetic Field
 Strength: 51997.9snT
 Dip Angle: 65.70°
 Date: 12/31/2013
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
S-16-9-16 TGT	4840.0	661.0	-676.0	Circle (Radius: 75.0)

SECTION DETAILS

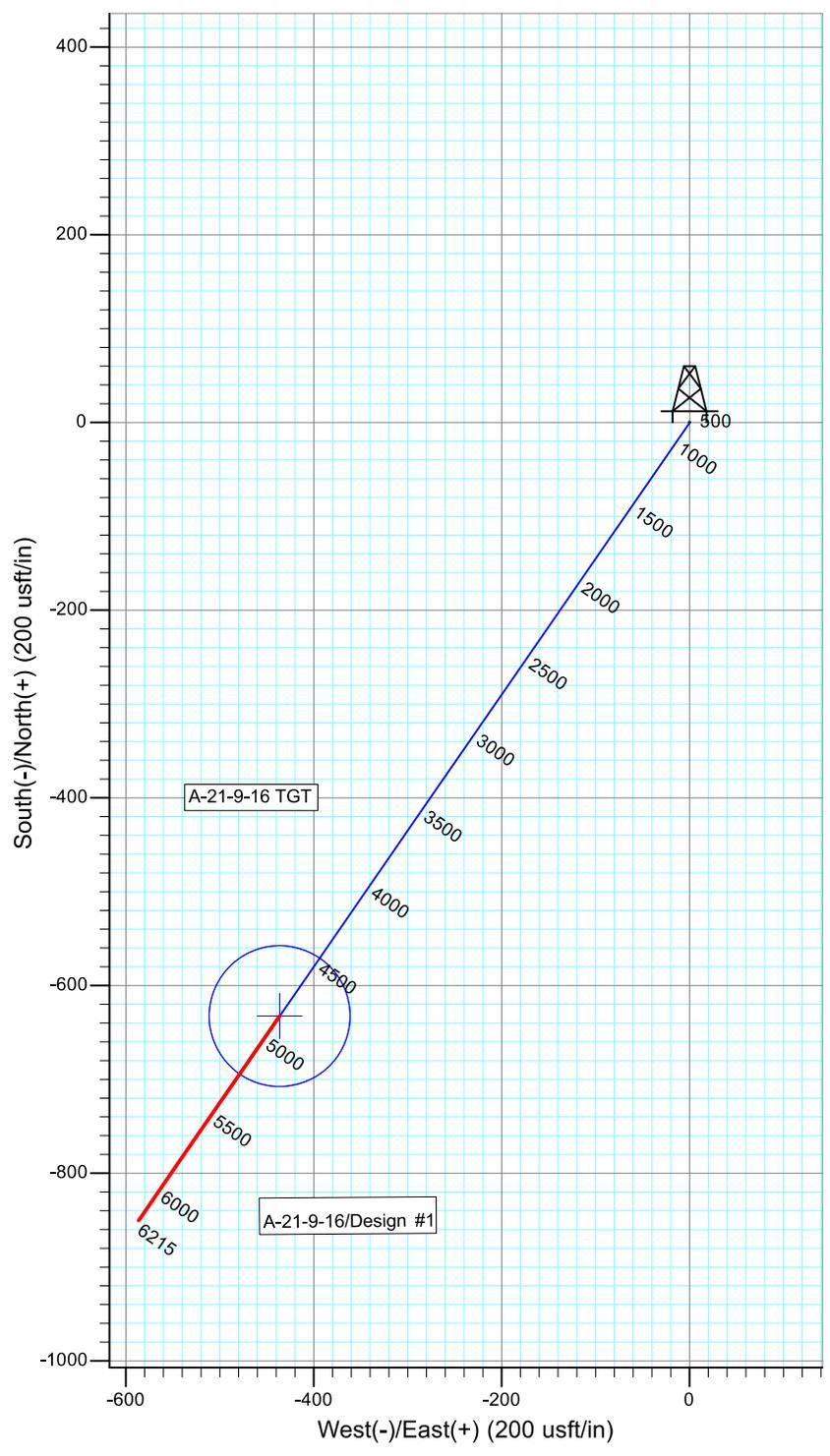
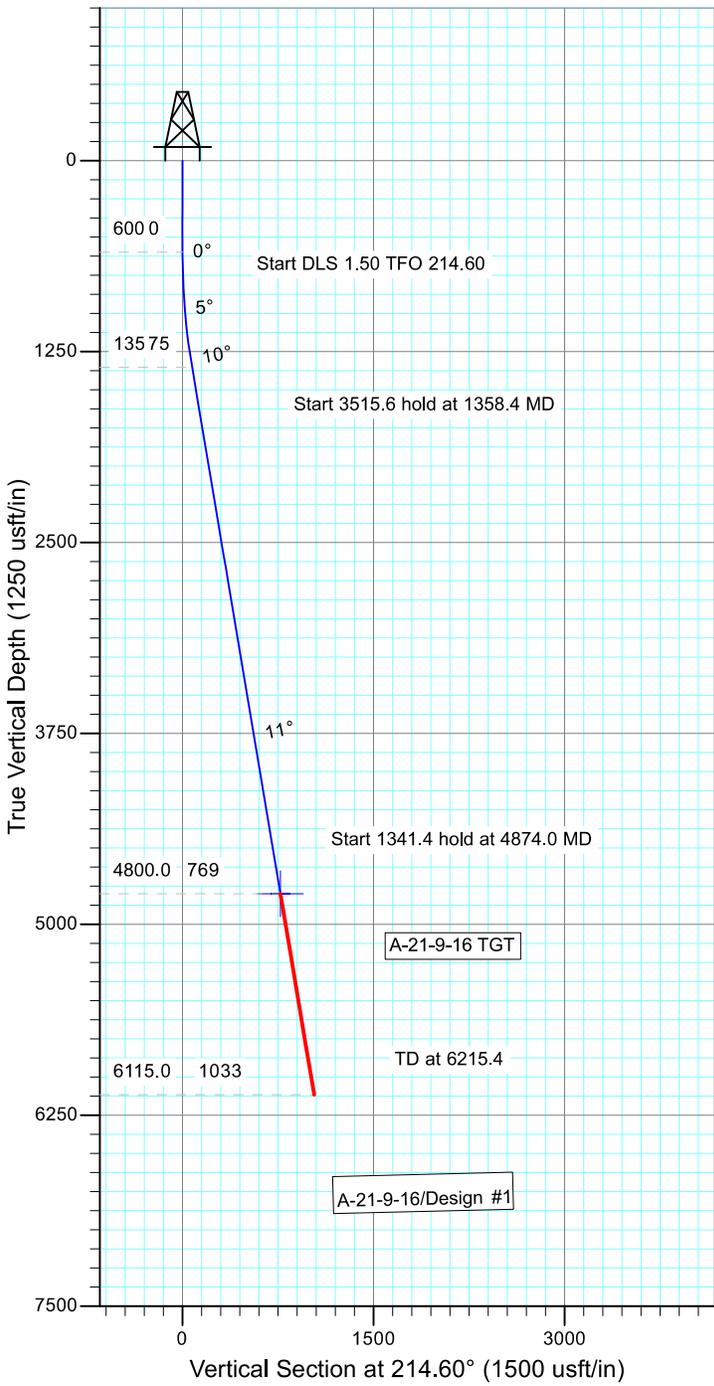
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSEct	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1539.0	14.09	314.36	1529.6	80.3	-82.1	1.50	314.36	114.8	
4	4952.0	14.09	314.36	4840.0	661.0	-676.0	0.00	0.00	945.4	S-16-9-16 TGT
5	6148.0	14.09	314.36	6000.0	864.5	-884.0	0.00	0.00	1236.5	





Project: USGS Myton SW (UT)
 Site: SECTION 15 T9S, R16E
 Well: A-21-9-16
 Wellbore: Wellbore #1
 Design: Design #1

T Azimuths to True North
M Magnetic North: 11.01°
 Magnetic Field
 Strength: 52003.1snT
 Dip Angle: 65.71°
 Date: 12/15/2013
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
A-21-9-16 TGT	4800.0	-632.6	-436.4	Circle (Radius: 75.0)

SECTION DETAILS

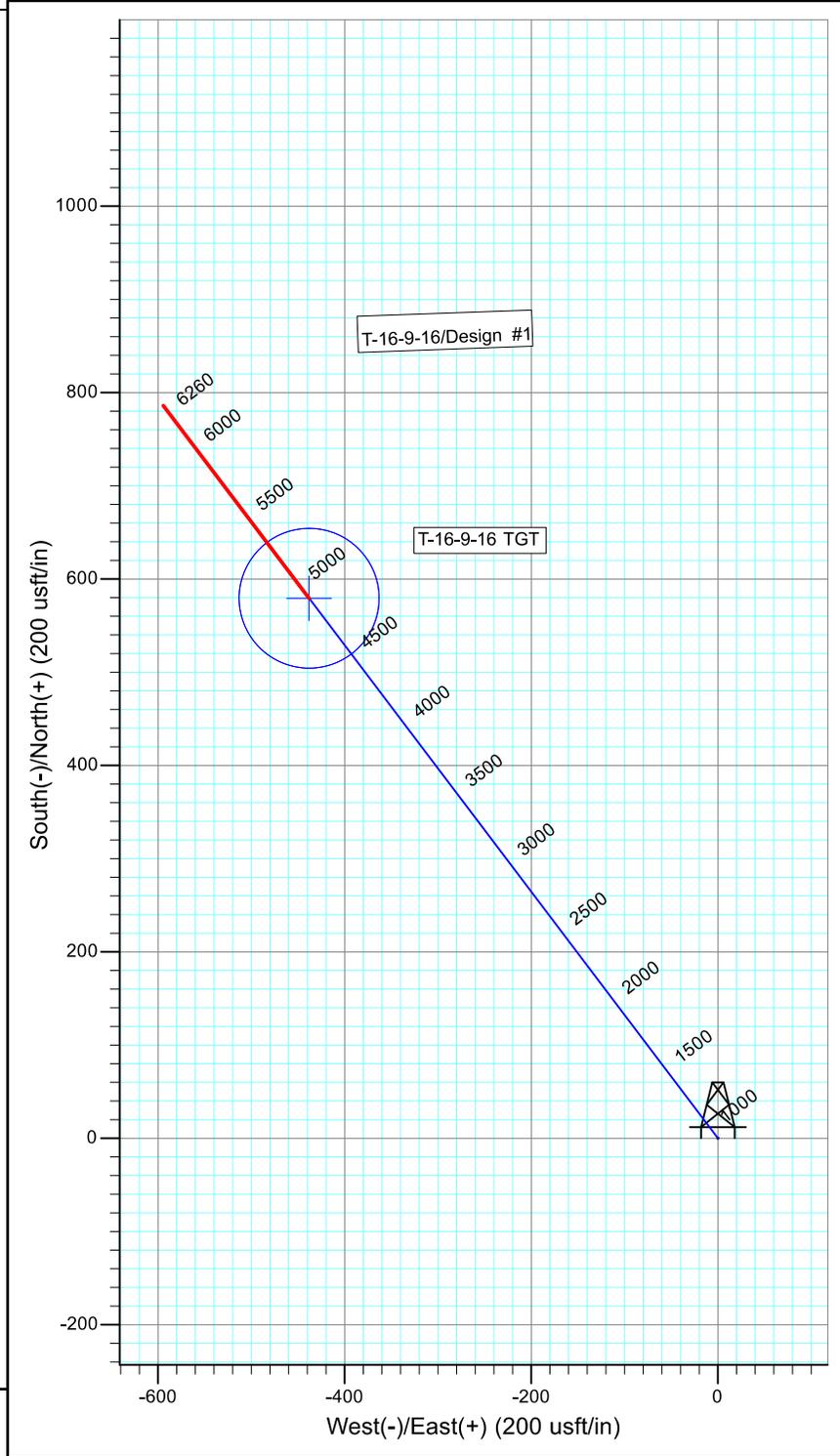
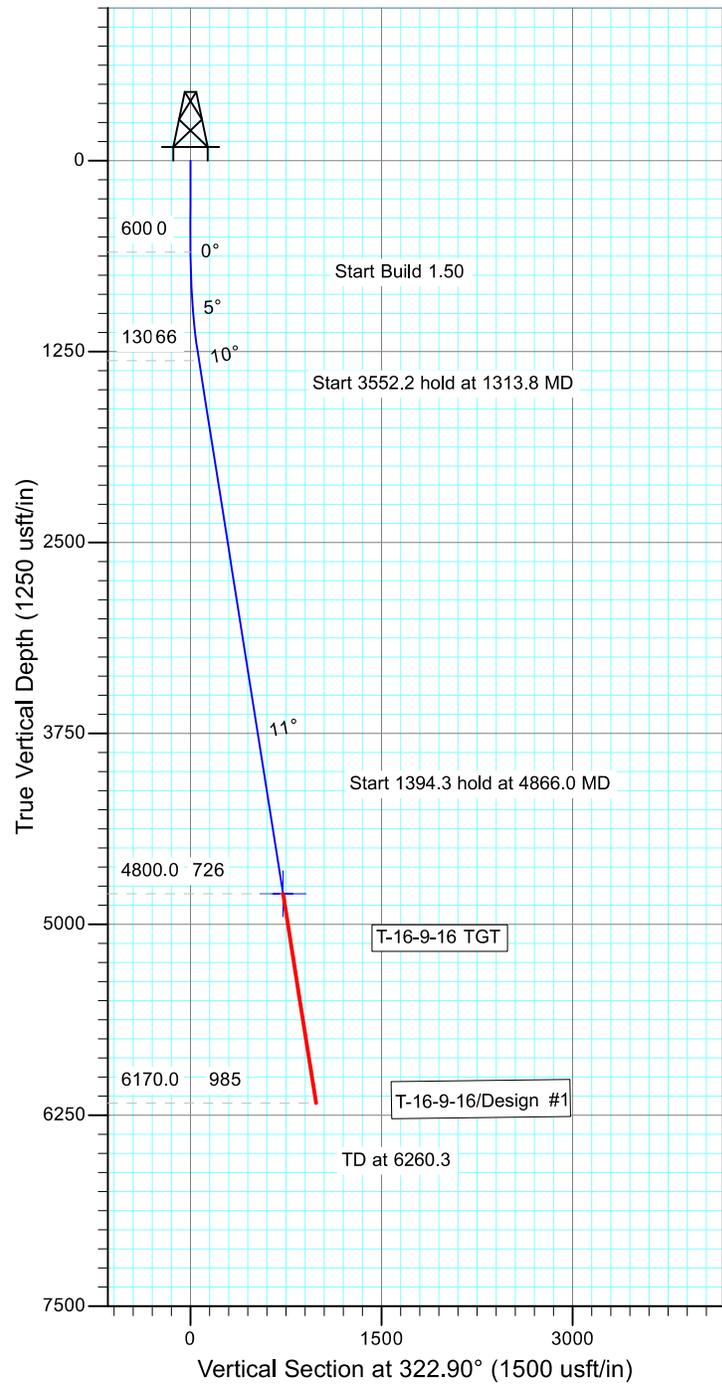
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1358.4	11.38	214.60	1353.4	-61.8	-42.6	1.50	214.60	75.0	
4	4874.0	11.38	214.60	4800.0	-632.6	-436.4	0.00	0.00	768.5	A-21-9-16 TGT
5	6215.4	11.38	214.60	6115.0	-850.4	-586.6	0.00	0.00	1033.1	





Project: USGS Myton SW (UT)
 Site: SECTION 15 T9S, R16E
 Well: T-16-9-16
 Wellbore: Wellbore #1
 Design: Design #1

T M Azimuths to True North
 Magnetic North: 10.94°
 Magnetic Field
 Strength: 51951.5snT
 Dip Angle: 65.69°
 Date: 6/24/2014
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
T-16-9-16 TGT	4800.0	579.4	-438.2	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1313.8	10.71	322.90	1309.6	53.0	-40.1	1.50	322.90	66.5	
4	4866.0	10.71	322.90	4800.0	579.4	-438.2	0.00	0.00	726.4	T-16-9-16 TGT
5	6260.3	10.71	322.90	6170.0	786.0	-594.4	0.00	0.00	985.4	





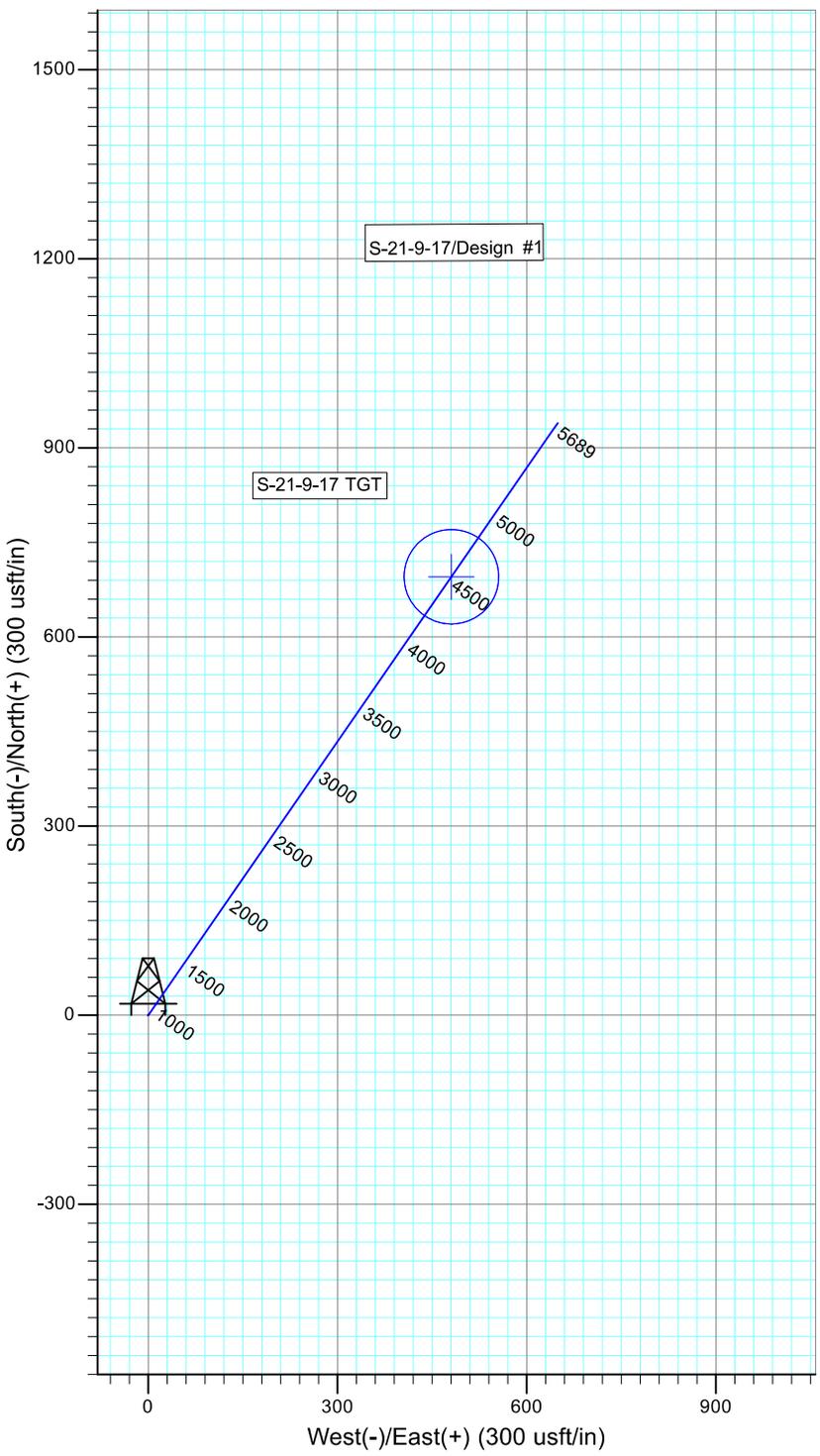
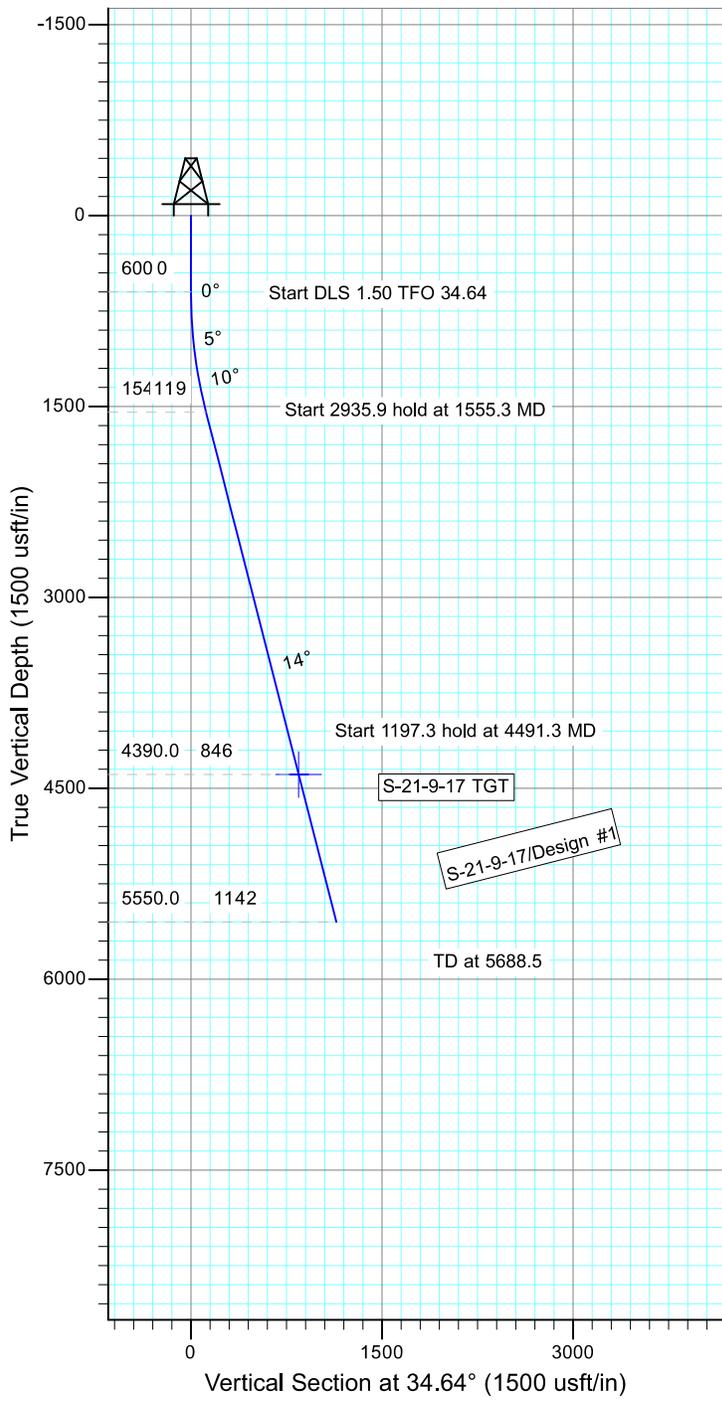
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: S-21-9-17
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.96°

Magnetic Field
 Strength: 52009.0snT
 Dip Angle: 65.71°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100'
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
S-21-9-17 TGT	4390.0	695.6	480.6	Circle (Radius: 75.0)

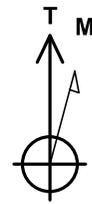
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1555.3	14.33	34.64	1545.4	97.8	67.6	1.50	34.64	118.8	
4	4491.3	14.33	34.64	4390.0	695.6	480.6	0.00	0.00	845.5	S-21-9-17 TGT
5	5688.5	14.33	34.64	5550.0	939.4	649.1	0.00	0.00	1141.9	





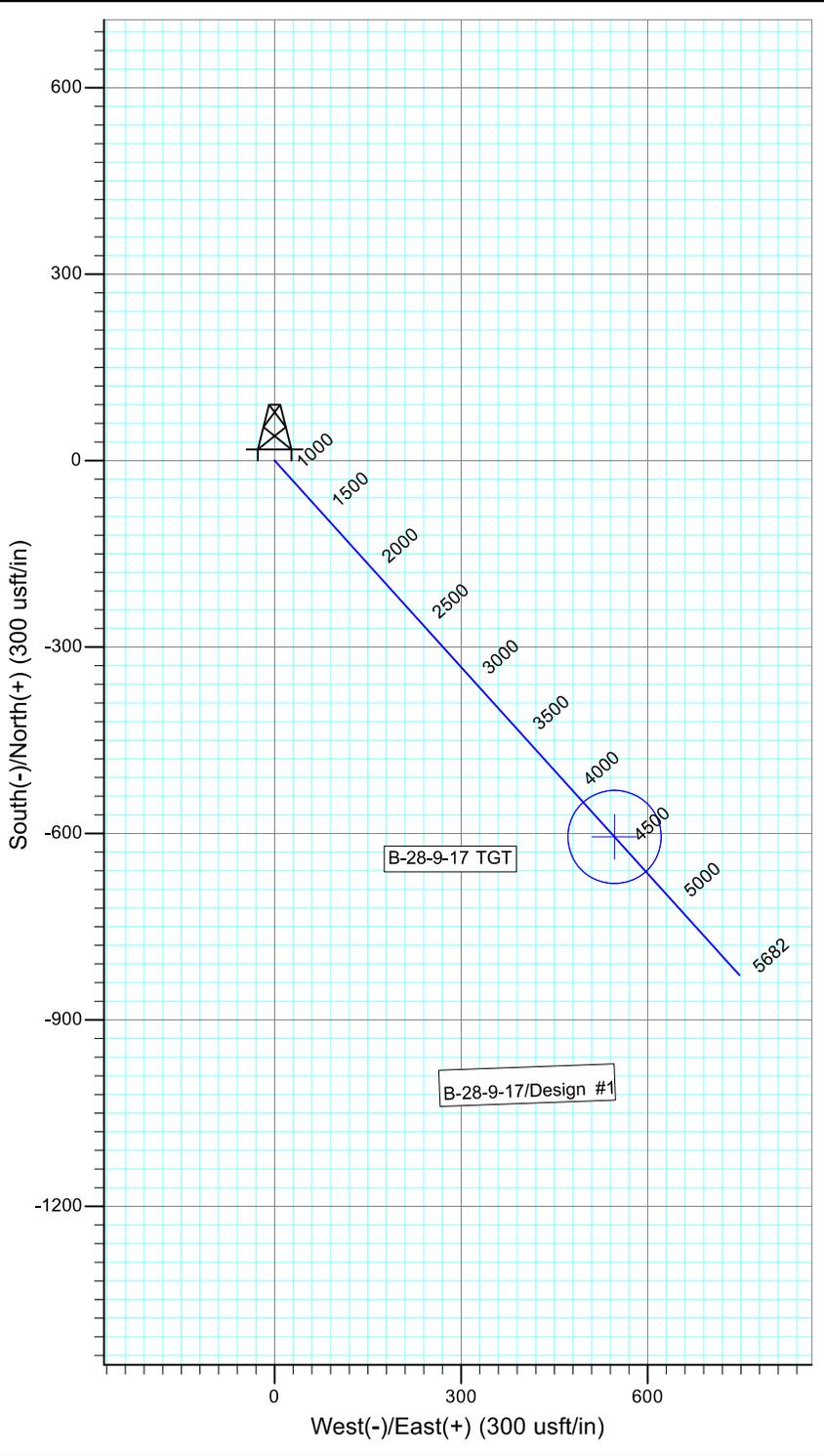
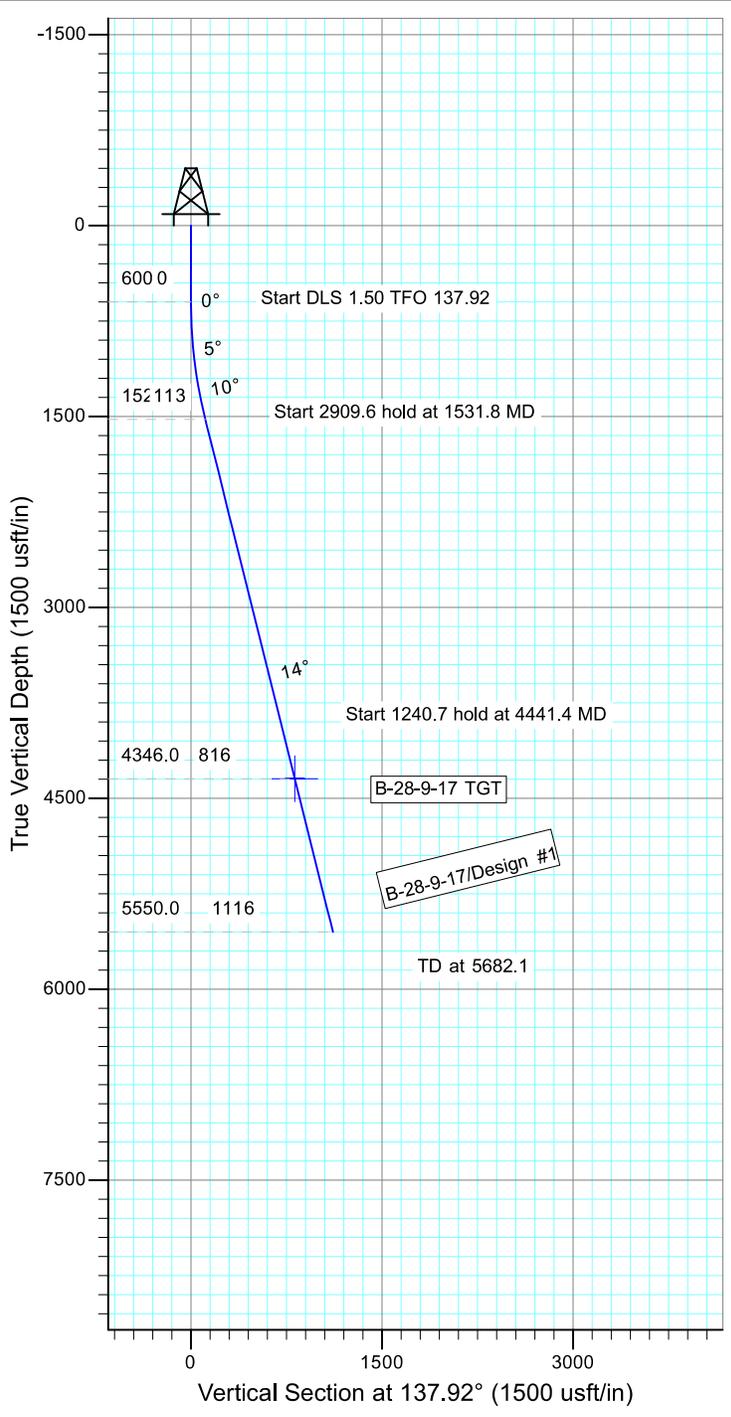
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: B-28-9-17
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.96°

Magnetic Field
 Strength: 52009.0snT
 Dip Angle: 65.71°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
B-28-9-17 TGT	4346.0	-605.5	546.7	Circle (Radius: 75.0)

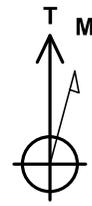
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1531.8	13.98	137.92	1522.6	-83.9	75.8	1.50	137.92	113.1	
4	4441.4	13.98	137.92	4346.0	-605.5	546.7	0.00	0.00	815.8	B-28-9-17 TGT
5	5682.1	13.98	137.92	5550.0	-827.9	747.6	0.00	0.00	1115.5	





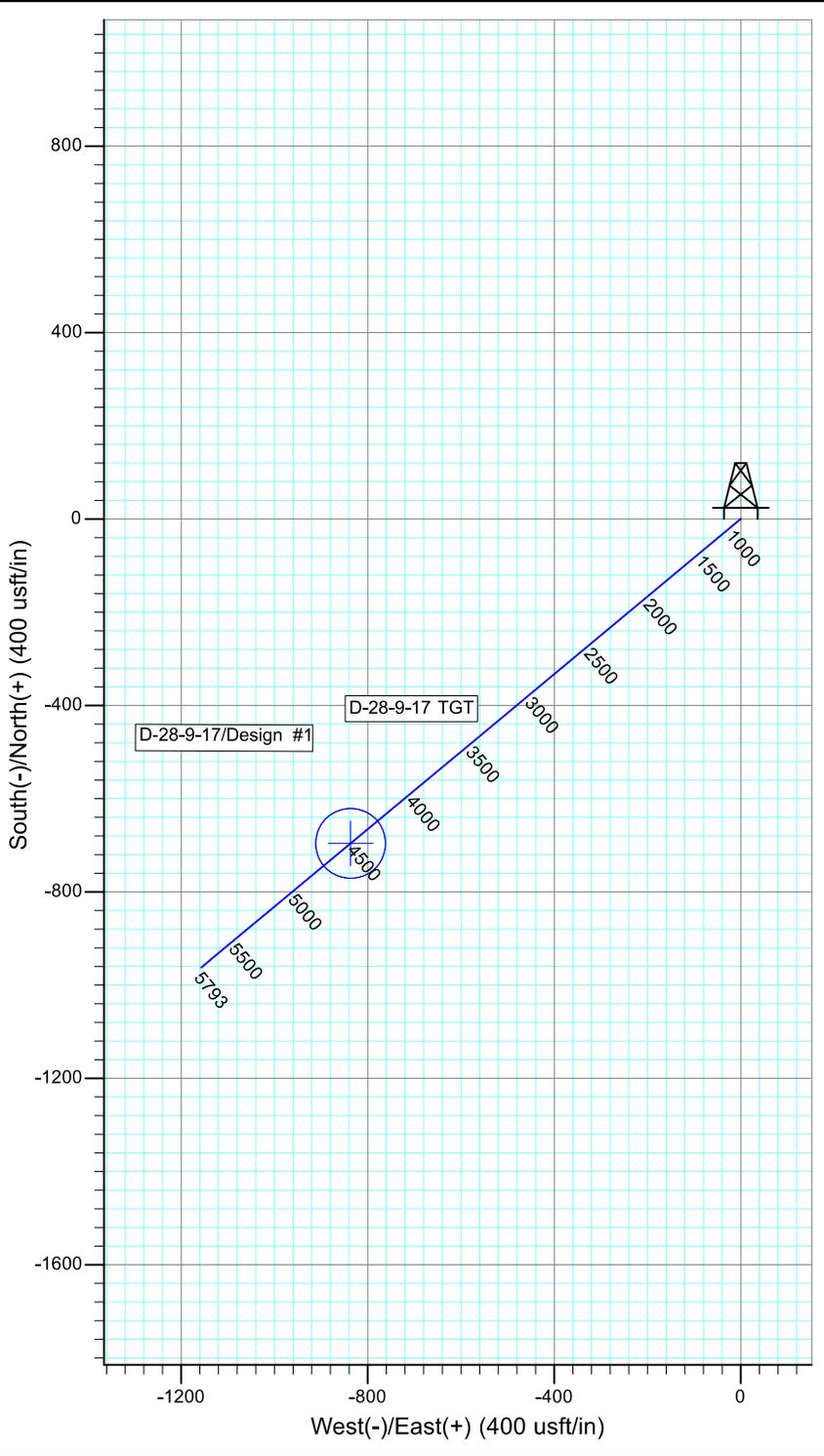
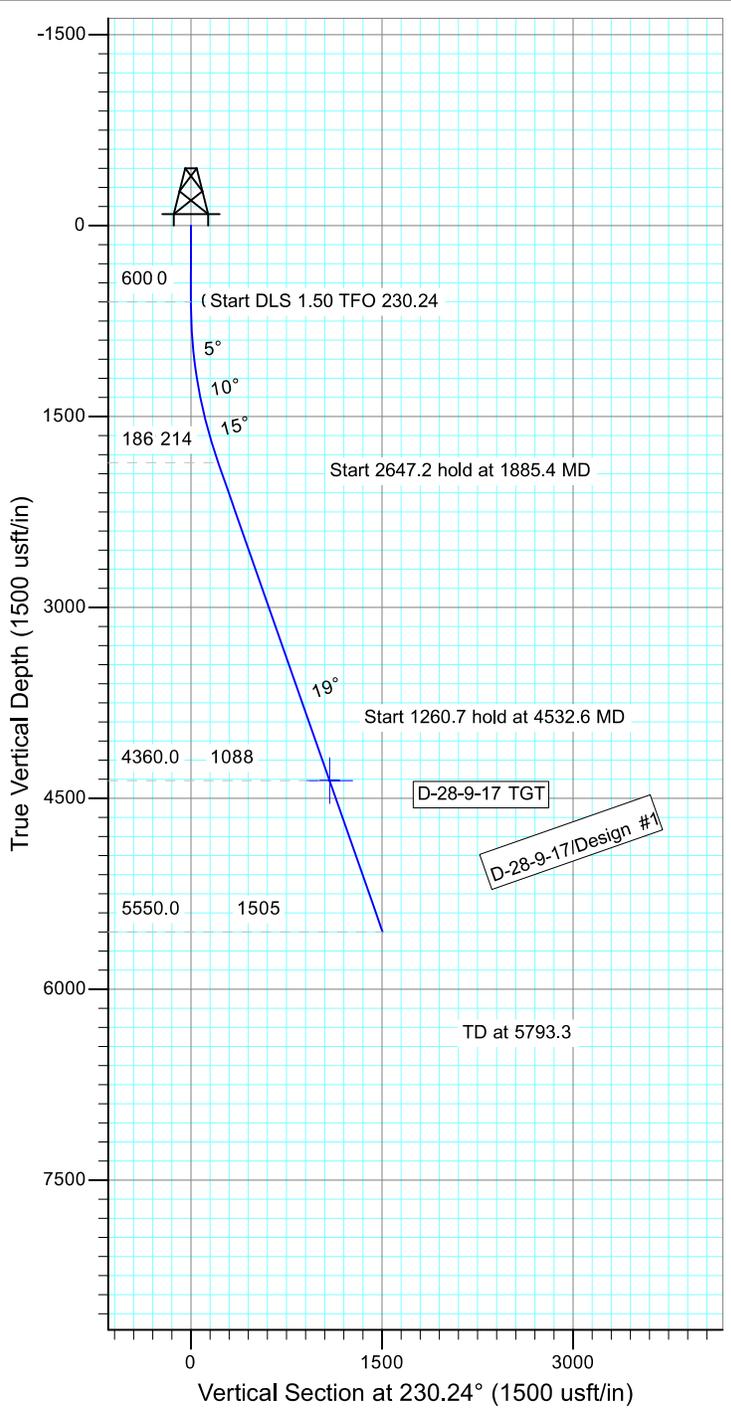
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: D-28-9-17
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.96°

Magnetic Field
 Strength: 52008.4snT
 Dip Angle: 65.71°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100'
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
D-28-9-17 TGT	4360.0	-696.1	-836.7	Circle (Radius: 75.0)

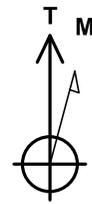
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1885.4	19.28	230.24	1861.3	-137.0	-164.7	1.50	230.24	214.3	
4	4532.6	19.28	230.24	4360.0	-696.1	-836.7	0.00	0.00	1088.4	D-28-9-17 TGT
5	5793.3	19.28	230.24	5550.0	-962.4	-1156.7	0.00	0.00	1504.7	





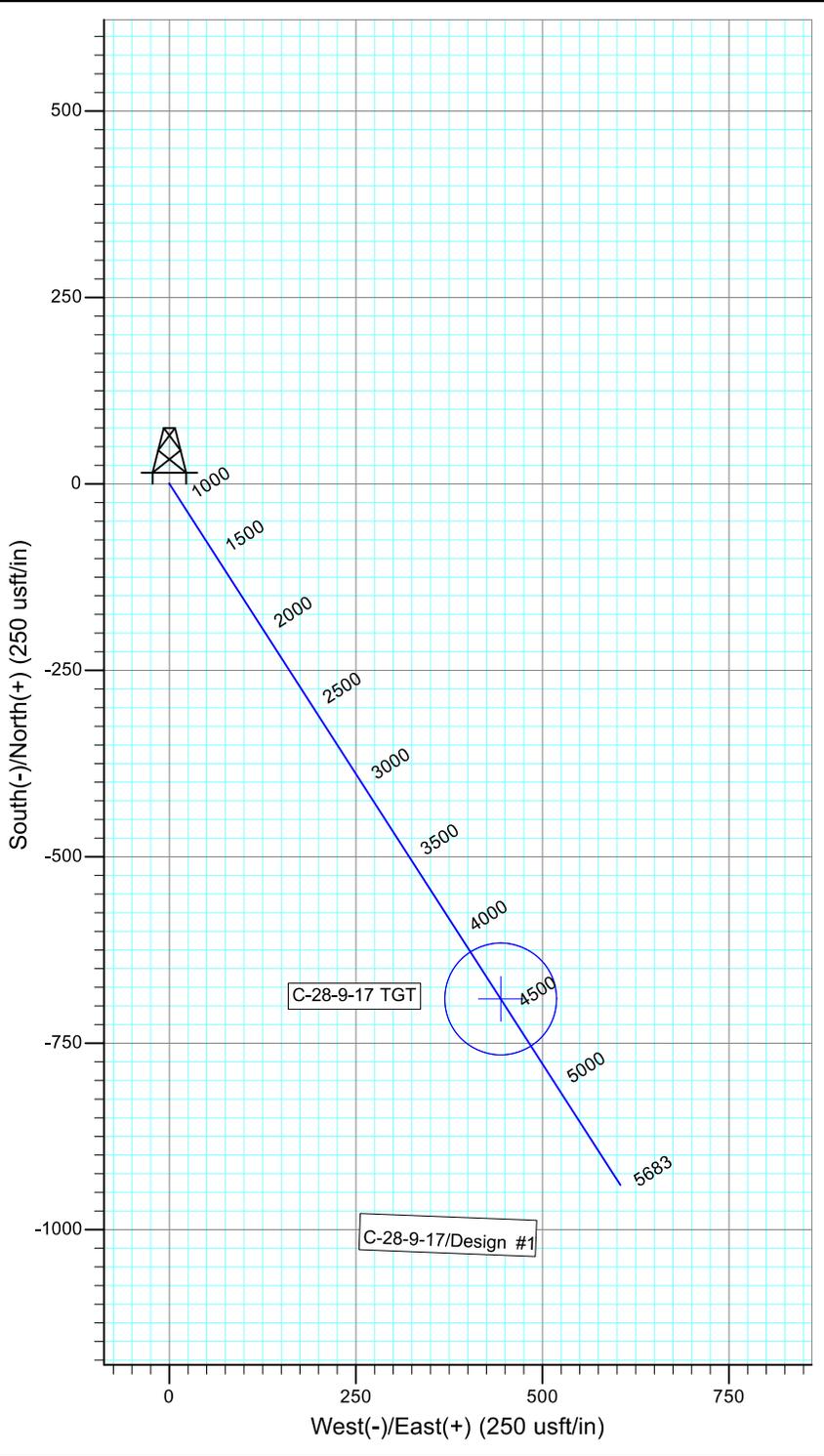
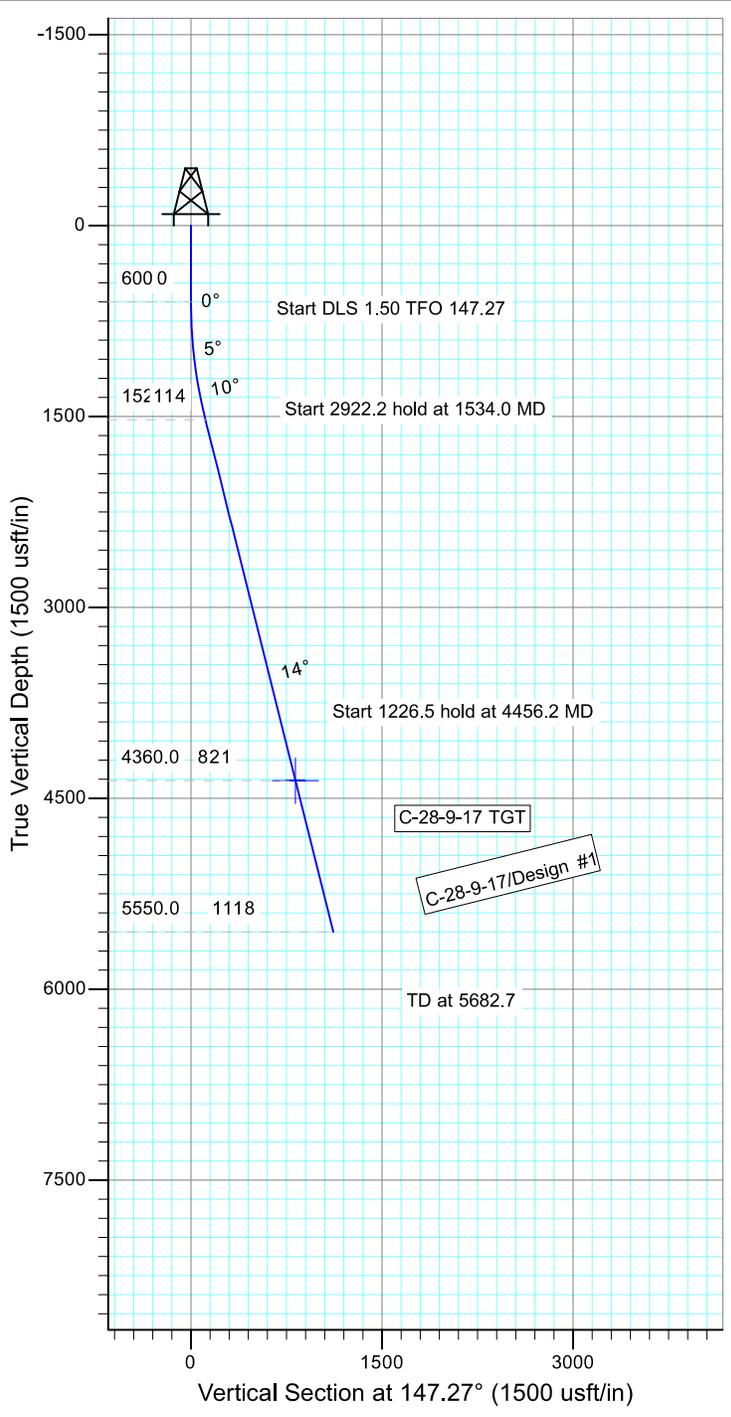
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: C-28-9-17
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.96°

Magnetic Field
 Strength: 52008.4snT
 Dip Angle: 65.71°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100'
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
C-28-9-17 TGT	4360.0	-690.7	443.9	Circle (Radius: 75.0)

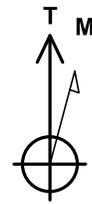
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1534.0	14.01	147.27	1524.7	-95.6	61.4	1.50	147.27	113.6	
4	4456.2	14.01	147.27	4360.0	-690.7	443.9	0.00	0.00	821.0	C-28-9-17 TGT
5	5682.7	14.01	147.27	5550.0	-940.4	604.4	0.00	0.00	1117.9	





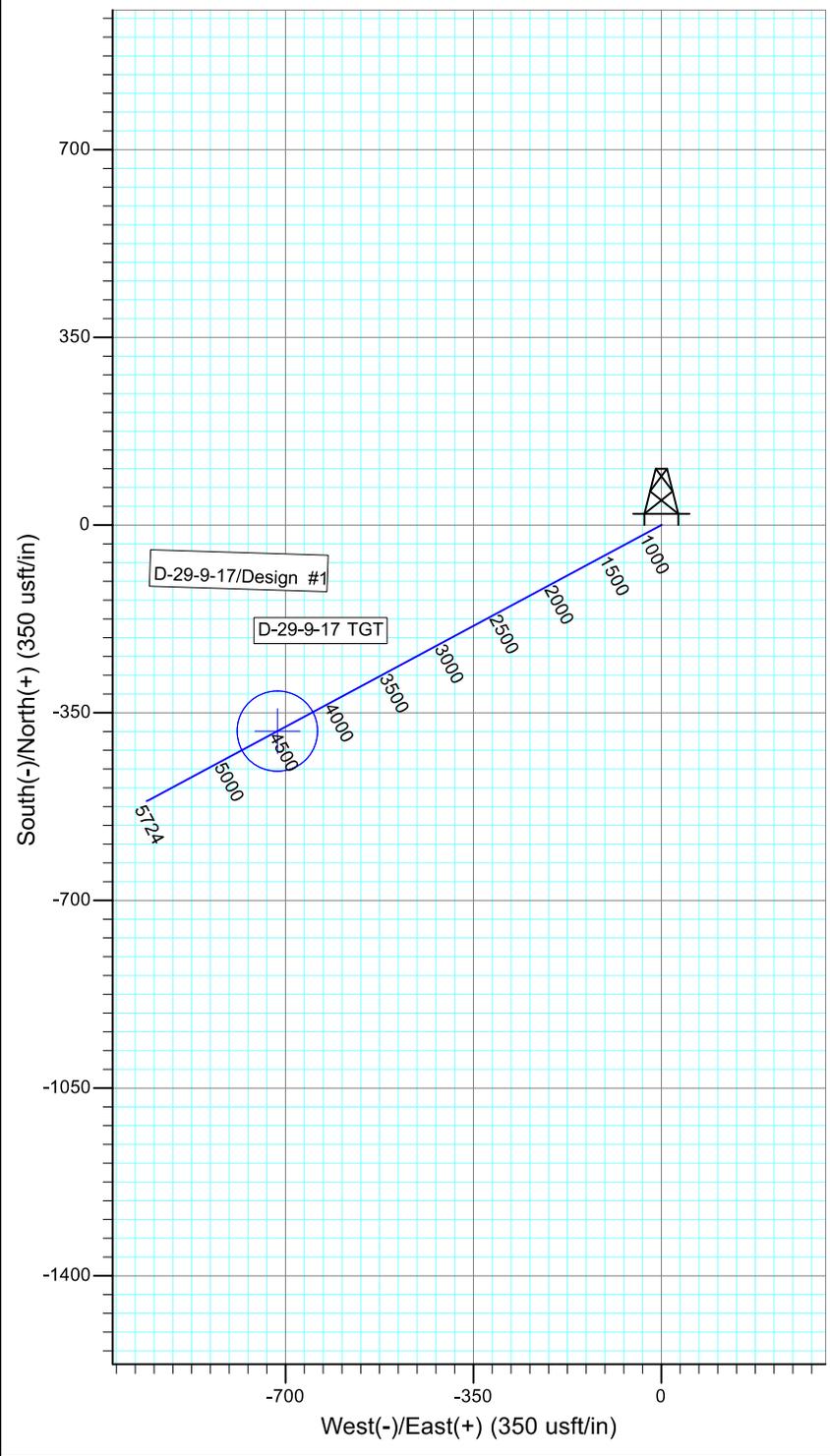
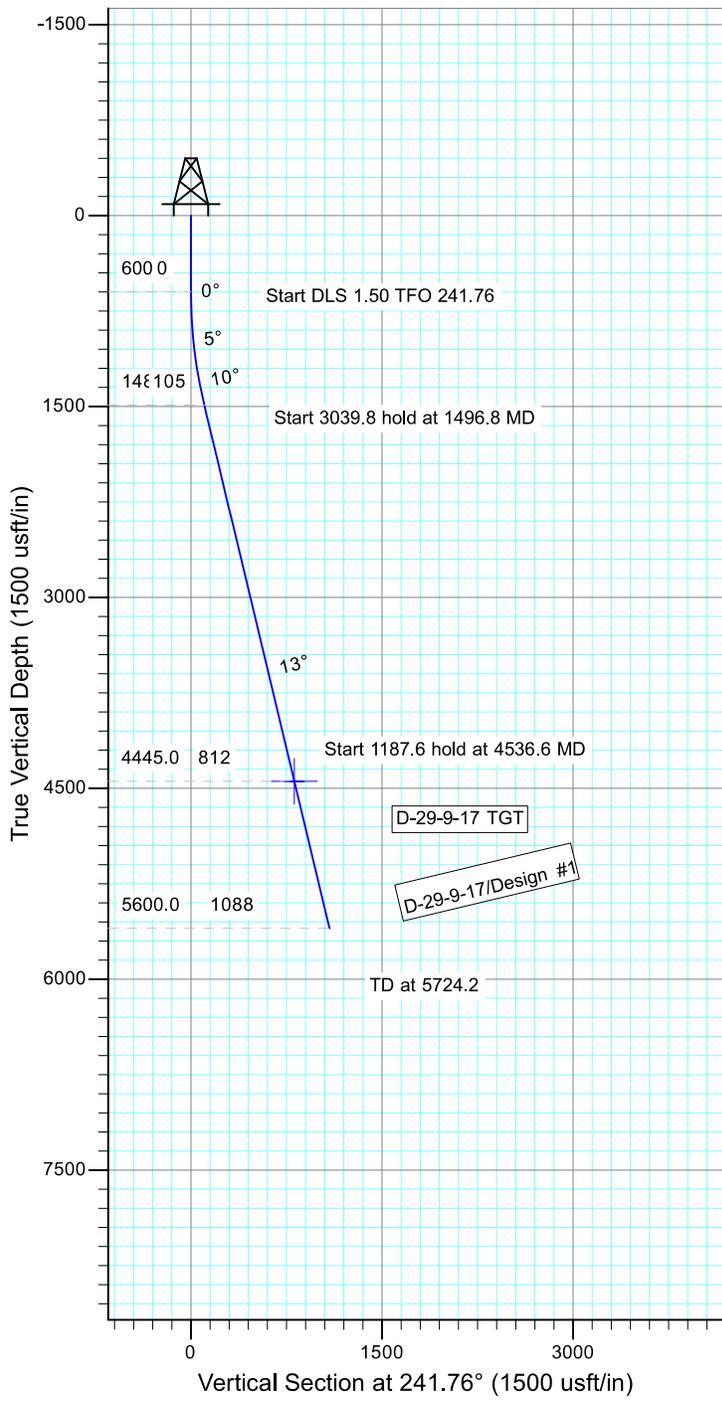
Project: USGS Myton SW (UT)
 Site: SECTION 20 T9S, R17E
 Well: D-29-9-17
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.97°

Magnetic Field
 Strength: 52004.2snT
 Dip Angle: 65.71°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
D-29-9-17 TGT	4445.0	-384.2	-715.3	Circle (Radius: 75.0)

SECTION DETAILS

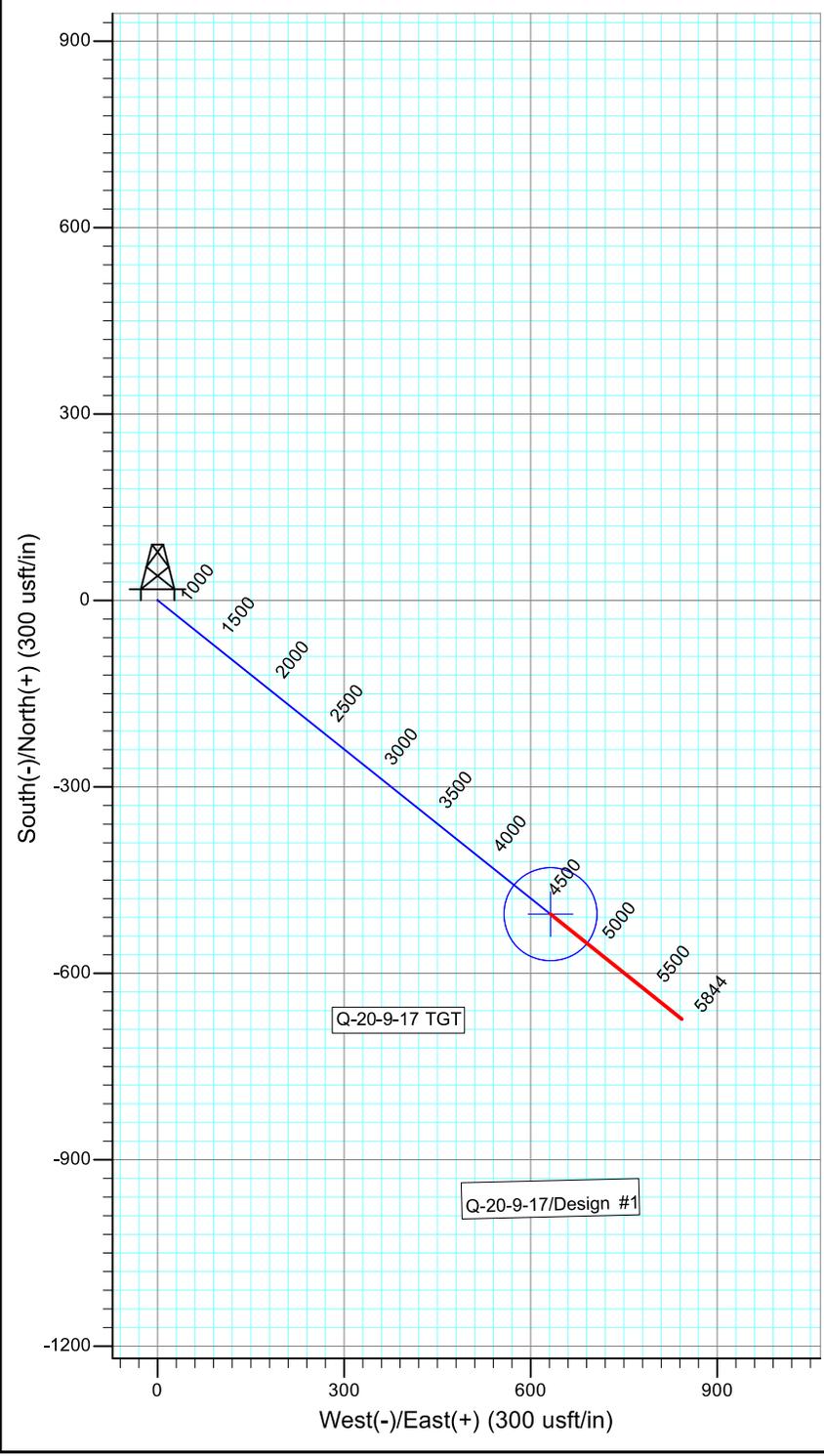
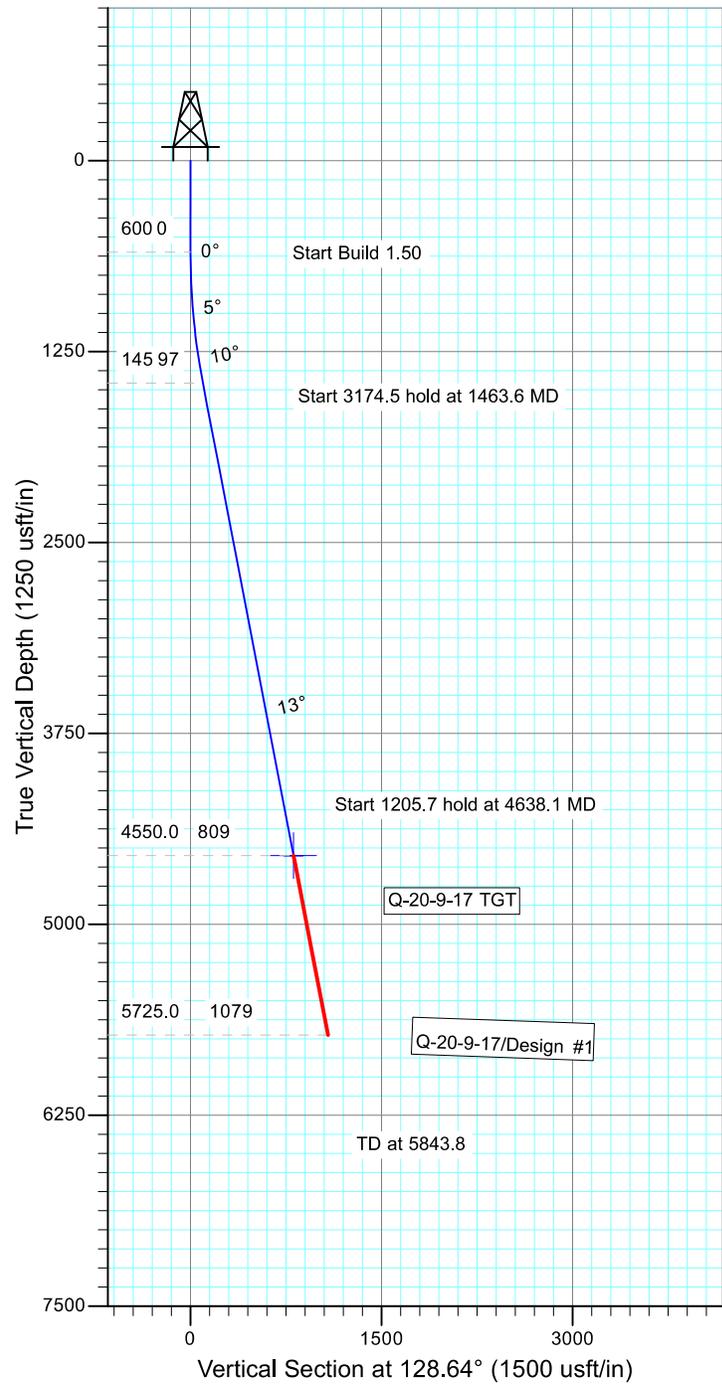
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1496.8	13.45	241.76	1488.6	-49.6	-92.3	1.50	241.76	104.8	
4	4536.6	13.45	241.76	4445.0	-384.2	-715.3	0.00	0.00	812.0	D-29-9-17 TGT
5	5724.2	13.45	241.76	5600.0	-514.9	-958.7	0.00	0.00	1088.2	





Project: USGS Myton SW (UT)
 Site: SECTION 20 T9S, R17E
 Well: Q-20-9-17
 Wellbore: Wellbore #1
 Design: Design #1

T Azimuths to True North
M Magnetic North: 10.99°
 Magnetic Field
 Strength: 52017.7snT
 Dip Angle: 65.71°
 Date: 11/19/2013
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Q-20-9-17 TGT	4550.0	-505.1	631.8	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1463.6	12.95	128.64	1456.3	-60.7	75.9	1.50	128.64	97.2	
4	4638.1	12.95	128.64	4550.0	-505.1	631.8	0.00	0.00	808.9	Q-20-9-17 TGT
5	5843.8	12.95	128.64	5725.0	-673.9	842.9	0.00	0.00	1079.2	





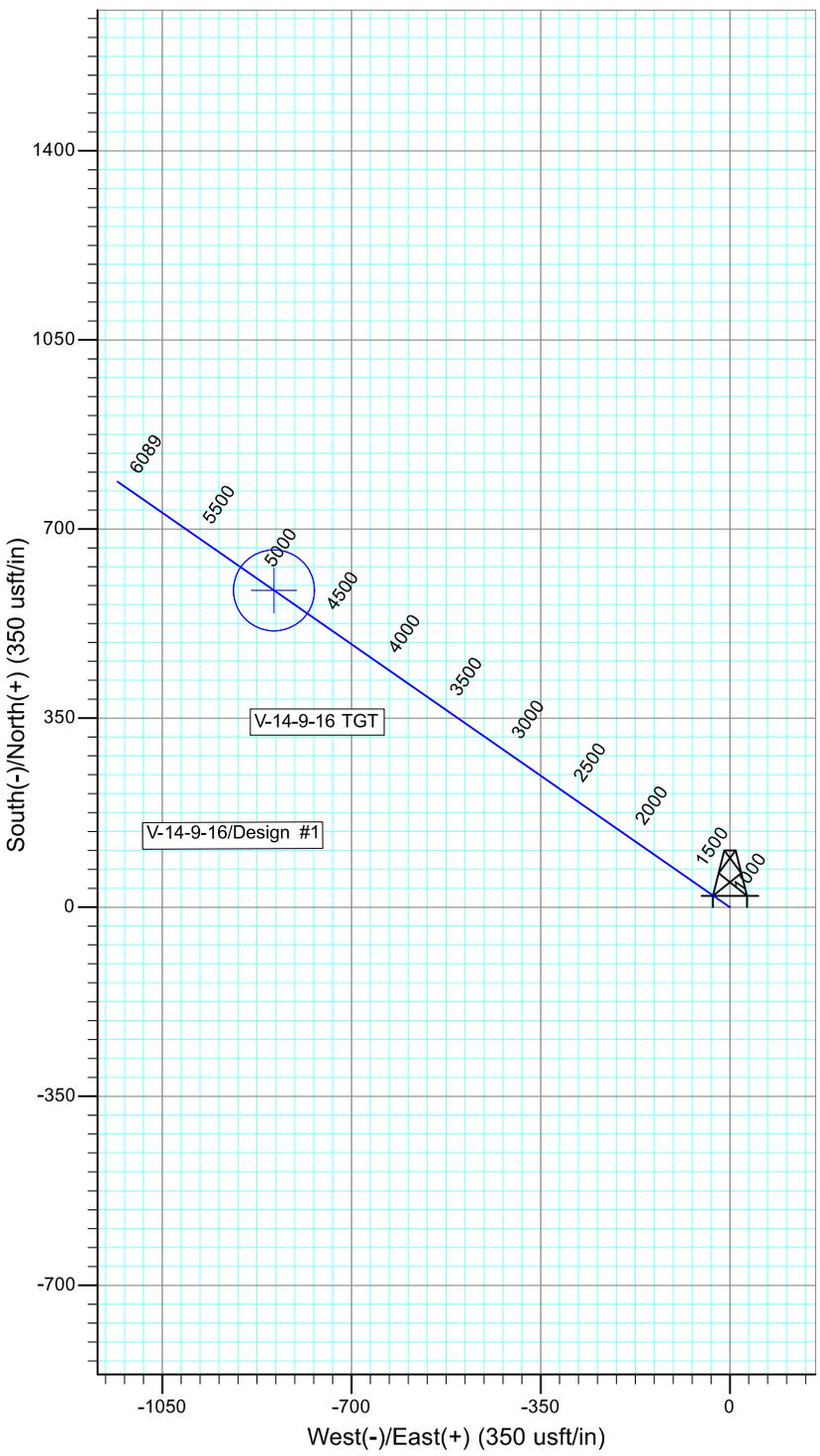
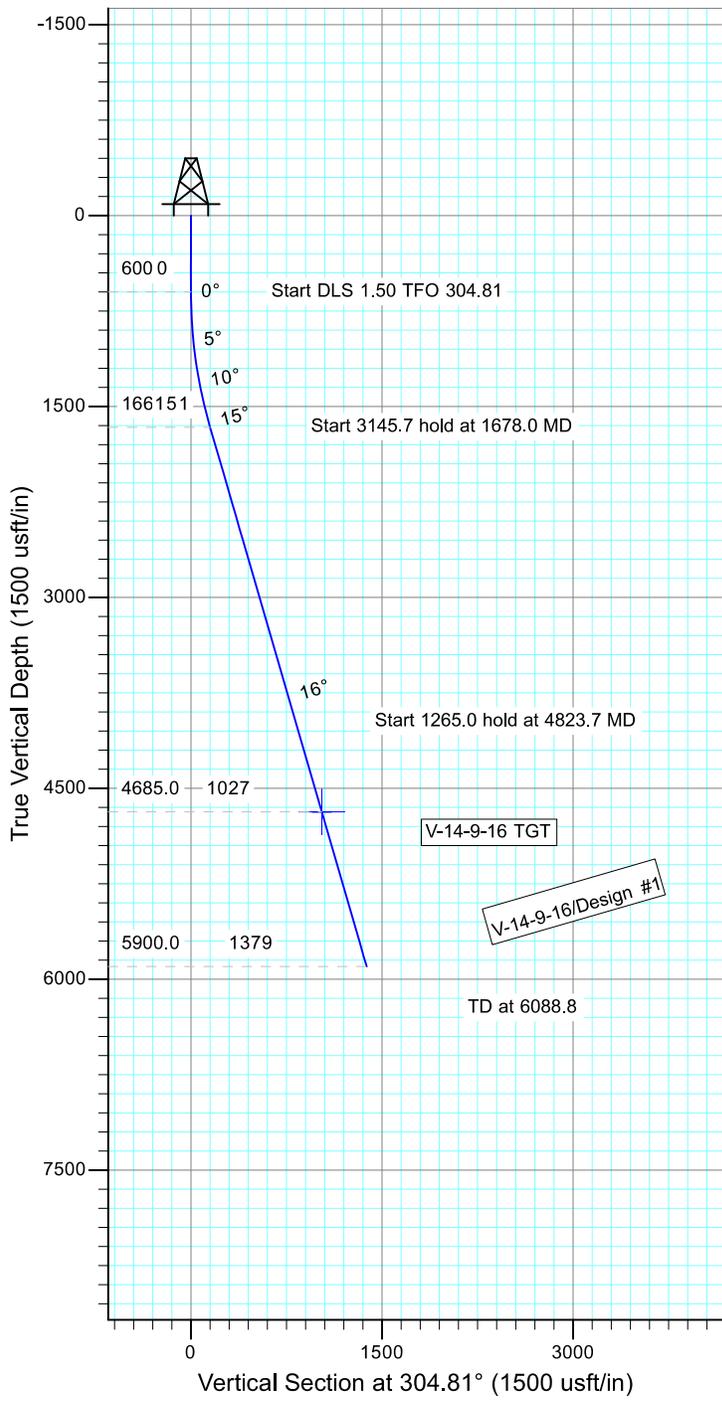
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: V-14-9-16
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.99°

Magnetic Field
 Strength: 52002.6snT
 Dip Angle: 65.71°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100'
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
V-14-9-16 TGT	4685.0	586.4	-843.4	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1678.0	16.17	304.81	1663.8	86.3	-124.1	1.50	304.81	151.1	
4	4823.7	16.17	304.81	4685.0	586.4	-843.4	0.00	0.00	1027.2	V-14-9-16 TGT
5	6088.8	16.17	304.81	5900.0	787.5	-1132.6	0.00	0.00	1379.5	



Received: July 15, 2014



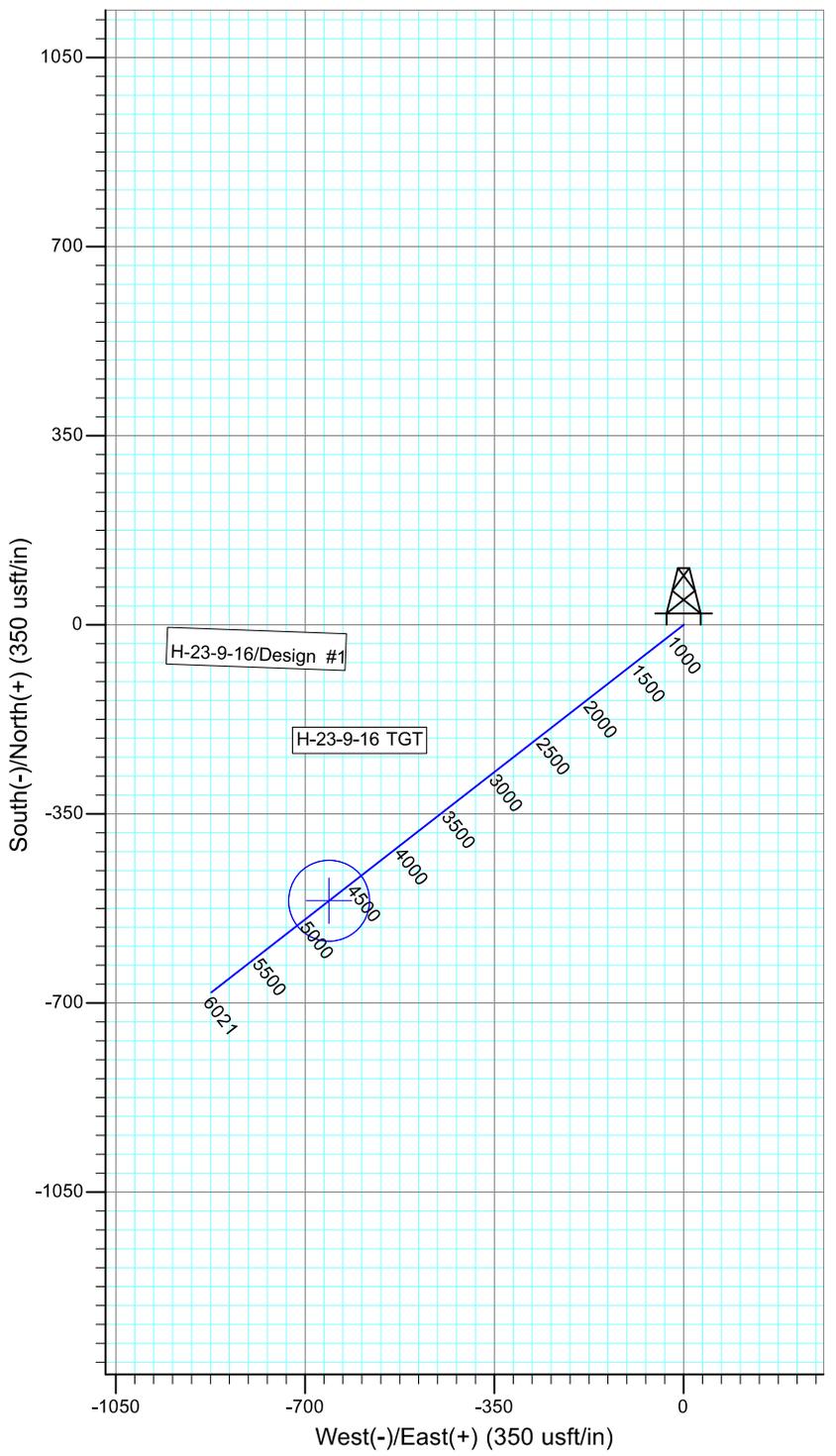
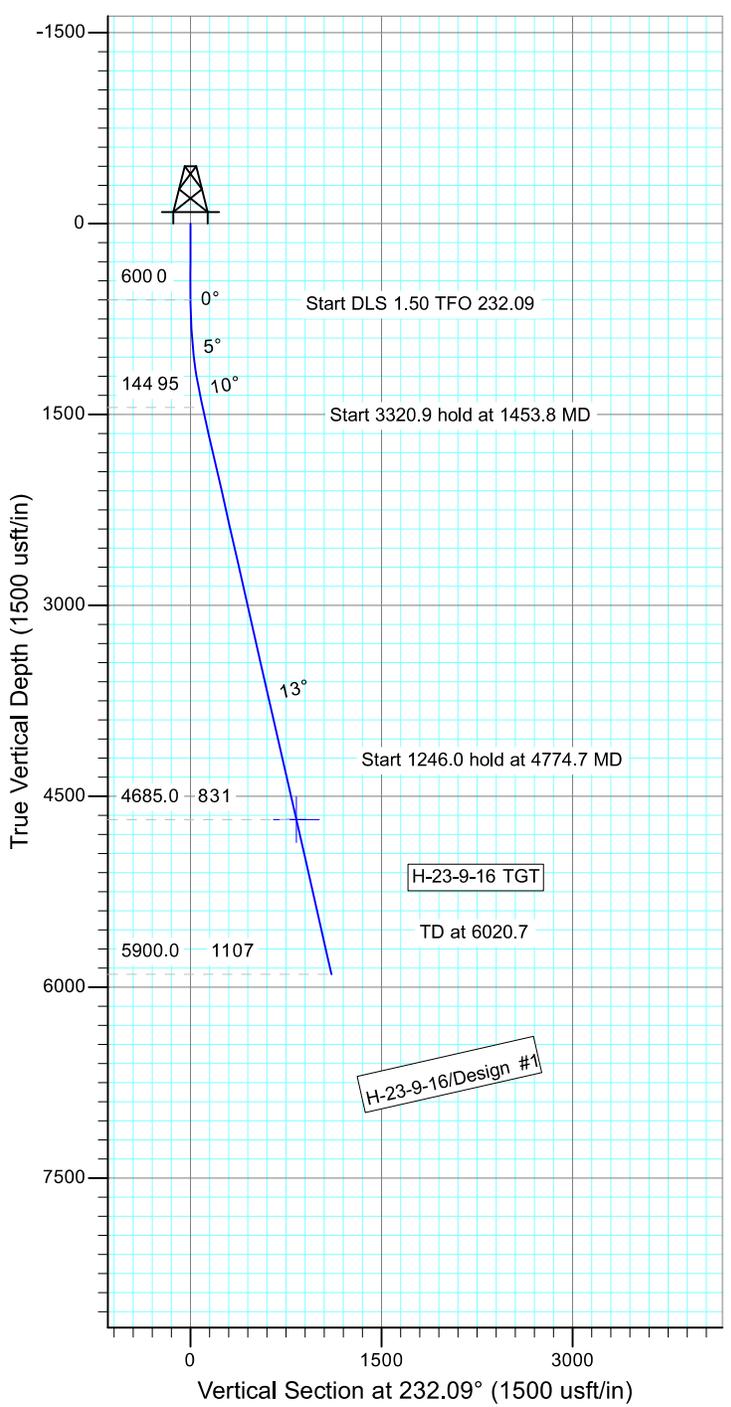
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: H-23-9-16
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.99°

Magnetic Field
 Strength: 52000.2snT
 Dip Angle: 65.71°
 Date: 1/6/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100'
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
H-23-9-16 TGT	4685.0	-510.7	-655.8	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1453.8	12.81	232.09	1446.7	-58.4	-75.0	1.50	232.09	95.0	
4	4774.7	12.81	232.09	4685.0	-510.7	-655.8	0.00	0.00	831.2	H-23-9-16 TGT
5	6020.7	12.81	232.09	5900.0	-680.4	-873.7	0.00	0.00	1107.4	





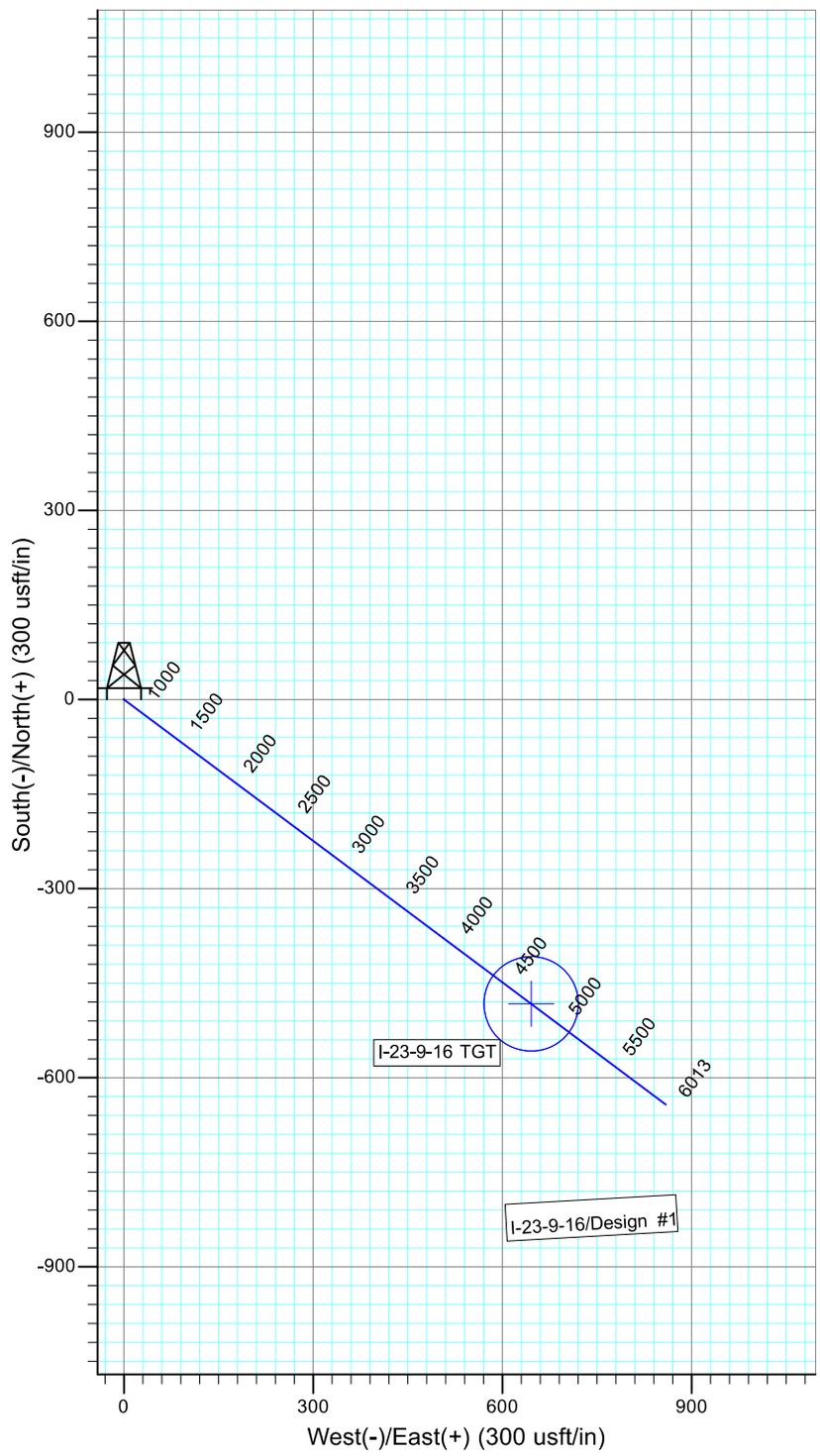
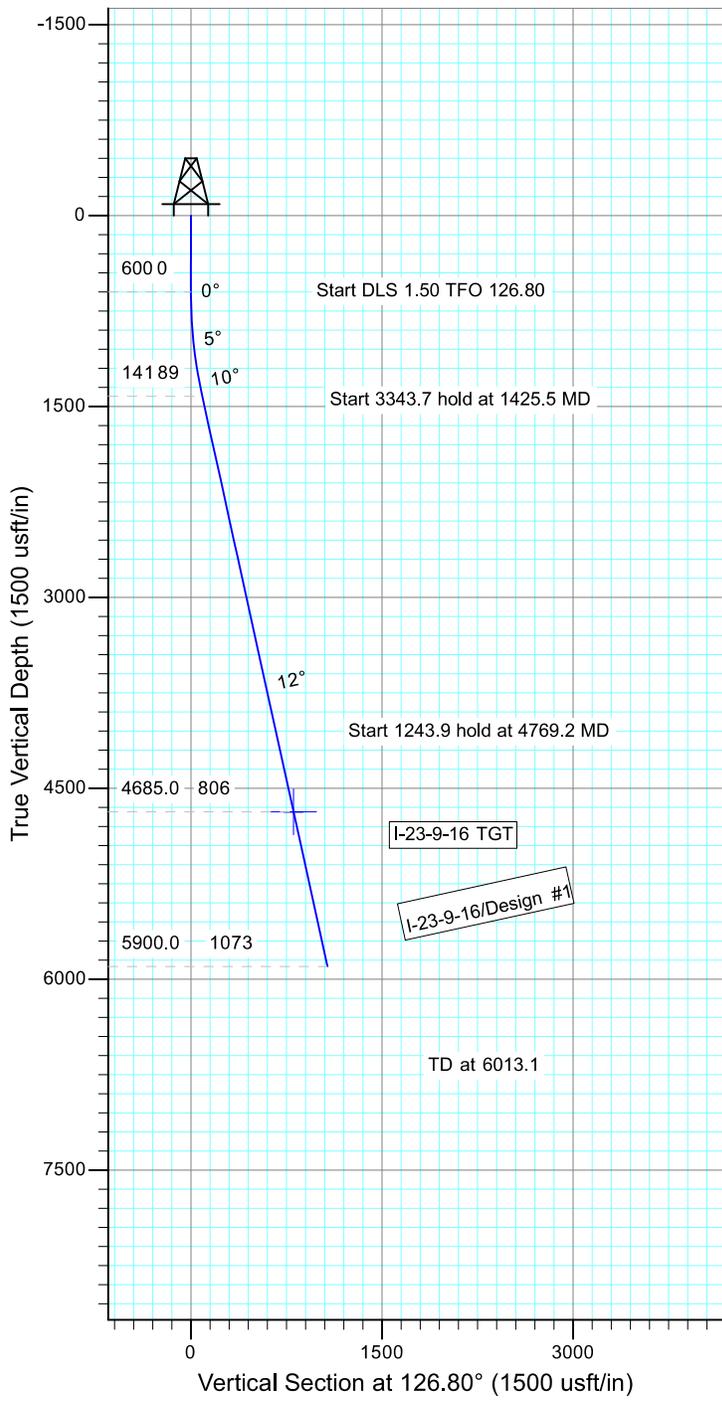
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: I-23-9-16
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.99°

Magnetic Field
 Strength: 52000.2snT
 Dip Angle: 65.71°
 Date: 1/6/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
I-23-9-16 TGT	4685.0	-482.8	645.3	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1425.5	12.38	126.80	1419.1	-53.2	71.2	1.50	126.80	88.9	
4	4769.2	12.38	126.80	4685.0	-482.8	645.3	0.00	0.00	805.9	I-23-9-16 TGT
5	6013.1	12.38	126.80	5900.0	-642.6	858.9	0.00	0.00	1072.7	





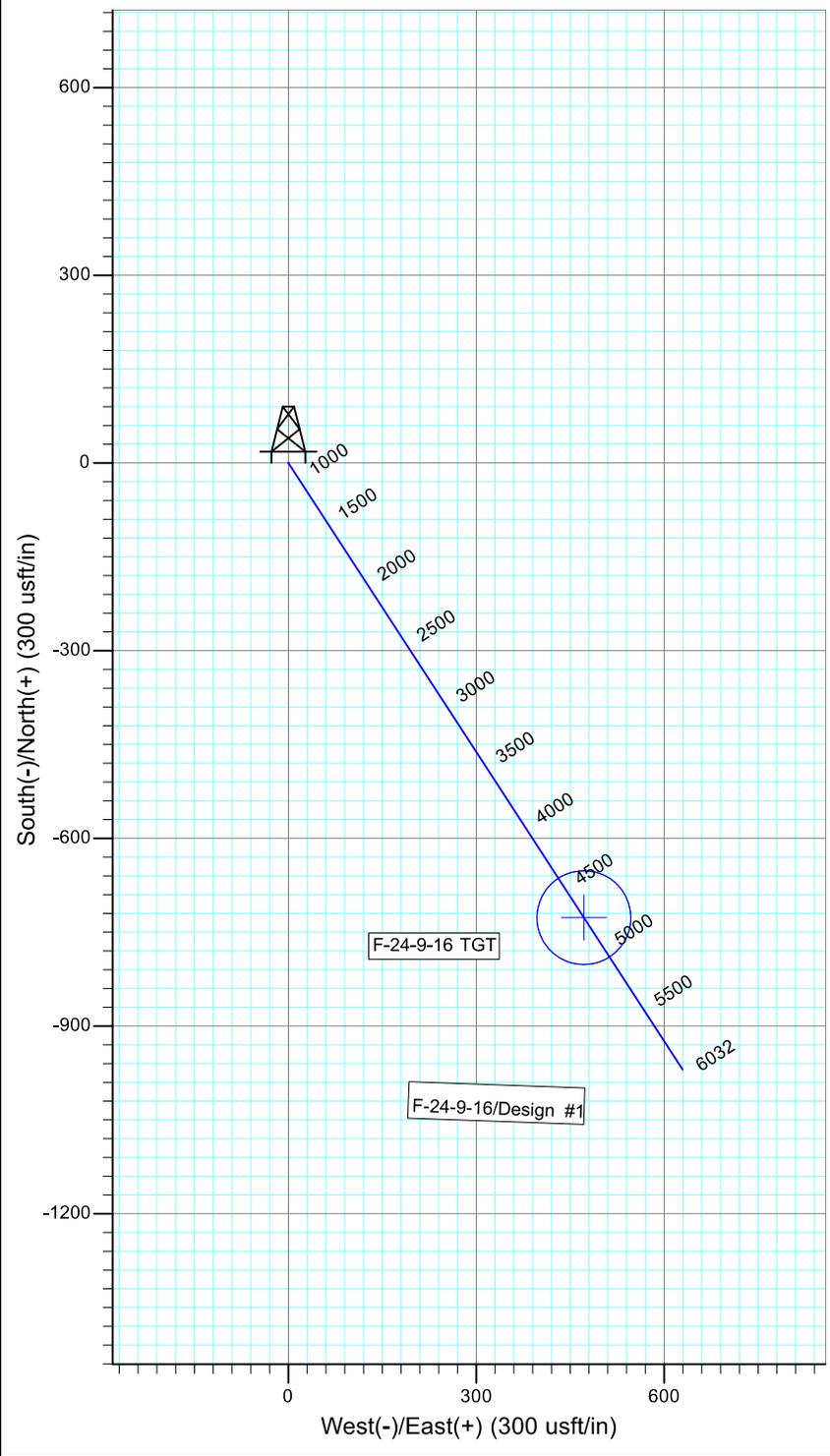
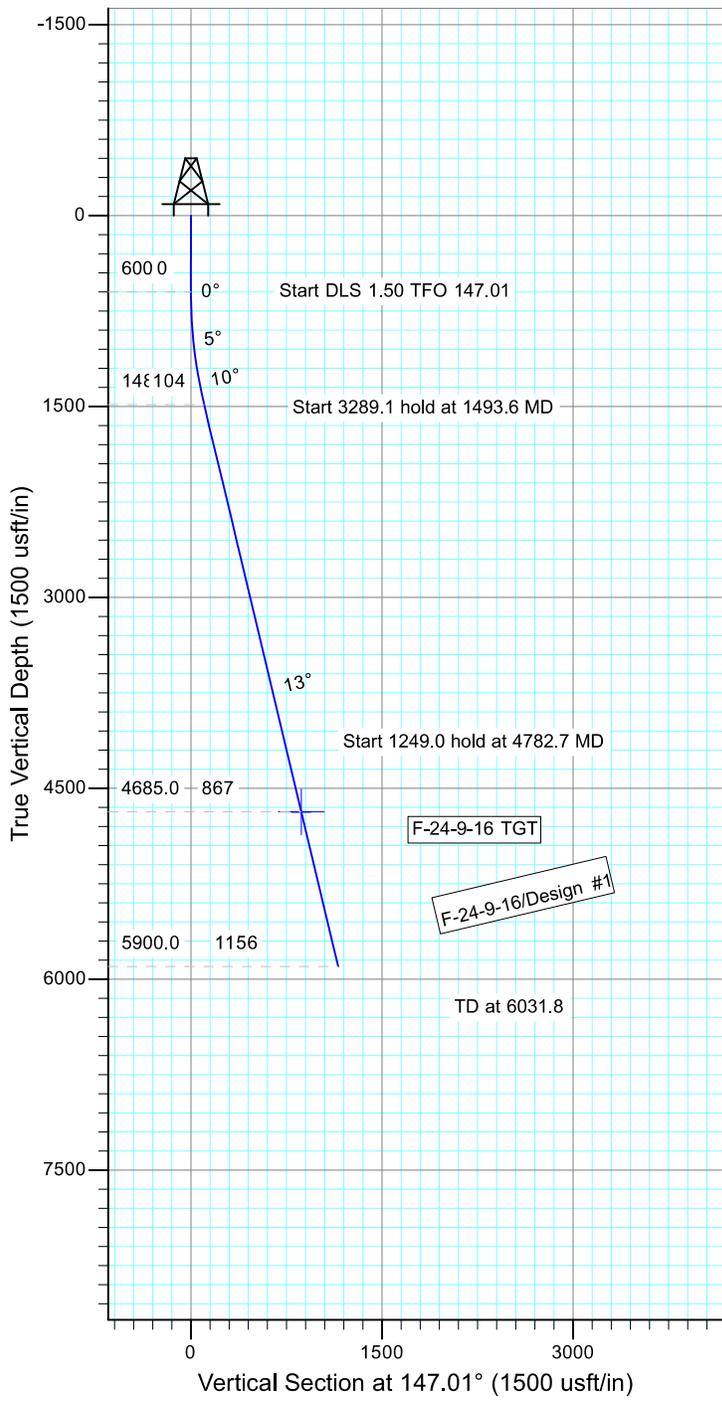
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: F-24-9-16
 Wellbore: Wellbore #1
 Design: Design #1



Azimuths to True North
 Magnetic North: 10.99°

Magnetic Field
 Strength: 52002.6snT
 Dip Angle: 65.71°
 Date: 1/2/2014
 Model: IGRF2010

KOP @ 600'
 DOGLEG RATE 1.5 DEG/100'
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
F-24-9-16 TGT	4685.0	-726.8	471.8	Circle (Radius: 75.0)

SECTION DETAILS

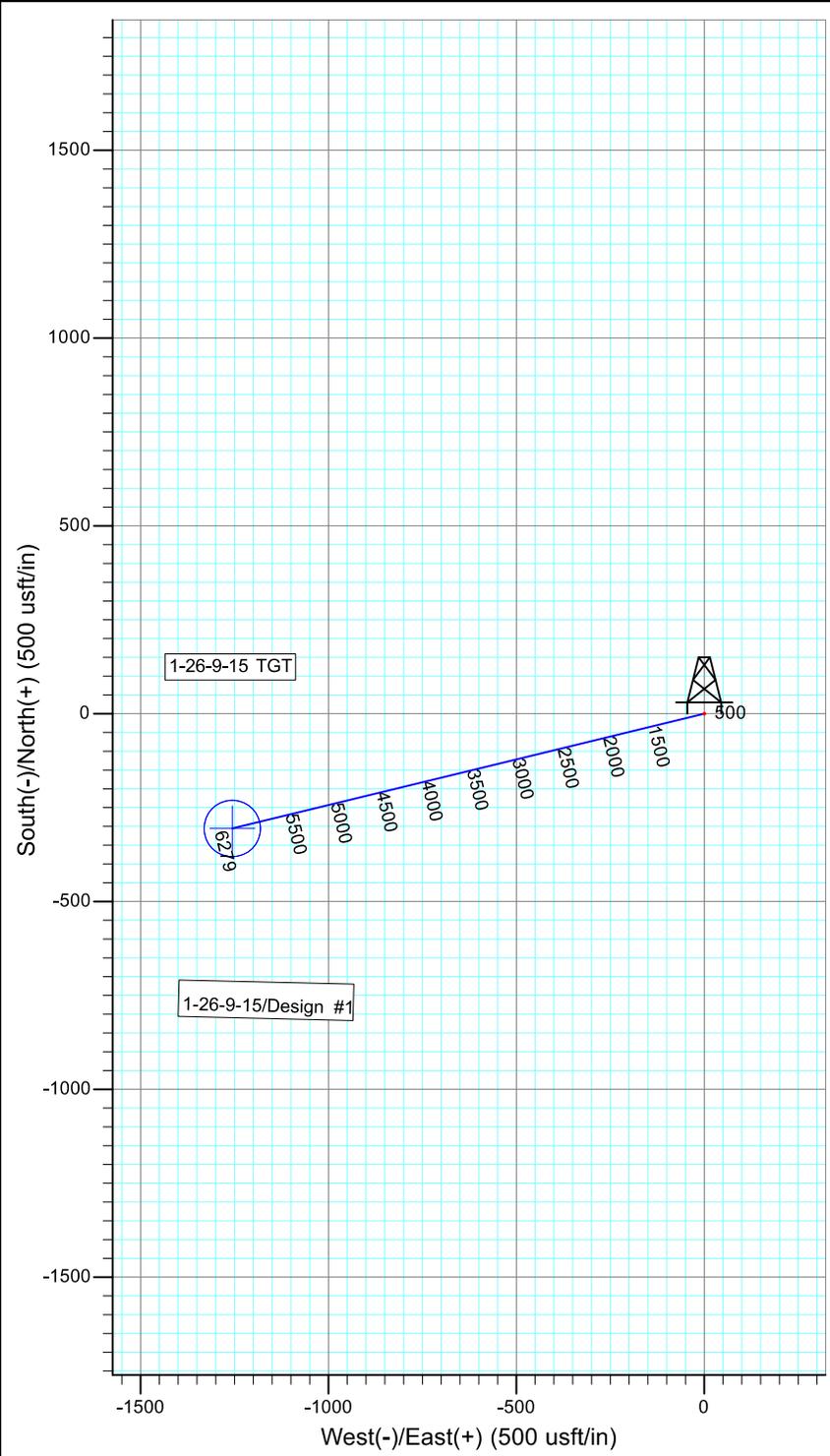
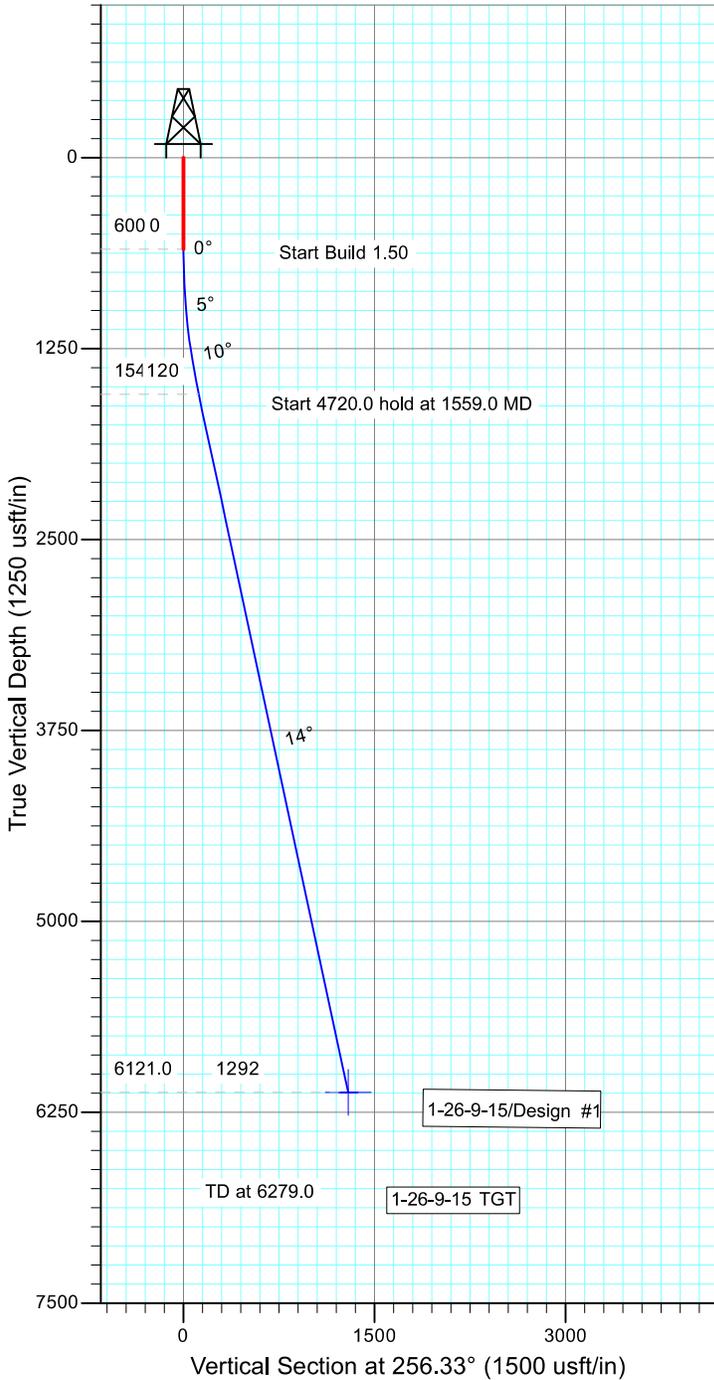
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1493.6	13.40	147.01	1485.5	-87.3	56.7	1.50	147.01	104.1	
4	4782.7	13.40	147.01	4685.0	-726.8	471.8	0.00	0.00	866.5	F-24-9-16 TGT
5	6031.8	13.40	147.01	5900.0	-969.7	629.5	0.00	0.00	1156.1	





Project: USGS Myton SW (UT)
 Site: SECTION 25 T9S, R15E
 Well: 1-26-9-15
 Wellbore: Wellbore #1
 Design: Design #1

T Azimuths to True North
M Magnetic North: 10.96°
 Magnetic Field
 Strength: 51921.7snT
 Dip Angle: 65.66°
 Date: 7/16/2014
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
1-26-9-15 TGT	6121.0	-305.5	-1255.8	Circle (Radius: 75.0)

SECTION DETAILS

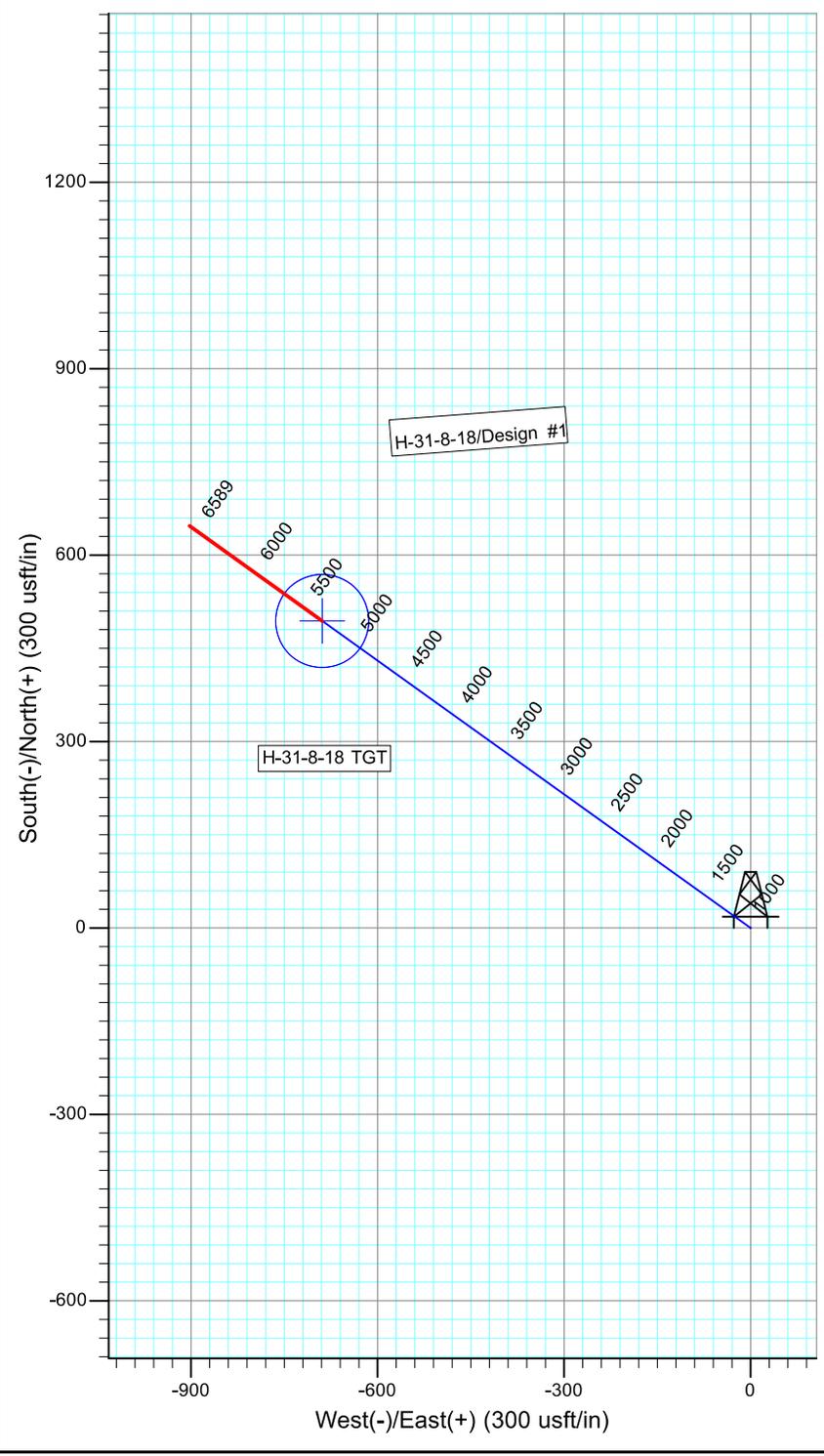
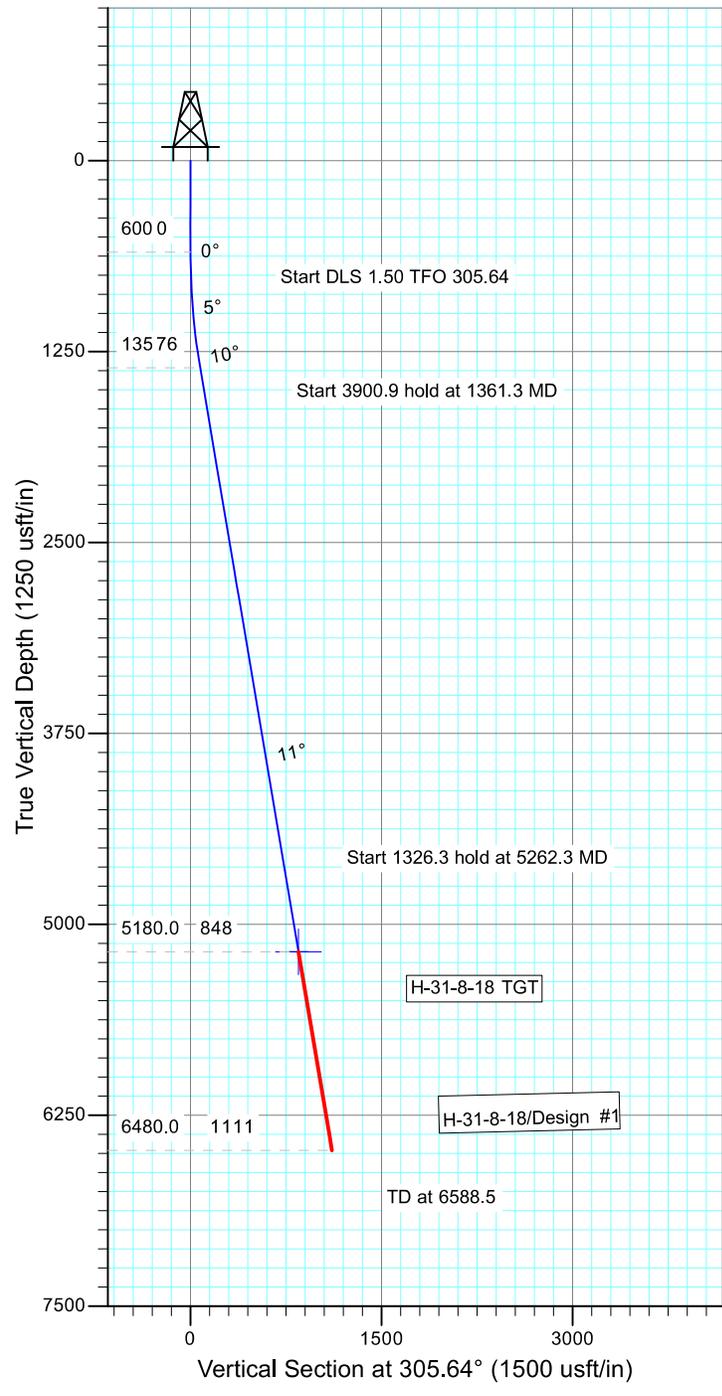
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1559.0	14.39	256.33	1549.0	-28.3	-116.4	1.50	256.33	119.8	
4	6279.0	14.39	256.33	6121.0	-305.5	-1255.8	0.00	0.00	1292.4	1-26-9-15 TGT





Project: USGS Myton SW (UT)
 Site: SECTION 31 T8S, R18E
 Well: H-31-8-18
 Wellbore: Wellbore #1
 Design: Design #1

T Azimuths to True North
M Magnetic North: 11.13°
 Magnetic Field
 Strength: 52203.5snT
 Dip Angle: 65.82°
 Date: 7/10/2012
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
H-31-8-18 TGT	5180.0	494.1	-689.1	Circle (Radius: 75.0)

SECTION DETAILS

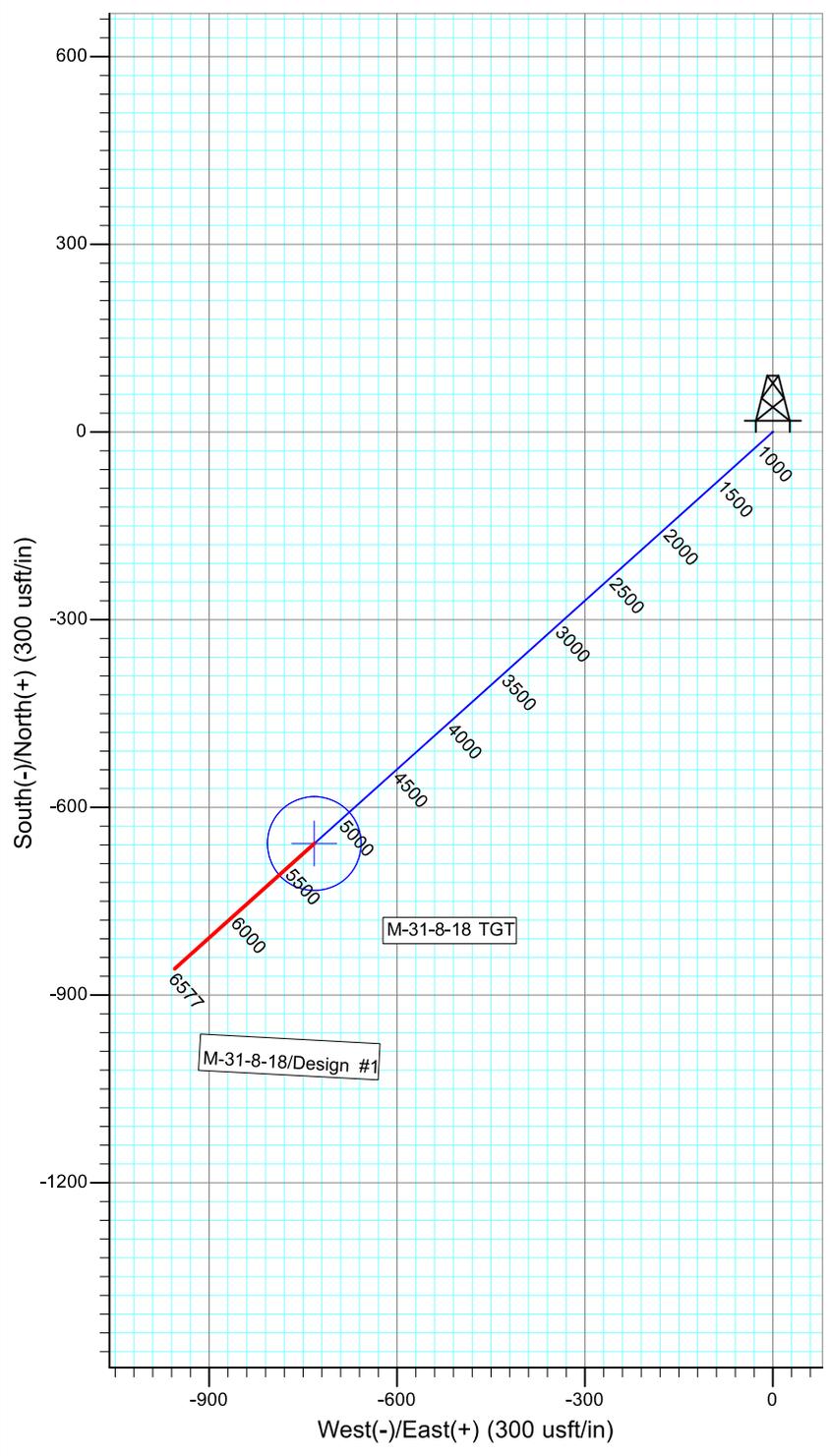
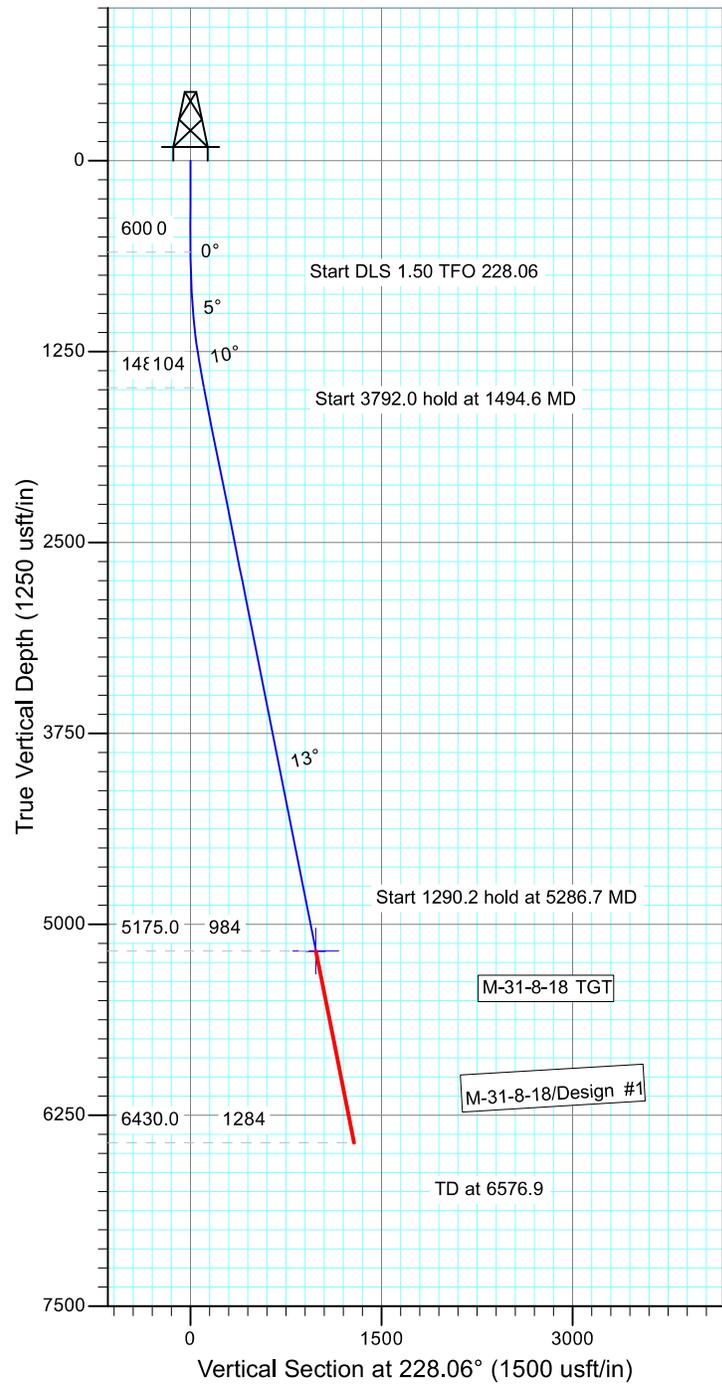
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1361.3	11.42	305.64	1356.3	44.1	-61.5	1.50	305.64	75.6	
4	5262.3	11.42	305.64	5180.0	494.1	-689.1	0.00	0.00	848.0	H-31-8-18 TGT
5	6588.5	11.42	305.64	6480.0	647.1	-902.6	0.00	0.00	1110.6	





Project: USGS Myton SW (UT)
 Site: SECTION 31 T8S, R18E
 Well: M-31-8-18
 Wellbore: Wellbore #1
 Design: Design #1

T Azimuths to True North
M Magnetic North: 10.95°
 Magnetic Field
 Strength: 52065.4snT
 Dip Angle: 65.78°
 Date: 12/2/2013
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
M-31-8-18 TGT	5175.0	-657.9	-732.2	Circle (Radius: 75.0)

SECTION DETAILS

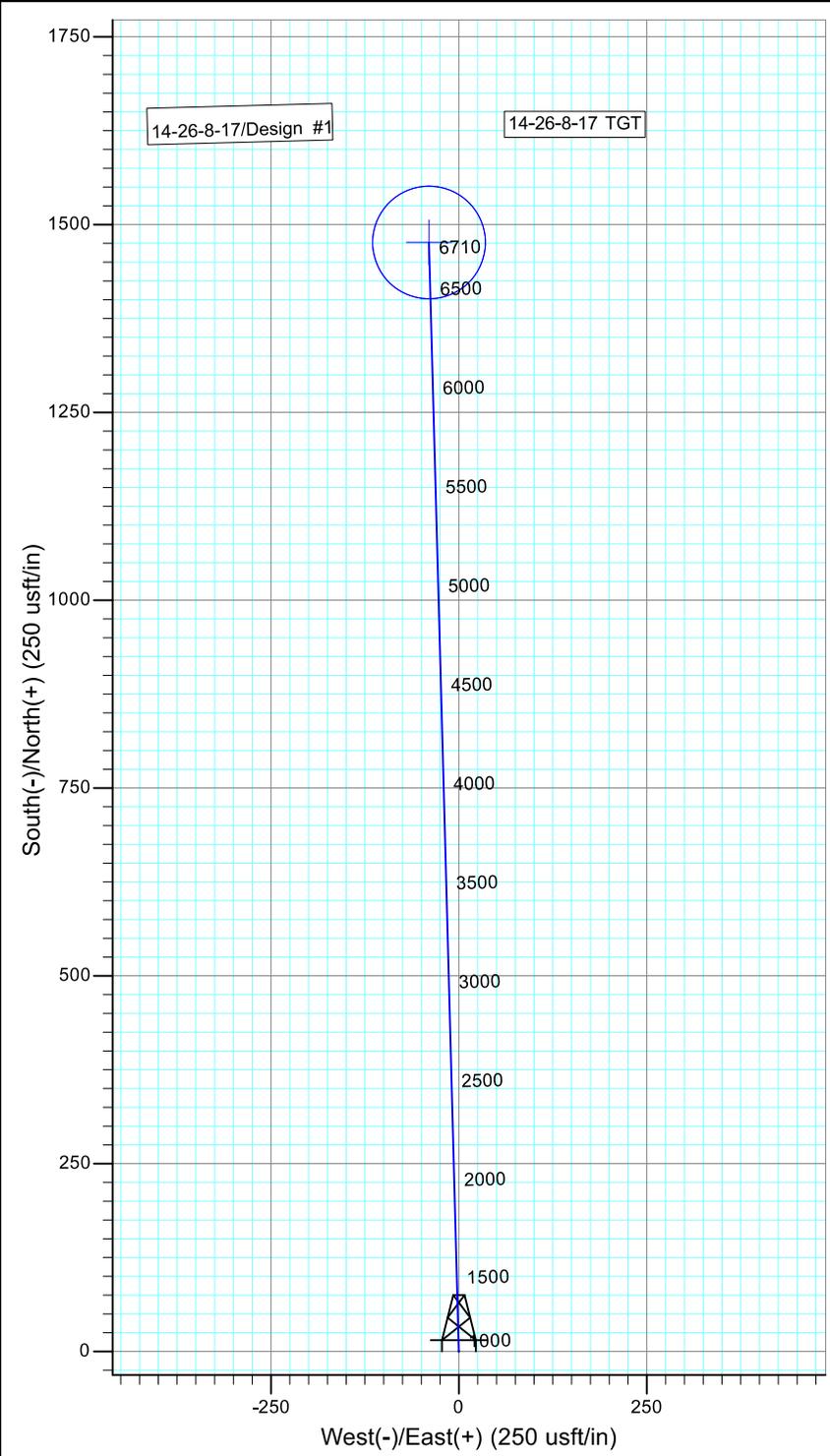
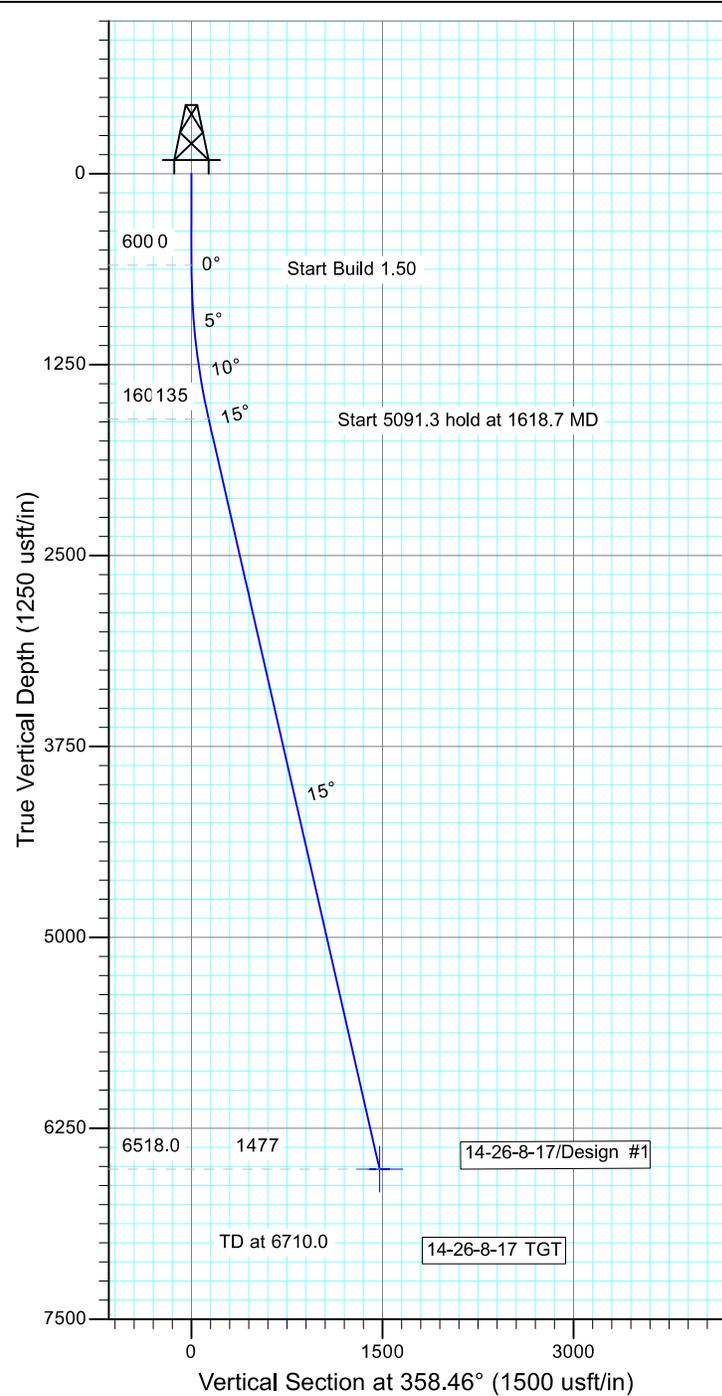
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1494.6	13.42	228.06	1486.5	-69.7	-77.6	1.50	228.06	104.3	
4	5286.7	13.42	228.06	5175.0	-657.9	-732.2	0.00	0.00	984.4	M-31-8-18 TGT
5	6576.9	13.42	228.06	6430.0	-858.0	-954.9	0.00	0.00	1283.8	





Project: USGS Myton SW (UT)
 Site: SECTION 35 T8, R17
 Well: 14-26-8-17
 Wellbore: Wellbore #1
 Design: Design #1

T M Azimuths to True North
 Magnetic North: 10.89°
 Magnetic Field
 Strength: 51999.9snT
 Dip Angle: 65.76°
 Date: 7/16/2014
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
14-26-8-17 TG6518.0	1476.3	1476.3	-39.6	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1618.7	15.28	358.46	1606.6	135.0	-3.6	1.50	358.46	135.0	
4	6710.0	15.28	358.46	6518.0	1476.3	-39.6	0.00	0.00	1476.8	14-26-8-17 TGT



WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/10/2014

API NO. ASSIGNED: 43047546240000

WELL NAME: GMBU M-31-8-18

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 646-4825

CONTACT: Mandie Crozier

PROPOSED LOCATION: SWNE 31 080S 180E

Permit Tech Review:

SURFACE: 2023 FNL 1876 FEL

Engineering Review:

BOTTOM: 2424 FSL 2381 FWL

Geology Review:

COUNTY: UINTAH

LATITUDE: 40.07622

LONGITUDE: -109.93292

UTM SURF EASTINGS: 590988.00

NORTHINGS: 4436552.00

FIELD NAME: EIGHT MILE FLAT

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-74872

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: FEDERAL - WYB000493
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 437478
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

LOCATION AND SITING:

- R649-2-3.
- Unit: GMBU (GRRV)
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 213-11
- Effective Date: 11/30/2009
- Siting: Suspends General Siting
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason
15 - Directional - dmason
27 - Other - bhll



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. HAZA
Division Director

Permit To Drill

Well Name: GMBU M-31-8-18
API Well Number: 43047546240000
Lease Number: UTU-74872
Surface Owner: FEDERAL
Approval Date: 7/23/2014

Issued to:

NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://oilgas.ogm.utah.gov>

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers
Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-74872	
SUNDRY NOTICES AND REPORTS ON WELLS	
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
7. UNIT or CA AGREEMENT NAME: GMBU (GRRV)	
1. TYPE OF WELL Oil Well	
8. WELL NAME and NUMBER: GMBU M-31-8-18	
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY	
9. API NUMBER: 43047546240000	
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052	
PHONE NUMBER: 435 646-4825 Ext	
9. FIELD and POOL or WILDCAT: EIGHT MILE FLAT	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2023 FNL 1876 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 31 Township: 08.0S Range: 18.0E Meridian: S	
COUNTY: UINTAH	
STATE: UTAH	

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/23/2015	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Newfield proposes to extend the Application for Permit to Drill this well.

Approved by the
June 23, 2015
Oil, Gas and Mining

Date: _____
By:

NAME (PLEASE PRINT) Mandie Crozier	PHONE NUMBER 435 646-4825	TITLE Regulatory Tech
SIGNATURE N/A	DATE 6/23/2015	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047546240000

API: 43047546240000

Well Name: GMBU M-31-8-18

Location: 2023 FNL 1876 FEL QTR SWNE SEC 31 TWNP 080S RNG 180E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 7/23/2014

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No

- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes No

- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes No

- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes No

- Has the approved source of water for drilling changed? Yes No

- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes No

- Is bonding still in place, which covers this proposed well? Yes No

Signature: Mandie Crozier

Date: 6/23/2015

Title: Regulatory Tech **Representing:** NEWFIELD PRODUCTION COMPANY

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS	
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PHONE NUMBER: 435 646-4825 Ext	8. WELL NAME and NUMBER: GMBU M-31-8-18
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2023 FNL 1876 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNE Section: 31 Township: 08.0S Range: 18.0E Meridian: S	9. API NUMBER: 43047546240000
	9. FIELD and POOL or WILDCAT: EIGHT MILE FLAT
	COUNTY: UINTAH
	STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/23/2016	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
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	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Newfield proposes to extend the Application for Permit to Drill this well.

Approved by the
July 02, 2016
Oil, Gas and Mining

Date: _____
By: 

NAME (PLEASE PRINT) Mandie Crozier	PHONE NUMBER 435 646-4825	TITLE Regulatory Tech
SIGNATURE N/A	DATE 7/11/2016	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047546240000

API: 43047546240000

Well Name: GMBU M-31-8-18

Location: 2023 FNL 1876 FEL QTR SWNE SEC 31 TWNP 080S RNG 180E MER S

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- Is bonding still in place, which covers this proposed well? Yes No

Signature: Mandie Crozier

Date: 7/11/2016

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY