

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 S-16-9-16				
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 MONUMENT BUTTE				
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) ML-16532			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" 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		634 FSL 665 FEL		SESE	16	9.0 S	16.0 E	S		
Top of Uppermost Producing Zone		1065 FSL 1105 FEL		SESE	16	9.0 S	16.0 E	S		
At Total Depth		1512 FSL 1532 FEL		NWSE	16	9.0 S	16.0 E	S		
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 1512			23. NUMBER OF ACRES IN DRILLING UNIT 20				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1320			26. PROPOSED DEPTH MD: 6148 TVD: 6000				
27. ELEVATION - GROUND LEVEL 5876			28. BOND NUMBER B001834			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 - 6148	15.5	J-55 LT&C	8.3	Premium Lite High Strength	231	3.26	11.0
							50/50 Poz	608	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 43013530420000				APPROVAL  Permit Manager						

NEWFIELD PRODUCTION COMPANY
GMBU S-16-9-16
AT SURFACE: SE/SE SECTION 16, T9S R16E
DUCHESNE 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' – 1,531'
Green River	1,531'
Wasatch	6,138'
Proposed TD	6,148'(MD) 6,000' (TVD)

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

Green River Formation (Oil) 1,531' – 6,138'

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 S-16-9-16**

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'	6,148'	15.5	J-55	LTC	4,810 2.46	4,040 2.07	217,000 2.28

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 S-16-9-16

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft ³ /sk)
			ft ³			
Surface casing	300'	Class G w/ 2% CaCl	138 161	30%	15.8	1.17
Prod casing Lead	2,800'	Prem Lite II w/ 10% gel + 3% KCl	193 631	30%	11.0	3.26
Prod casing Tail	3,348'	50/50 Poz w/ 2% gel + 3% KCl	608 754	30%	14.3	1.24

*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:**

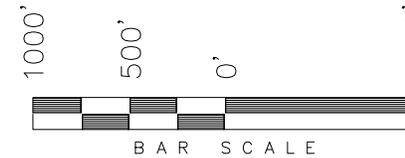
It is anticipated that the drilling operations will commence the first quarter of 2015, and take approximately seven (7) days from spud to rig release.

T9S, R16E, S.L.B.&M.

NEWFIELD EXPLORATION COMPANY

WELL LOCATION, S-16-9-16, LOCATED AS SHOWN IN THE SE 1/4 SE 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

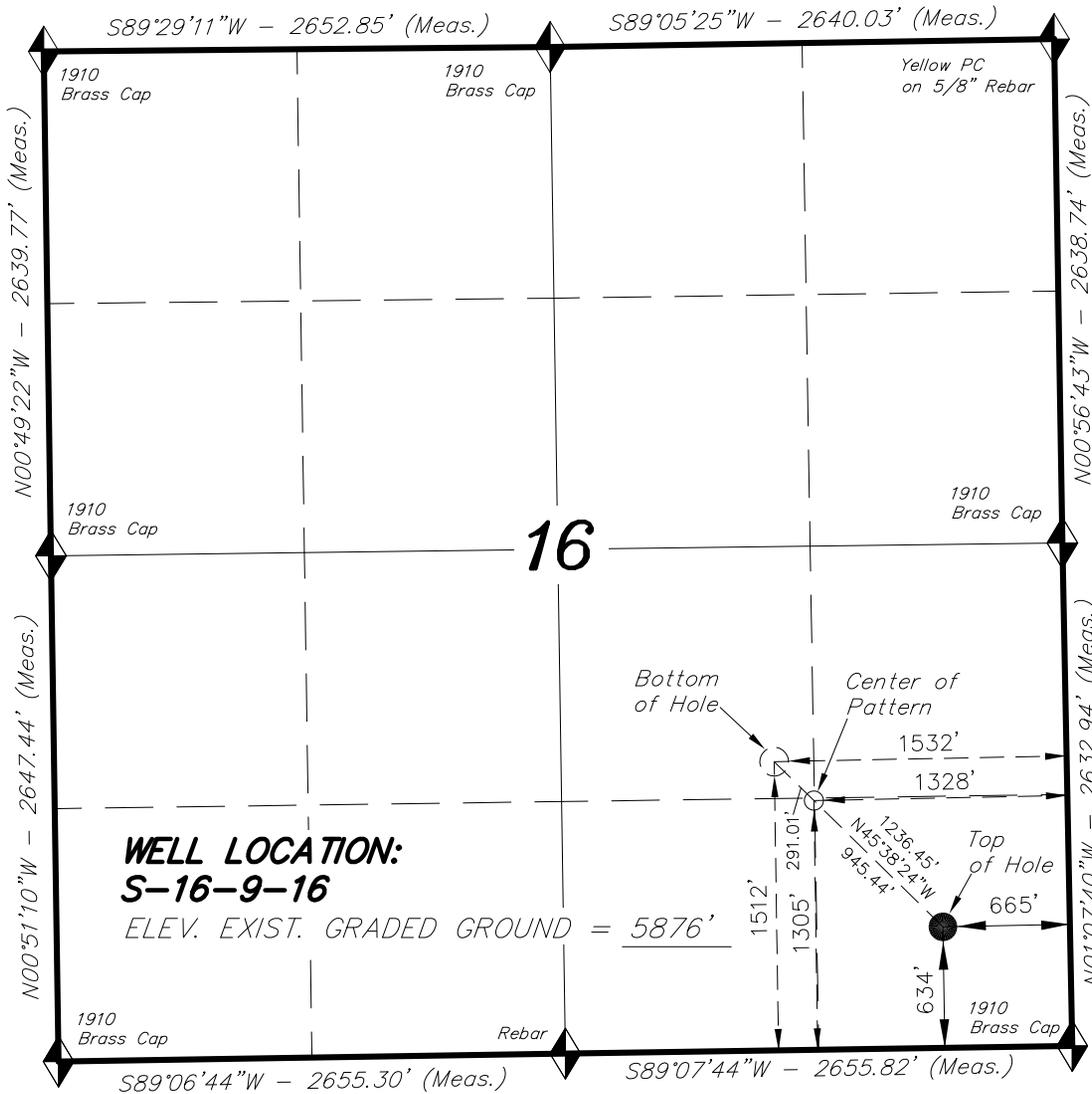
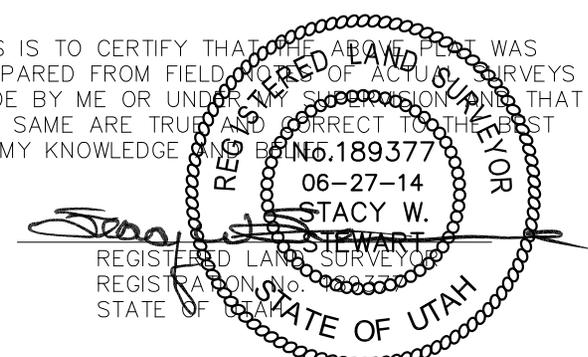
TARGET BOTTOM HOLE, S-16-9-16, LOCATED AS SHOWN IN THE NW 1/4 SE 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



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 PLAN 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.



**WELL LOCATION:
S-16-9-16**

ELEV. EXIST. GRADED GROUND = 5876'

◆ = 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'

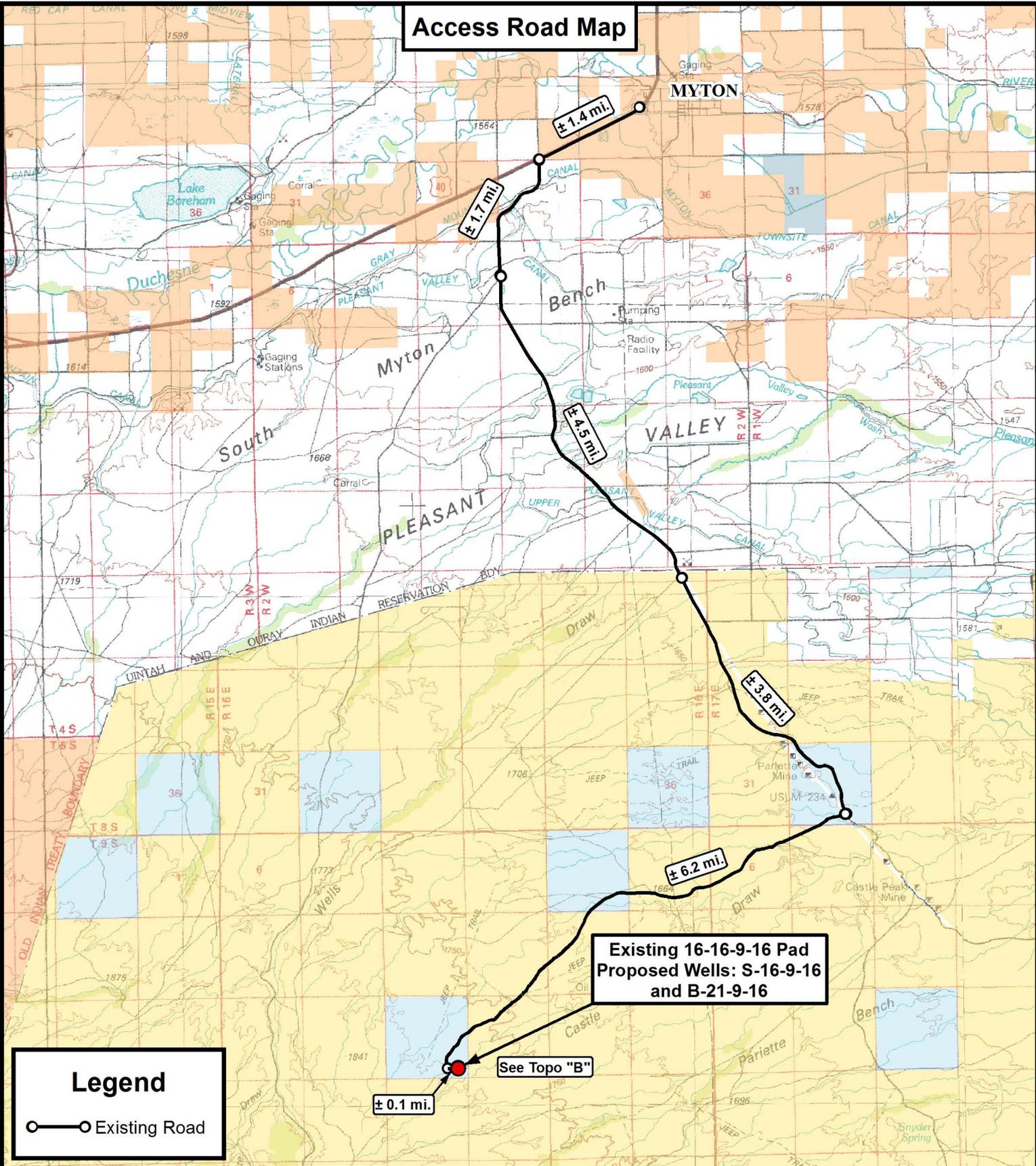
NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°01'31.28"	
LONGITUDE = 110°07'01.88"	
NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°01'31.41"	
LONGITUDE = 110°06'59.34"	
NAD 83 (CENTER OF PATTERN)	NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 40°01'37.91"	LATITUDE = 40°01'39.95"
LONGITUDE = 110°07'10.44"	LONGITUDE = 110°07'13.07"
NAD 27 (CENTER OF PATTERN)	NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 40°01'38.05"	LATITUDE = 40°01'40.09"
LONGITUDE = 110°07'07.89"	LONGITUDE = 110°07'10.53"

TRI STATE LAND SURVEYING & CONSULTING

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

DATE SURVEYED: 11-22-13	SURVEYED BY: G.D.O.	VERSION:
DATE DRAWN: 12-18-13	DRAWN BY: L.K.	V2
REVISED: 06-27-14 F.T.M.	SCALE: 1" = 1000'	

Access Road Map



Legend
 ○—○ Existing Road

**Existing 16-16-9-16 Pad
 Proposed Wells: S-16-9-16
 and B-21-9-16**

See Topo "B"

Tri State Land Surveying, Inc.
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078
 P: (435) 781-2501
 F: (435) 781-2518



NEWFIELD EXPLORATION COMPANY

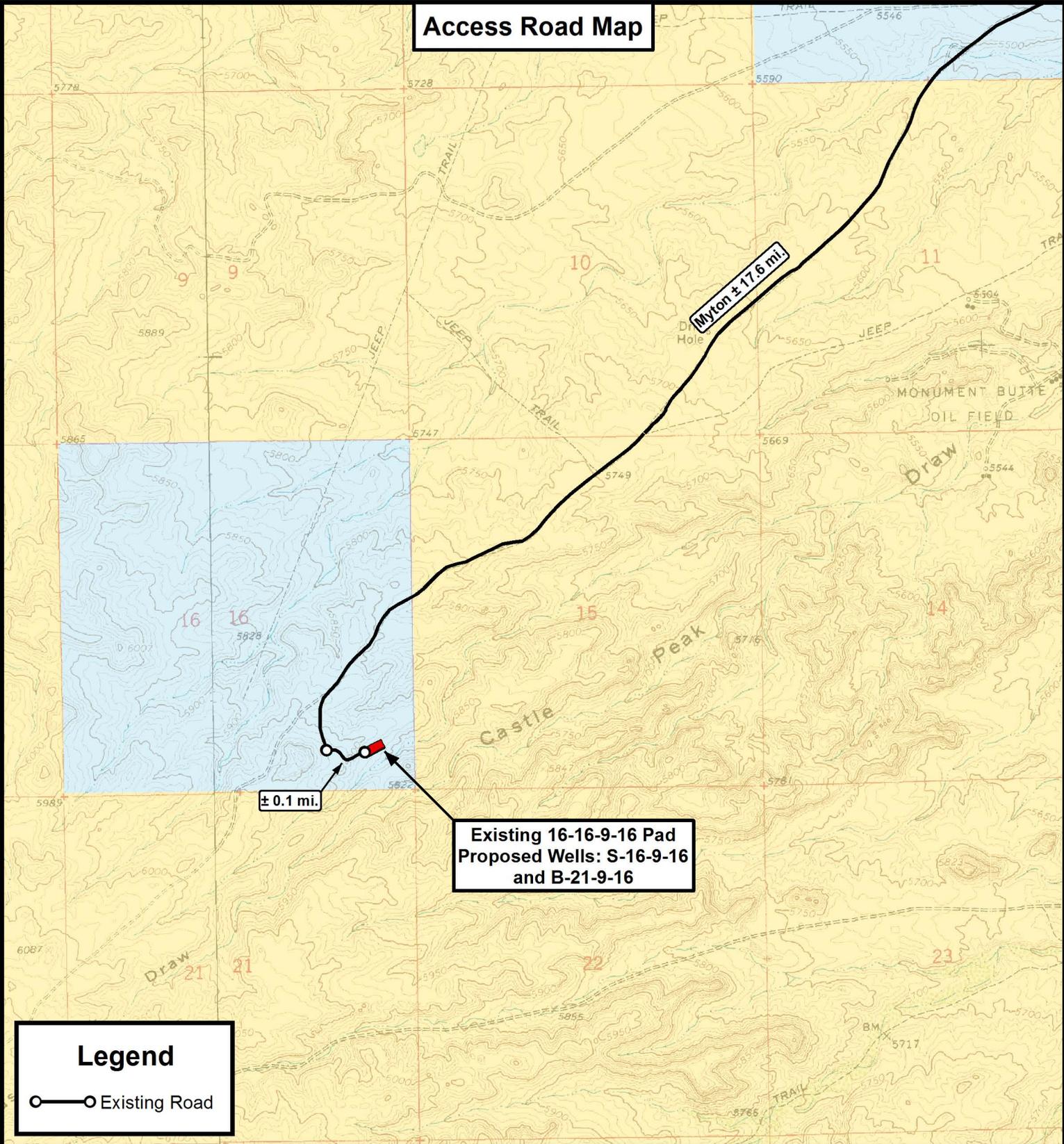
Existing 16-16-9-16 Pad
 Proposed Wells: S-16-9-16 and B-21-9-16
 Sec. 16, T9S, R16E, S.L.B.&M.
 Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			V2
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.

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NEWFIELD EXPLORATION COMPANY

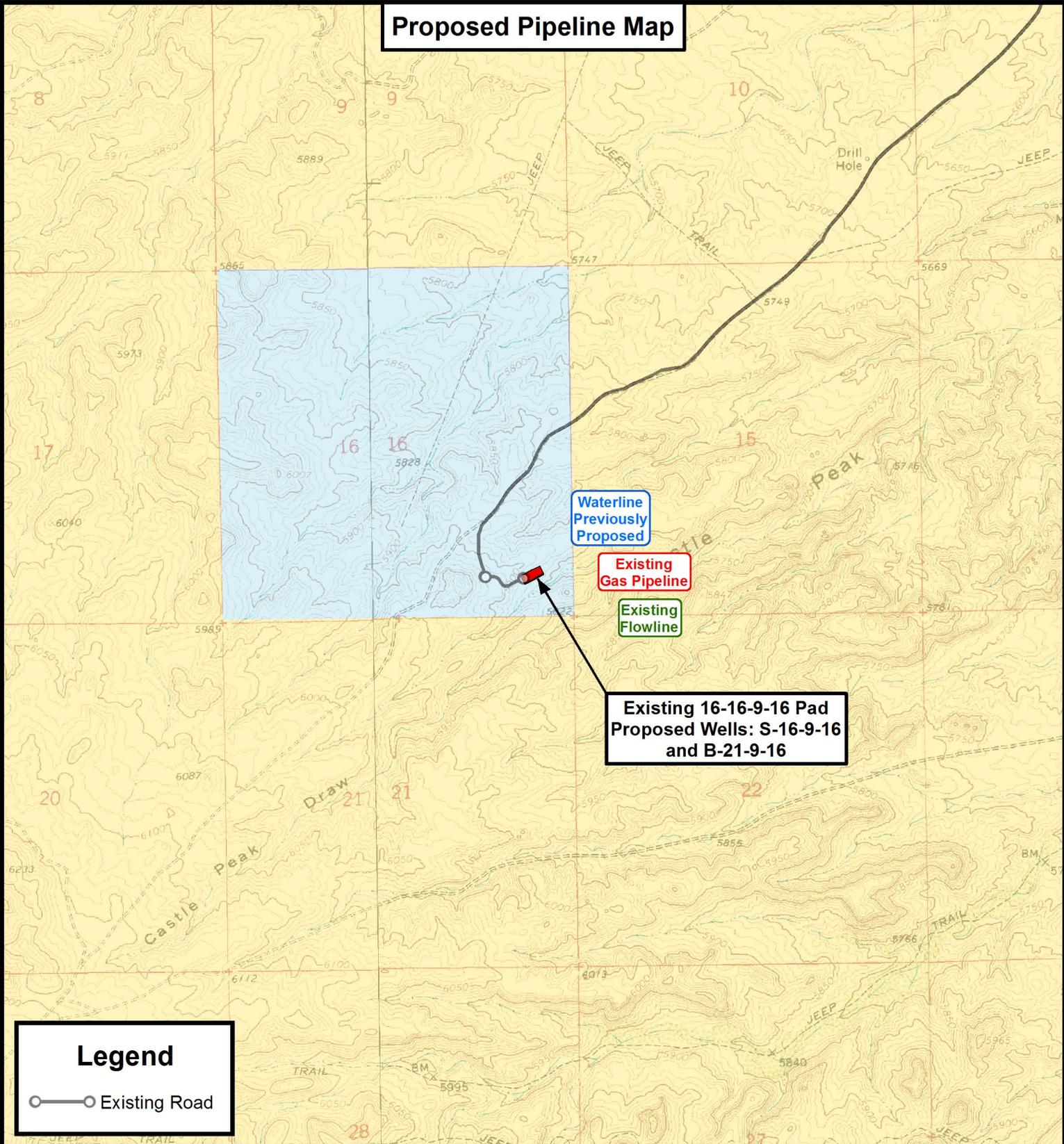
Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16 and B-21-9-16
Sec. 16, T9S, R16E, S.L.B.&M.
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			V2
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET
B

Proposed Pipeline Map



Legend

○—○ Existing Road

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NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16 and B-21-9-16
Sec. 16, T9S, R16E, S.L.B.&M.
Duchesne County, UT.

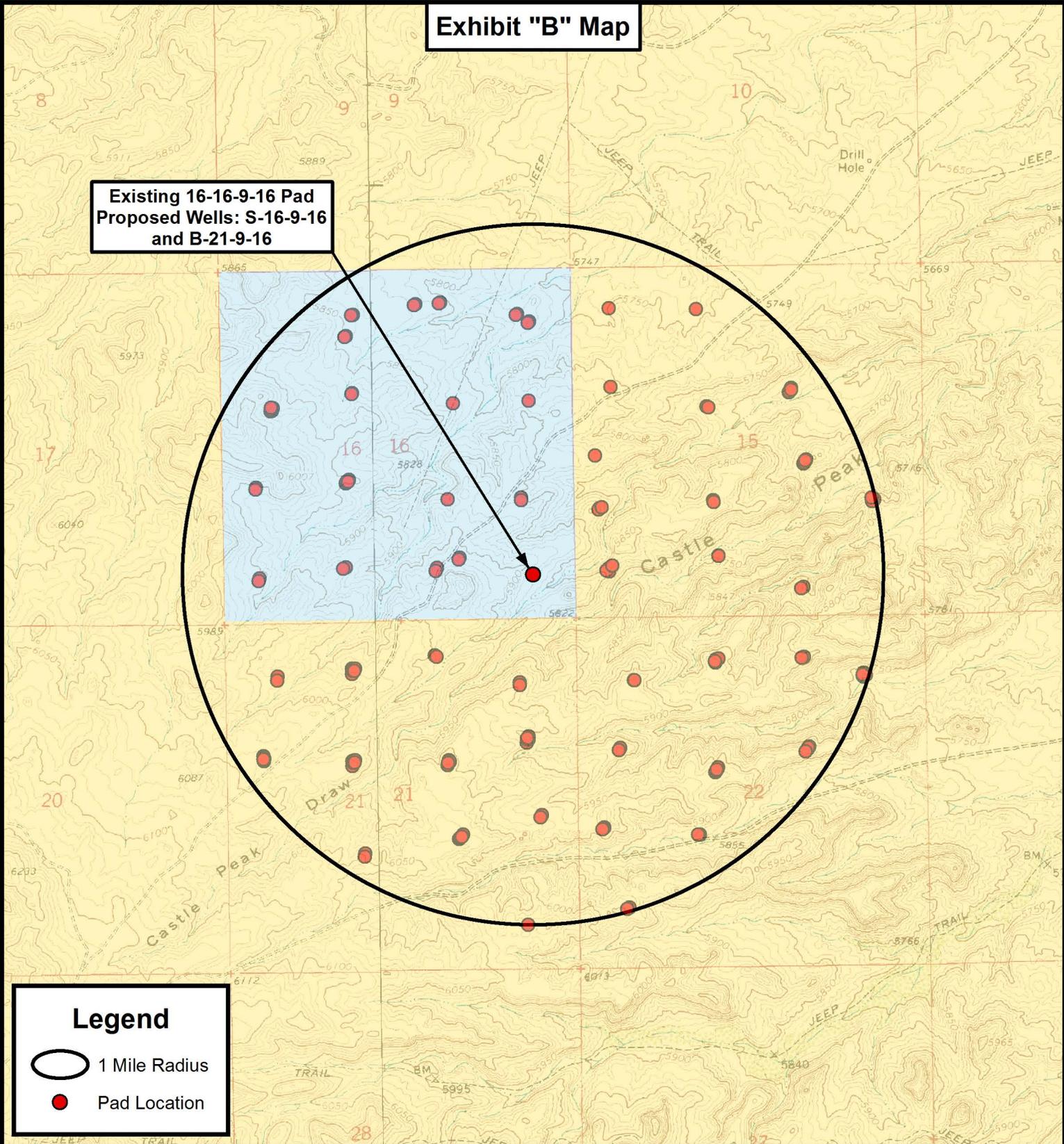
DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			
SCALE:	1" = 2,000'			V2

TOPOGRAPHIC MAP

SHEET
C

Exhibit "B" Map

**Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16
and B-21-9-16**



Legend

-  1 Mile Radius
-  Pad Location

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NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16 and B-21-9-16
Sec. 16, T9S, R16E, S.L.B.&M.
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			V2
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET
D

Coordinate Report

Well Number	Feature Type	Latitude (NAD 83) (DMS)	Longitude (NAD 83) (DMS)
16-16-9-16	Surface Hole	40° 01' 31.48" N	110° 07' 01.80" W
S-16-9-16	Surface Hole	40° 01' 31.28" N	110° 07' 01.88" W
B-21-9-16	Surface Hole	40° 01' 31.08" N	110° 07' 01.97" W
S-16-9-16	Center of Pattern	40° 01' 37.91" N	110° 07' 10.44" W
B-21-9-16	Center of Pattern	40° 01' 25.61" N	110° 07' 10.24" W
S-16-9-16	Bottom of Hole	40° 01' 39.95" N	110° 07' 13.07" W
B-21-9-16	Bottom of Hole	40° 01' 23.69" N	110° 07' 13.15" W
Well Number	Feature Type	Latitude (NAD 83) (DD)	Longitude (NAD 83) (DD)
16-16-9-16	Surface Hole	40.025411	110.117167
S-16-9-16	Surface Hole	40.025355	110.117190
B-21-9-16	Surface Hole	40.025300	110.117213
S-16-9-16	Center of Pattern	40.027198	110.119566
B-21-9-16	Center of Pattern	40.023781	110.119512
S-16-9-16	Bottom of Hole	40.027765	110.120298
B-21-9-16	Bottom of Hole	40.023248	110.120318
Well Number	Feature Type	Northing (NAD 83) (UTM Meters)	Longitude (NAD 83) (UTM Meters)
16-16-9-16	Surface Hole	4430950.816	575330.954
S-16-9-16	Surface Hole	4430944.642	575329.047
B-21-9-16	Surface Hole	4430938.468	575327.140
S-16-9-16	Center of Pattern	4431147.142	575124.259
B-21-9-16	Center of Pattern	4430767.951	575132.664
S-16-9-16	Bottom of Hole	4431209.472	575061.223
B-21-9-16	Bottom of Hole	4430708.114	575064.419
Well Number	Feature Type	Latitude (NAD 27) (DMS)	Longitude (NAD 27) (DMS)
16-16-9-16	Surface Hole	40° 01' 31.61" N	110° 06' 59.26" W
S-16-9-16	Surface Hole	40° 01' 31.41" N	110° 06' 59.34" W
B-21-9-16	Surface Hole	40° 01' 31.21" N	110° 06' 59.42" W
S-16-9-16	Center of Pattern	40° 01' 38.05" N	110° 07' 07.89" W
B-21-9-16	Center of Pattern	40° 01' 25.75" N	110° 07' 07.70" W
S-16-9-16	Bottom of Hole	40° 01' 40.09" N	110° 07' 10.53" W
B-21-9-16	Bottom of Hole	40° 01' 23.83" N	110° 07' 10.60" W



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NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16 and B-21-9-16
Sec. 16, T9S, R16E, S.L.B.&M.
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.
DATE:	01-09-2014		
VERSION:	V2		

COORDINATE REPORT

SHEET

1

RECEIVED: July 10, 2014

NEWFIELD



NEWFIELD EXPLORATION

**USGS Myton SW (UT)
SECTION 16 T9S, R16E
S-16-9-16**

Wellbore #1

Plan: Design #1

Standard Planning Report

31 December, 2013





Payzone Directional
Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well S-16-9-16
Company:	NEWFIELD EXPLORATION	TVD Reference:	S-16-9-16 @ 5886.0usft (PLAN)
Project:	USGS Myton SW (UT)	MD Reference:	S-16-9-16 @ 5886.0usft (PLAN)
Site:	SECTION 16 T9S, R16E	North Reference:	True
Well:	S-16-9-16	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 16 T9S, R16E				
Site Position:		Northing:	7,183,440.35 usft	Latitude:	40° 1' 56.460 N
From:	Lat/Long	Easting:	2,023,704.73 usft	Longitude:	110° 7' 51.890 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.88 °

Well	S-16-9-16, SHL: 40°01'31.28" -110°07'01.88"					
Well Position	+N/-S	-2,547.5 usft	Northing:	7,180,952.73 usft	Latitude:	40° 1' 31.280 N
	+E/-W	3,890.1 usft	Easting:	2,027,633.38 usft	Longitude:	110° 7' 1.880 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	5,886.0 usft	Ground Level:	5,876.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/31/2013	11.01	65.70	51,998

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	314.36

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	
1,539.0	14.09	314.36	1,529.6	80.3	-82.1	1.50	1.50	-4.86	314.36	
4,952.0	14.09	314.36	4,840.0	661.0	-676.0	0.00	0.00	0.00	0.00	S-16-9-16 TGT
6,148.0	14.09	314.36	6,000.0	864.5	-884.0	0.00	0.00	0.00	0.00	



Payzone Directional
Planning Report



Database: EDM 5000.1 Single User Db
Company: NEWFIELD EXPLORATION
Project: USGS Myton SW (UT)
Site: SECTION 16 T9S, R16E
Well: S-16-9-16
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well S-16-9-16
TVD Reference: S-16-9-16 @ 5886.0usft (PLAN)
MD Reference: S-16-9-16 @ 5886.0usft (PLAN)
North Reference: True
Survey Calculation Method: Minimum Curvature

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	314.36	700.0	0.9	-0.9	1.3	1.50	1.50	0.00
800.0	3.00	314.36	799.9	3.7	-3.7	5.2	1.50	1.50	0.00
900.0	4.50	314.36	899.7	8.2	-8.4	11.8	1.50	1.50	0.00
1,000.0	6.00	314.36	999.3	14.6	-15.0	20.9	1.50	1.50	0.00
1,100.0	7.50	314.36	1,098.6	22.8	-23.4	32.7	1.50	1.50	0.00
1,200.0	9.00	314.36	1,197.5	32.9	-33.6	47.0	1.50	1.50	0.00
1,300.0	10.50	314.36	1,296.1	44.7	-45.7	64.0	1.50	1.50	0.00
1,400.0	12.00	314.36	1,394.2	58.4	-59.7	83.5	1.50	1.50	0.00
1,500.0	13.50	314.36	1,491.7	73.8	-75.5	105.5	1.50	1.50	0.00
1,539.0	14.09	314.36	1,529.6	80.3	-82.1	114.8	1.50	1.50	0.00
1,600.0	14.09	314.36	1,588.7	90.7	-92.7	129.7	0.00	0.00	0.00
1,700.0	14.09	314.36	1,685.7	107.7	-110.1	154.0	0.00	0.00	0.00
1,800.0	14.09	314.36	1,782.7	124.7	-127.5	178.4	0.00	0.00	0.00
1,900.0	14.09	314.36	1,879.7	141.7	-144.9	202.7	0.00	0.00	0.00
2,000.0	14.09	314.36	1,976.7	158.7	-162.3	227.0	0.00	0.00	0.00
2,100.0	14.09	314.36	2,073.7	175.7	-179.7	251.4	0.00	0.00	0.00
2,200.0	14.09	314.36	2,170.7	192.8	-197.1	275.7	0.00	0.00	0.00
2,300.0	14.09	314.36	2,267.7	209.8	-214.5	300.0	0.00	0.00	0.00
2,400.0	14.09	314.36	2,364.7	226.8	-231.9	324.4	0.00	0.00	0.00
2,500.0	14.09	314.36	2,461.7	243.8	-249.3	348.7	0.00	0.00	0.00
2,600.0	14.09	314.36	2,558.7	260.8	-266.7	373.0	0.00	0.00	0.00
2,700.0	14.09	314.36	2,655.7	277.8	-284.1	397.4	0.00	0.00	0.00
2,800.0	14.09	314.36	2,752.7	294.8	-301.5	421.7	0.00	0.00	0.00
2,900.0	14.09	314.36	2,849.7	311.9	-318.9	446.1	0.00	0.00	0.00
3,000.0	14.09	314.36	2,946.6	328.9	-336.3	470.4	0.00	0.00	0.00
3,100.0	14.09	314.36	3,043.6	345.9	-353.7	494.7	0.00	0.00	0.00
3,200.0	14.09	314.36	3,140.6	362.9	-371.1	519.1	0.00	0.00	0.00
3,300.0	14.09	314.36	3,237.6	379.9	-388.5	543.4	0.00	0.00	0.00
3,400.0	14.09	314.36	3,334.6	396.9	-405.9	567.7	0.00	0.00	0.00
3,500.0	14.09	314.36	3,431.6	414.0	-423.3	592.1	0.00	0.00	0.00
3,600.0	14.09	314.36	3,528.6	431.0	-440.7	616.4	0.00	0.00	0.00
3,700.0	14.09	314.36	3,625.6	448.0	-458.1	640.7	0.00	0.00	0.00
3,800.0	14.09	314.36	3,722.6	465.0	-475.5	665.1	0.00	0.00	0.00
3,900.0	14.09	314.36	3,819.6	482.0	-492.9	689.4	0.00	0.00	0.00
4,000.0	14.09	314.36	3,916.6	499.0	-510.3	713.7	0.00	0.00	0.00
4,100.0	14.09	314.36	4,013.6	516.0	-527.7	738.1	0.00	0.00	0.00
4,200.0	14.09	314.36	4,110.6	533.1	-545.1	762.4	0.00	0.00	0.00
4,300.0	14.09	314.36	4,207.6	550.1	-562.5	786.8	0.00	0.00	0.00
4,400.0	14.09	314.36	4,304.6	567.1	-579.9	811.1	0.00	0.00	0.00
4,500.0	14.09	314.36	4,401.6	584.1	-597.3	835.4	0.00	0.00	0.00
4,600.0	14.09	314.36	4,498.5	601.1	-614.7	859.8	0.00	0.00	0.00
4,700.0	14.09	314.36	4,595.5	618.1	-632.1	884.1	0.00	0.00	0.00
4,800.0	14.09	314.36	4,692.5	635.1	-649.5	908.4	0.00	0.00	0.00
4,900.0	14.09	314.36	4,789.5	652.2	-666.9	932.8	0.00	0.00	0.00
4,952.0	14.09	314.36	4,840.0	661.0	-676.0	945.4	0.00	0.00	0.00
5,000.0	14.09	314.36	4,886.5	669.2	-684.3	957.1	0.00	0.00	0.00
5,100.0	14.09	314.36	4,983.5	686.2	-701.7	981.4	0.00	0.00	0.00



Payzone Directional
Planning Report



Database: EDM 5000.1 Single User Db
Company: NEWFIELD EXPLORATION
Project: USGS Myton SW (UT)
Site: SECTION 16 T9S, R16E
Well: S-16-9-16
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well S-16-9-16
TVD Reference: S-16-9-16 @ 5886.0usft (PLAN)
MD Reference: S-16-9-16 @ 5886.0usft (PLAN)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.0	14.09	314.36	5,080.5	703.2	-719.1	1,005.8	0.00	0.00	0.00
5,300.0	14.09	314.36	5,177.5	720.2	-736.5	1,030.1	0.00	0.00	0.00
5,400.0	14.09	314.36	5,274.5	737.2	-753.9	1,054.5	0.00	0.00	0.00
5,500.0	14.09	314.36	5,371.5	754.3	-771.3	1,078.8	0.00	0.00	0.00
5,600.0	14.09	314.36	5,468.5	771.3	-788.7	1,103.1	0.00	0.00	0.00
5,700.0	14.09	314.36	5,565.5	788.3	-806.1	1,127.5	0.00	0.00	0.00
5,800.0	14.09	314.36	5,662.5	805.3	-823.5	1,151.8	0.00	0.00	0.00
5,900.0	14.09	314.36	5,759.5	822.3	-840.9	1,176.1	0.00	0.00	0.00
6,000.0	14.09	314.36	5,856.5	839.3	-858.3	1,200.5	0.00	0.00	0.00
6,100.0	14.09	314.36	5,953.4	856.3	-875.7	1,224.8	0.00	0.00	0.00
6,148.0	14.09	314.36	6,000.0	864.5	-884.0	1,236.5	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
S-16-9-16 TGT - hit/miss target - Shape - Circle (radius 75.0)	0.00	0.00	4,840.0	661.0	-676.0	7,181,603.22	2,026,947.29	40° 1' 37.813 N	110° 7' 10.570 W



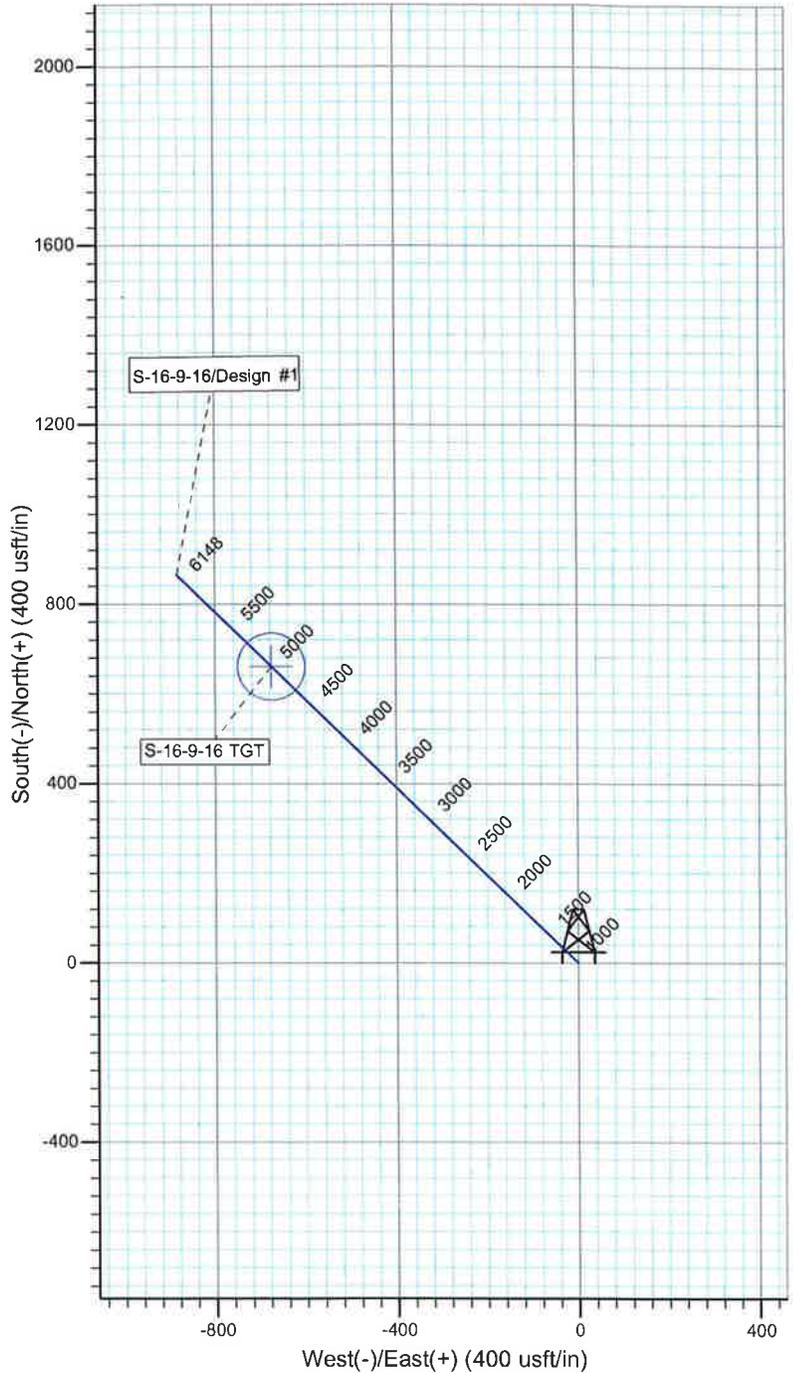
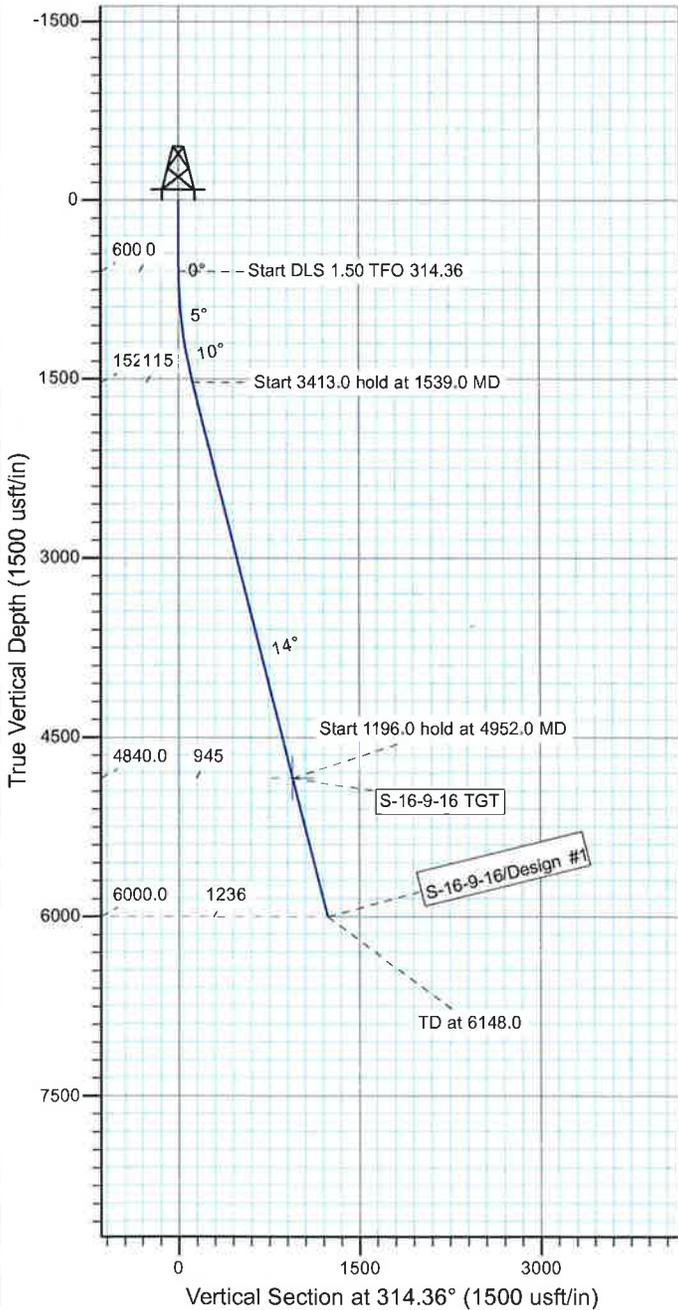
Project: USGS Myton SW (UT)
 Site: SECTION 16 T9S, R16E
 Well: S-16-9-16
 Wellbore: Wellbore #1
 Design: Design #1



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	



**NEWFIELD PRODUCTION COMPANY
GMBU S-16-9-16
AT SURFACE: SE/SE SECTION 16, T9S R16E
DUCHESNE 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 S-16-9-16 located in the SE 1/4 SE 1/4 Section 16, T9S, R16E, Duchesne 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 – 10.0 miles \pm to it's junction with an existing road to the southwest; proceed in a southwesterly direction – 6.2 miles \pm to it's junction with an existing road to the east; proceed in a easterly direction – 0.1 miles \pm to it's junction with the beginning of the access road to the existing 16-16-9-16 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 16-16-9-16 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. United State Department of Interior Permit # 14-UT-60122, 4/1/14, prepared by Montgomery Archaeological Consultants. Paleontological Resource Survey prepared by, SWCA. Report # UT14-14273-43, 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 S-16-9-16, 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 S-16-9-16, 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 #S-16-9-16, Section 16, Township 9S, Range 16E: Lease ML-16532, Duchesne 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, State Bond #B001834.

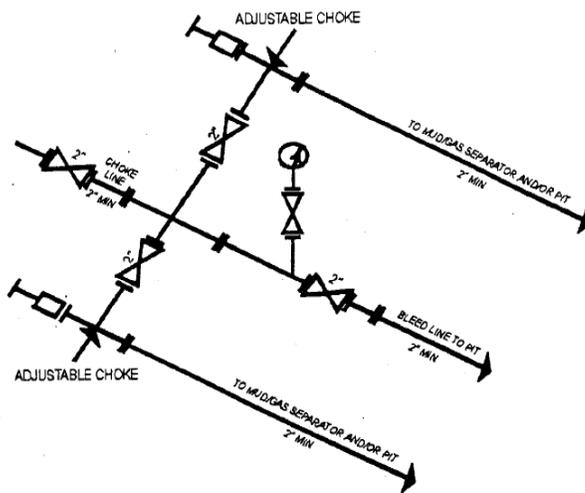
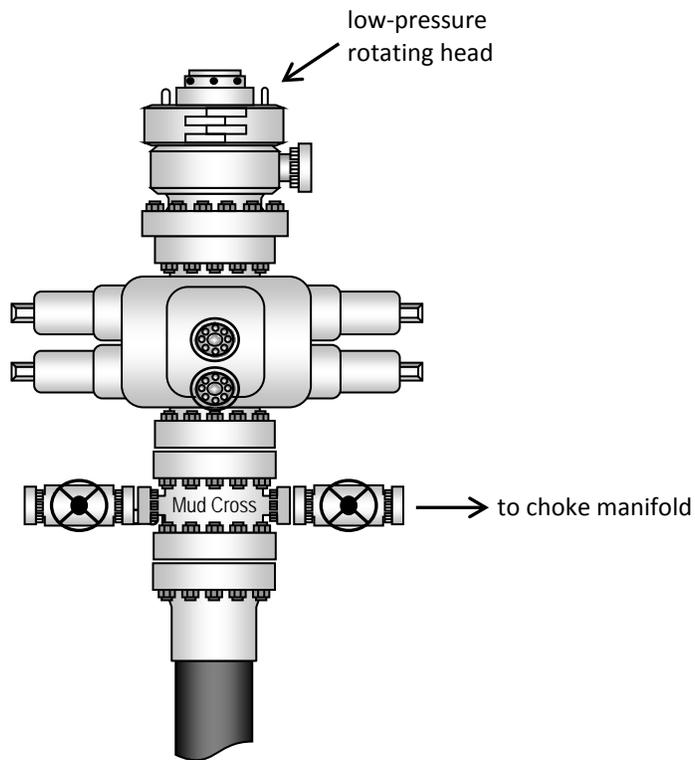
I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will 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 Analyst
Newfield Production Company

Typical 2M BOP stack configuration



2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

NEWFIELD EXPLORATION COMPANY

WELL PAD INTERFERENCE PLAT

EXISTING 16-16-9-16 PAD

PROPOSED WELLS: S-16-9-16 AND B-21-9-16

Pad Location: SESE Section 16, T9S, R16E, S.L.B.&M.

TOP HOLE FOOTAGES

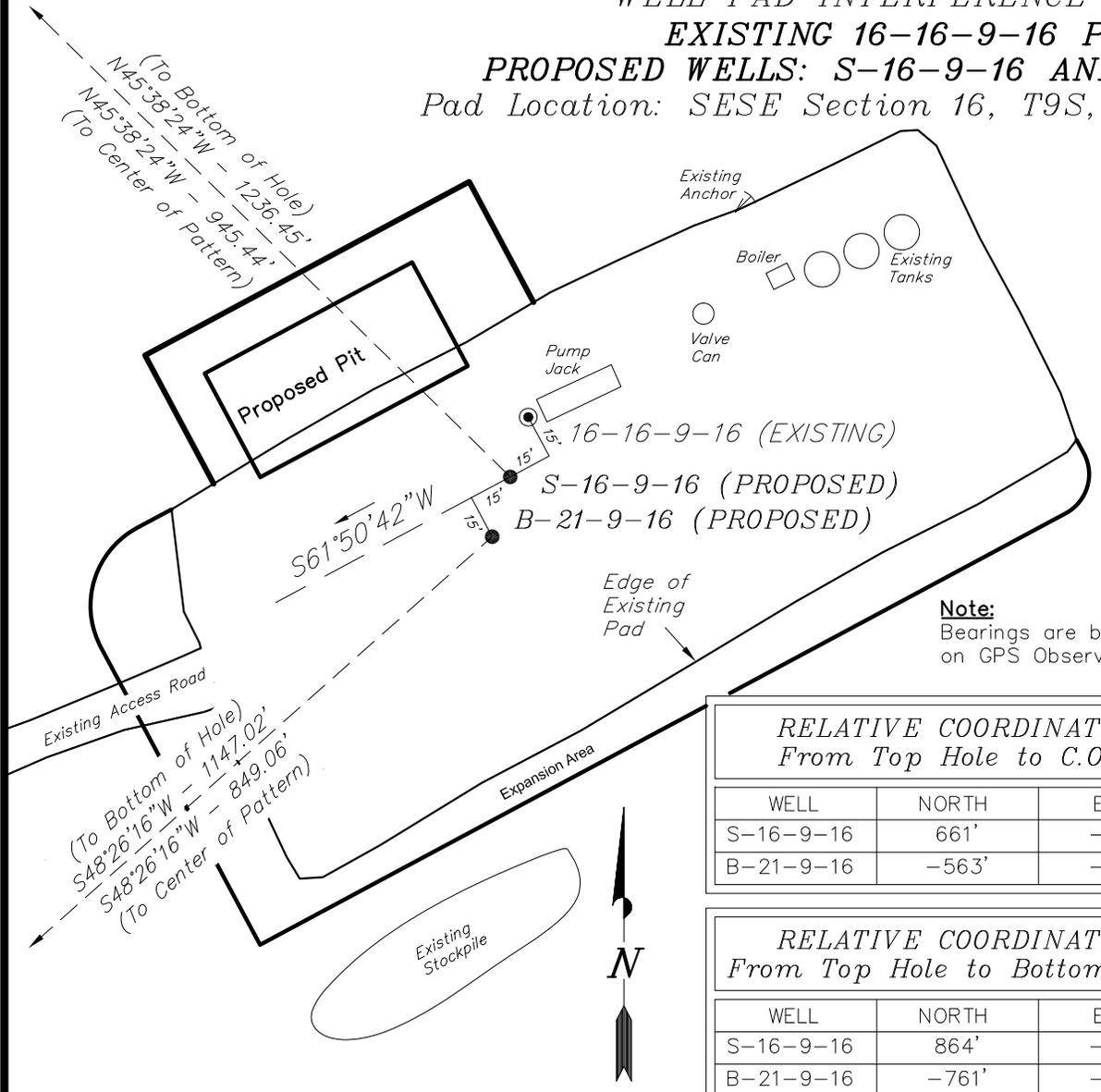
S-16-9-16
634' FSL & 665' FEL
B-21-9-16
614' FSL & 672' FEL

CENTER OF PATTERN FOOTAGES

S-16-9-16
1305' FSL & 1328' FEL
B-21-9-16
60' FSL & 1318' FEL

BOTTOM HOLE FOOTAGES

S-16-9-16
1512' FSL & 1532' FEL
B-21-9-16
134' FNL & 1544' FEL



Note:
Bearings are based on GPS Observations.

LATITUDE & LONGITUDE Surface position of Wells (NAD 83)		
WELL	LATITUDE	LONGITUDE
16-16-9-16	40° 01' 31.48"	110° 07' 01.80"
S-16-9-16	40° 01' 31.28"	110° 07' 01.88"
B-21-9-16	40° 01' 31.08"	110° 07' 01.97"

RELATIVE COORDINATES From Top Hole to C.O.P.		
WELL	NORTH	EAST
S-16-9-16	661'	-676'
B-21-9-16	-563'	-635'

LATITUDE & LONGITUDE Center of Pattern (NAD 83)		
WELL	LATITUDE	LONGITUDE
S-16-9-16	40° 01' 37.91"	110° 07' 10.44"
B-21-9-16	40° 01' 25.61"	110° 07' 10.24"

RELATIVE COORDINATES From Top Hole to Bottom Hole		
WELL	NORTH	EAST
S-16-9-16	864'	-884'
B-21-9-16	-761'	-858'

LATITUDE & LONGITUDE Bottom Hole Position (NAD 83)		
WELL	LATITUDE	LONGITUDE
S-16-9-16	40° 01' 39.95"	110° 07' 13.07"
B-21-9-16	40° 01' 23.69"	110° 07' 13.15"

SURVEYED BY: G.D.O.	DATE SURVEYED: 11-22-13	VERSION: V2
DRAWN BY: L.K.	DATE DRAWN: 12-18-13	
SCALE: 1" = 60'	REVISED: F.T.M. 06-27-14	

Tri State (435) 781-2501
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

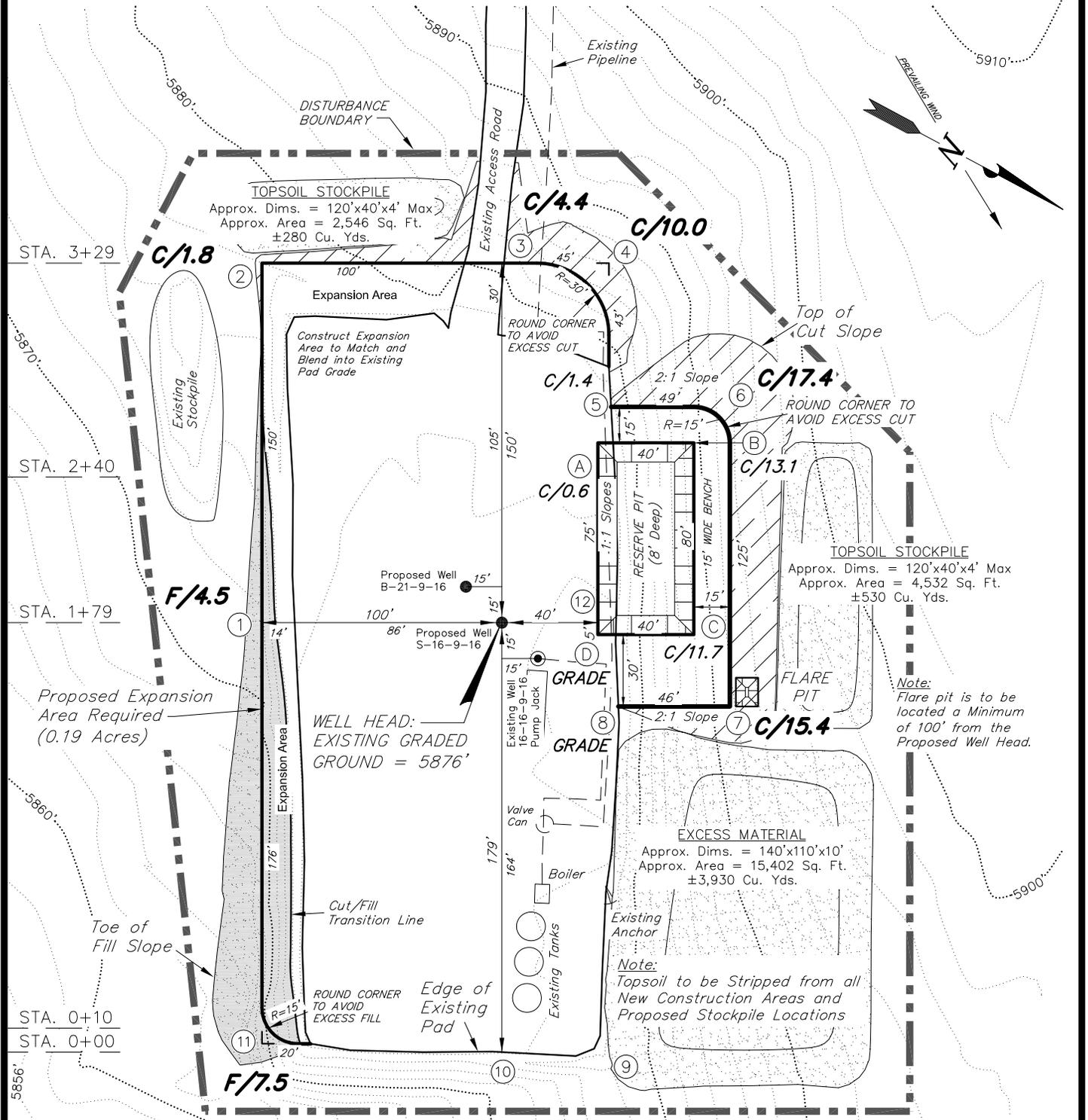
NEWFIELD EXPLORATION COMPANY

LOCATION LAYOUT

EXISTING 16-16-9-16 PAD

PROPOSED WELLS: S-16-9-16 AND B-21-9-16

Pad Location: SESE Section 16, T9S, R16E, S.L.B.&M.



Note:
Flare pit is to be located a Minimum of 100' from the Proposed Well Head.

NOTE:
The topsoil & excess material areas are calculated as being mounds containing 4,740 cubic yards of dirt (a 10% fluff factor is included). The mound areas are calculated with push slopes of 1.5:1 & fall slopes of 1.5:1.

Berm Note:
Construct 2' High Berm around Perimeter of Pad, Except when Cut Exceeds 2'.
Blend new Constructed Berm into Existing Pad Berm where Required.

SURVEYED BY: G.D.O	DATE SURVEYED: 11-22-13	VERSION:
DRAWN BY: L.K.	DATE DRAWN: 12-18-13	V2
SCALE: 1" = 60'	REVISED: F.T.M. 06-27-14	

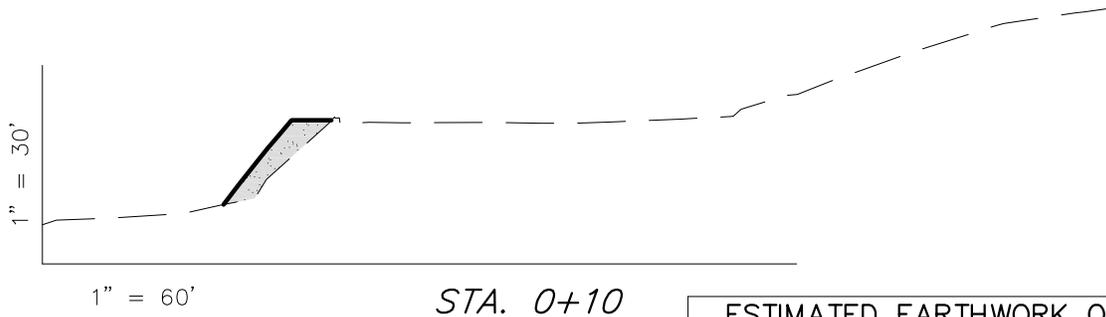
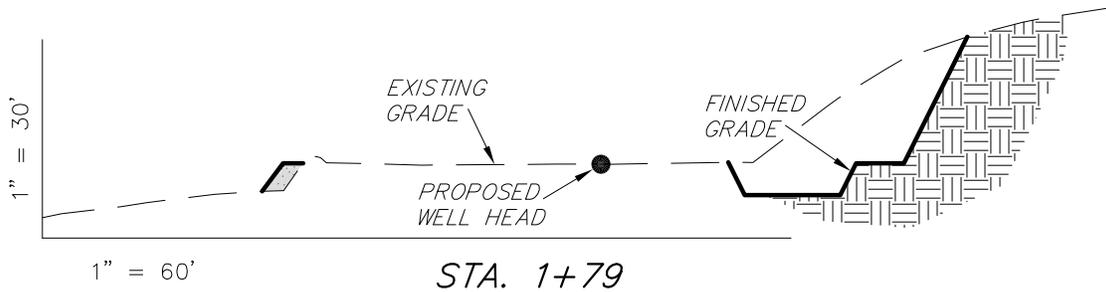
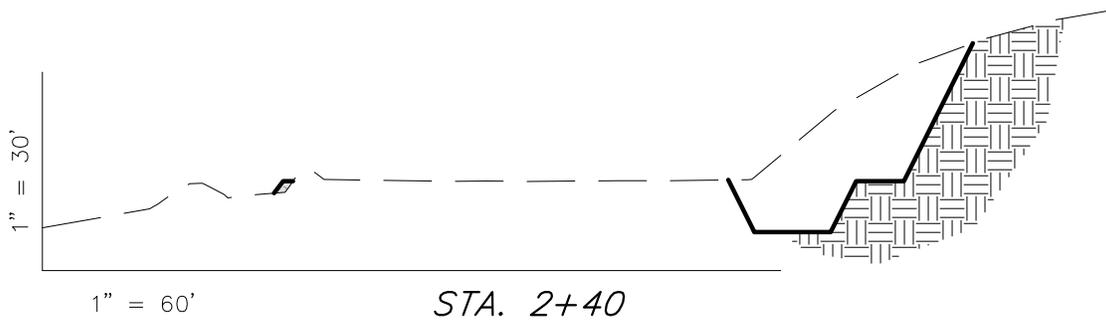
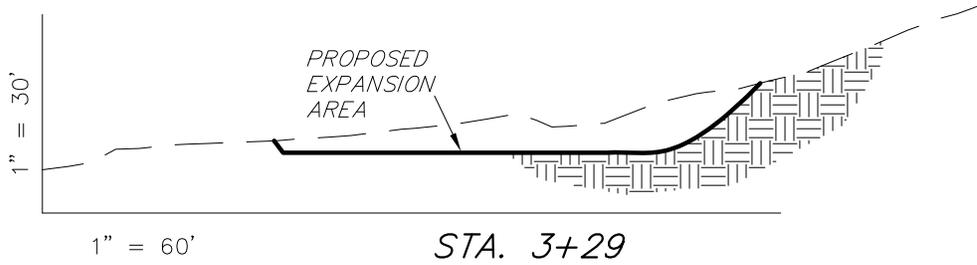
Tri State Land Surveying, Inc. (435) 781-2501
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

NEWFIELD EXPLORATION COMPANY

CROSS SECTIONS EXISTING 16-16-9-16 PAD

PROPOSED WELLS: S-16-9-16 AND B-21-9-16

Pad Location: SESE Section 16, T9S, R16E, S.L.B.&M.



NOTE:
UNLESS OTHERWISE
NOTED ALL CUT/FILL
SLOPES ARE AT 1.5:1

ESTIMATED EARTHWORK QUANTITIES
(No Shrink or swell adjustments have been used)
(Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	3,620	740	Topsoil is not included in Pad Cut	2,880
PIT	690	0		690
TOTALS	4,310	740	740	3,570

SURVEYED BY: G.D.O.	DATE SURVEYED: 11-22-13	VERSION:
DRAWN BY: L.K.	DATE DRAWN: 12-18-13	V2
SCALE: 1" = 60'	REVISED: F.T.M. 06-27-14	

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

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RECEIVED: July 10, 2014

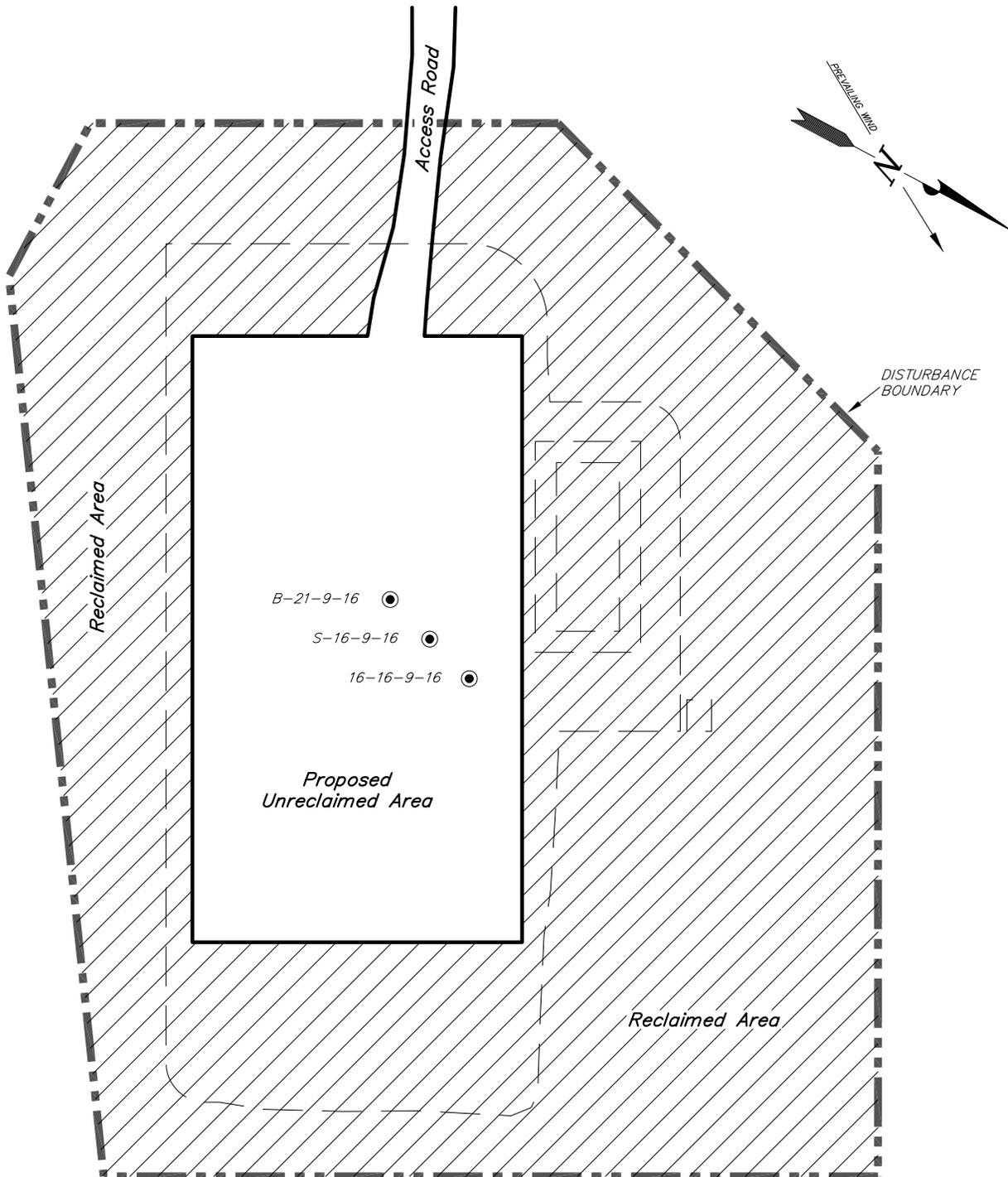
NEWFIELD EXPLORATION COMPANY

RECLAMATION LAYOUT

EXISTING 16-16-9-16 PAD

PROPOSED WELLS: S-16-9-16 AND B-21-9-16

Pad Location: SESE Section 16, T9S, R16E, S.L.B.&M.



Notes:

1. Reclaimed Area to Include Seeding of Approved Vegetation and Sufficient Storm Water Management System.
2. Actual Equipment Layout and Reclaimed Pad Surface Area May Change due to Production Requirements or Site Conditions.

DISTURBED AREA:

TOTAL DISTURBED AREA = ±2.69 ACRES
 TOTAL RECLAIMED AREA = ±2.00 ACRES
 UNRECLAIMED AREA = ±0.69 ACRES

SURVEYED BY: G.D.O.	DATE SURVEYED: 11-22-13	VERSION:
DRAWN BY: L.K.	DATE DRAWN: 12-18-13	V2
SCALE: 1" = 60'	REVISED: F.T.M. 06-27-14	

Tri State (435) 781-2501
 Land Surveying, Inc.
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

NEWFIELD EXPLORATION COMPANY

PROPOSED SITE FACILITY DIAGRAM

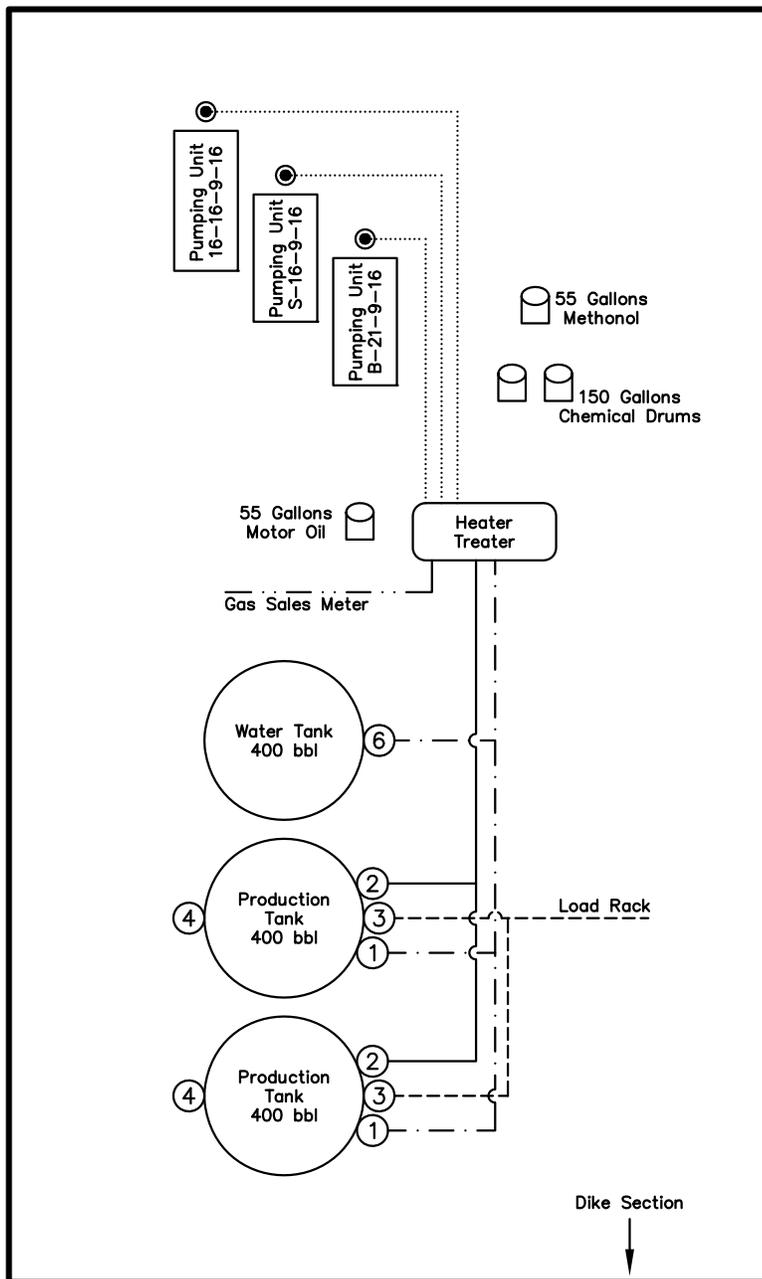
16-16-9-16 PAD

16-16-9-16 ML-16532

S-16-9-16 ML-16532

B-21-9-16 ML-16532

*Pad Location: SESE Section 16, T9S, R16E, S.L.B.&M.
Duchesne County, Utah*



Legend

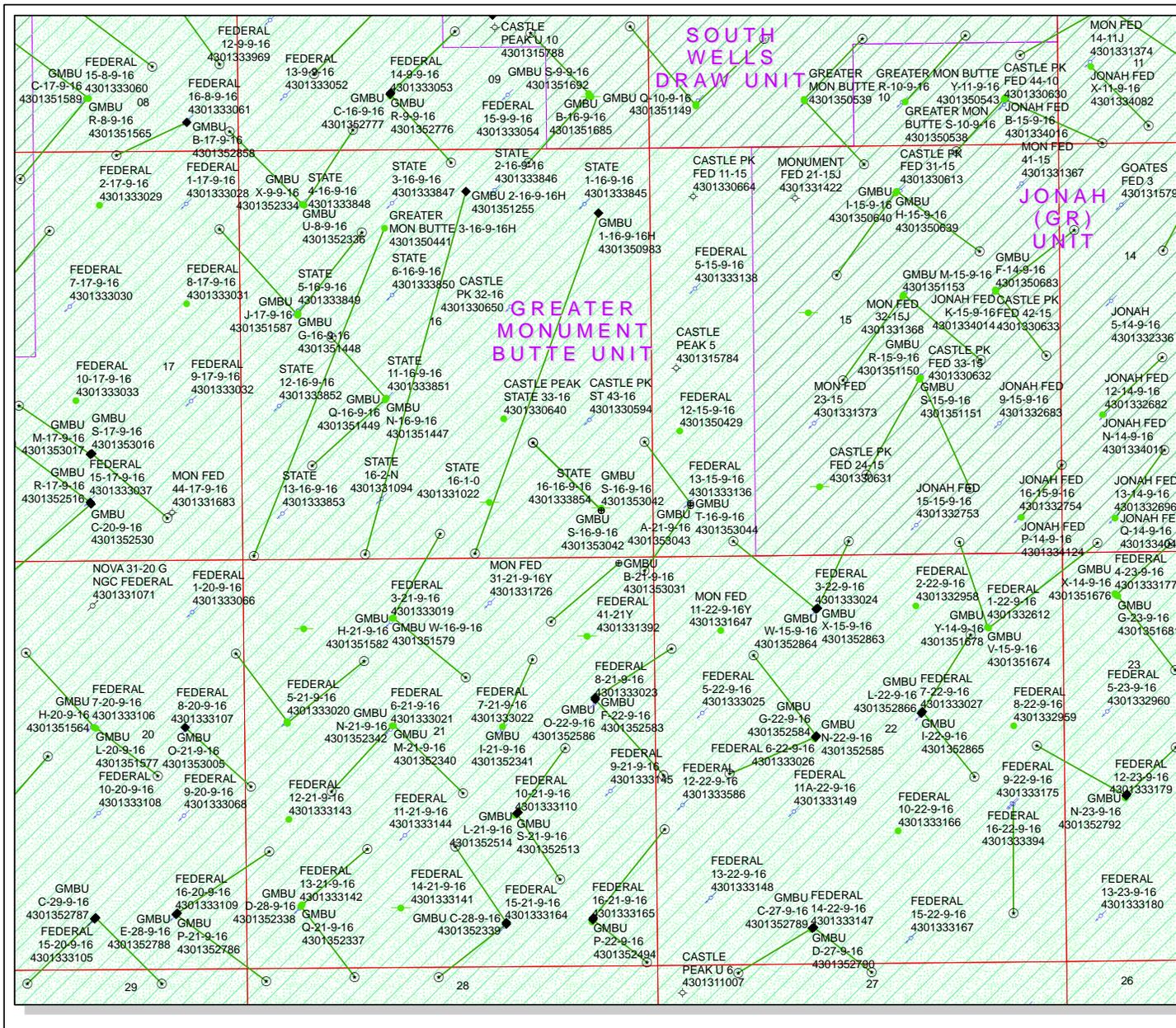
Emulsion Line
Load Rack	-----
Water Line	- . - . - .
Gas Sales	- -
Oil Line	—————

NOT TO SCALE

SURVEYED BY: G.D.O.	DATE SURVEYED: 11-22-13	VERSION: V2
DRAWN BY: L.K.	DATE DRAWN: 12-18-13	
SCALE: NONE	REVISED: F.T.M. 06-27-14	

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

(435) 781-2501



API Number: 4301353042

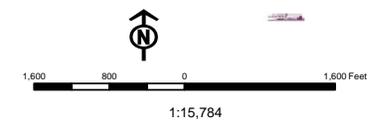
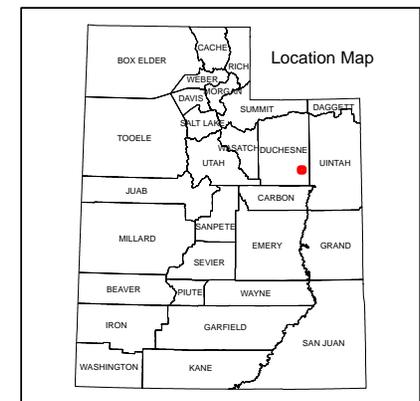
Well Name: GMBU S-16-9-16

Township: T09.0S Range: R16.0E Section: 16 Meridian: S

Operator: NEWFIELD PRODUCTION COMPANY

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

Wells Query		Units	
Status		STATUS	
● APD - Approved Permit	○ DRL - Spudded (Drilling Commenced)	□ ACTIVE	□ EXPLORATORY
★ GS - Gas Storage	★ LOC - New Location	□ GAS STORAGE	□ NF PP OIL
⊕ OPS - Operation Suspended	⊕ PA - Plugged Abandoned	□ NF SECONDARY	□ PI OIL
⊕ PGW - Producing Gas Well	⊕ POW - Producing Oil Well	□ PP GAS	□ PP GEOTHERMAL
⊕ SGW - Shut-in Gas Well	⊕ SGW - Shut-in Oil Well	□ PP OIL	□ SECONDARY
⊕ TA - Temp. Abandoned	○ TW - Test Well	□ TERMINATED	
○ WDW - Water Disposal	○ WIIW - Water Injection Well		
○ WSW - Water Supply Well			
		Fields	
		STATUS	
		□ Unknown	□ ABANDONED
		□ ACTIVE	□ COMBINED
		□ INACTIVE	□ STORAGE
		□ TERMINATED	



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

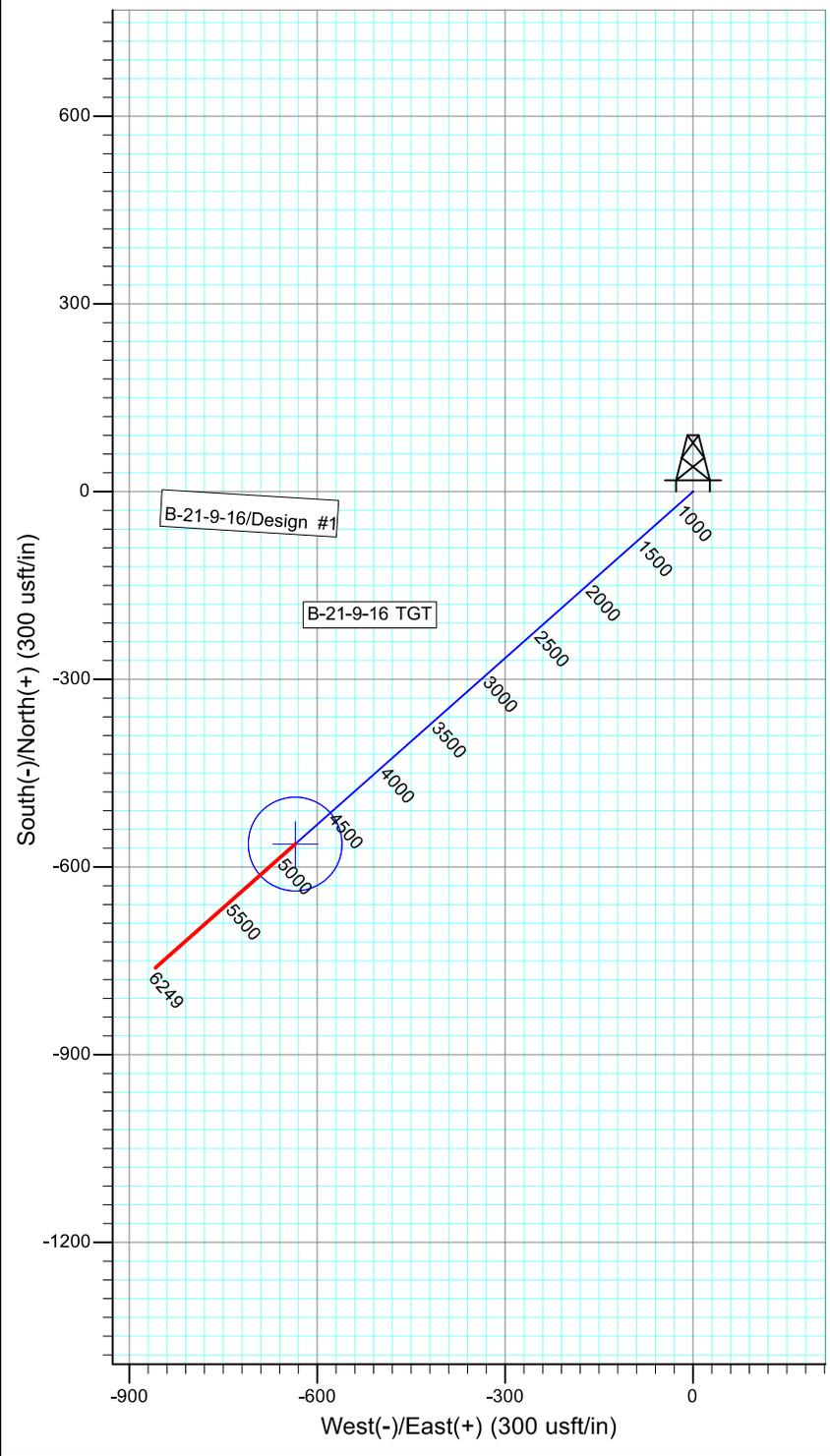
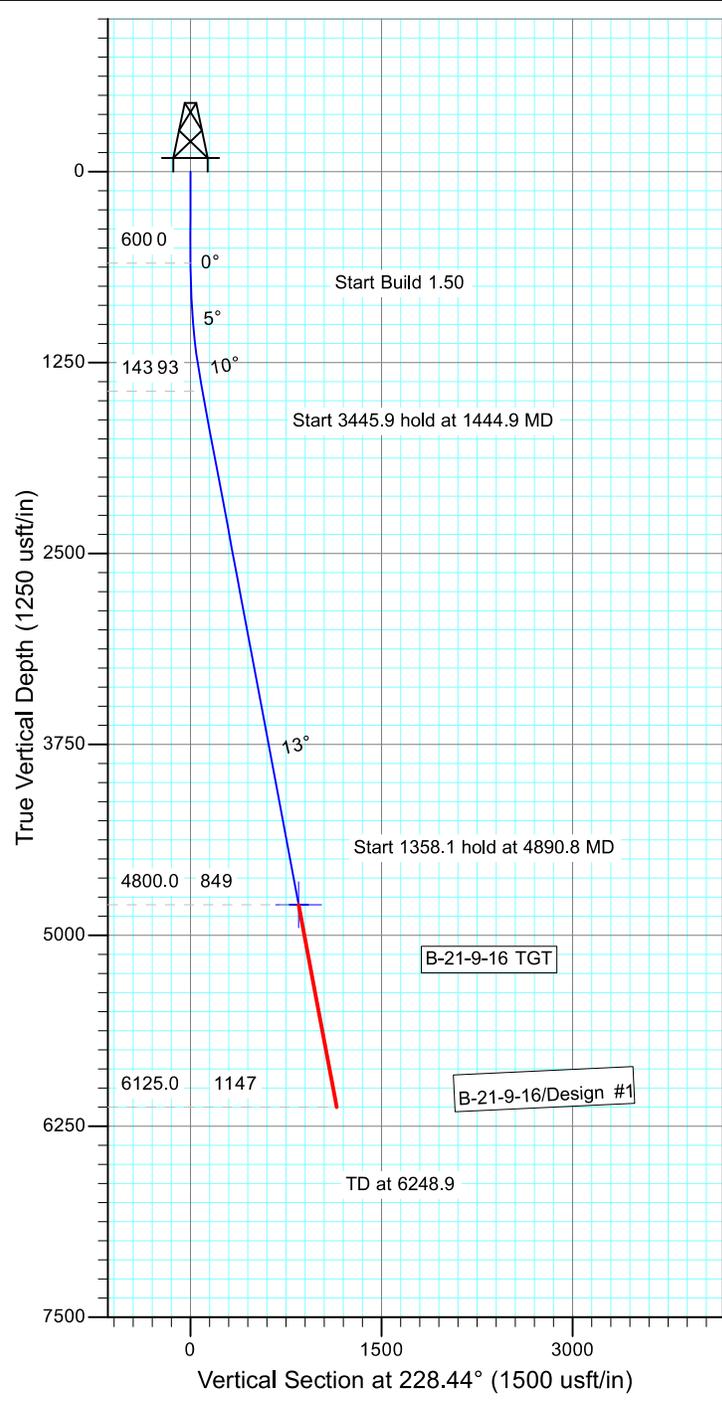
MCoulthard:mc:7-21-14

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	





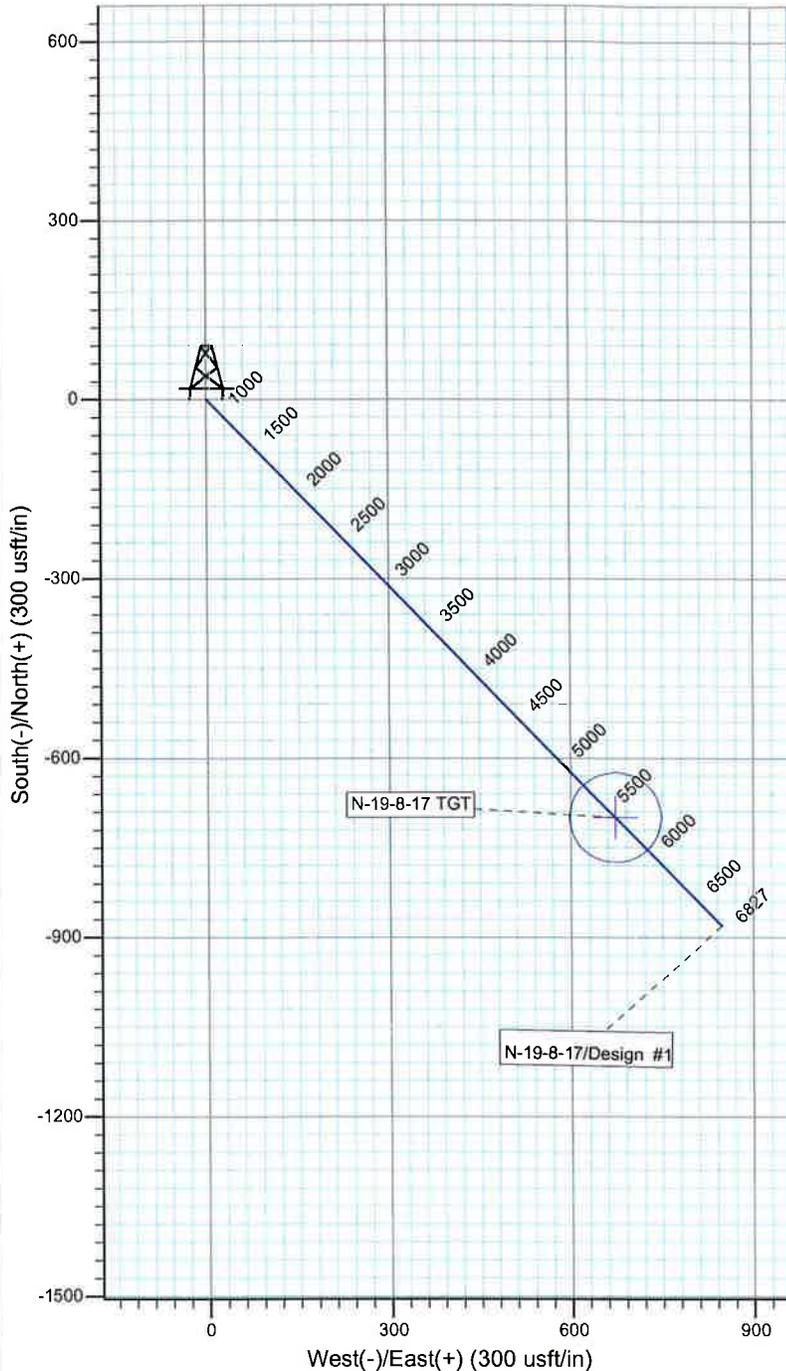
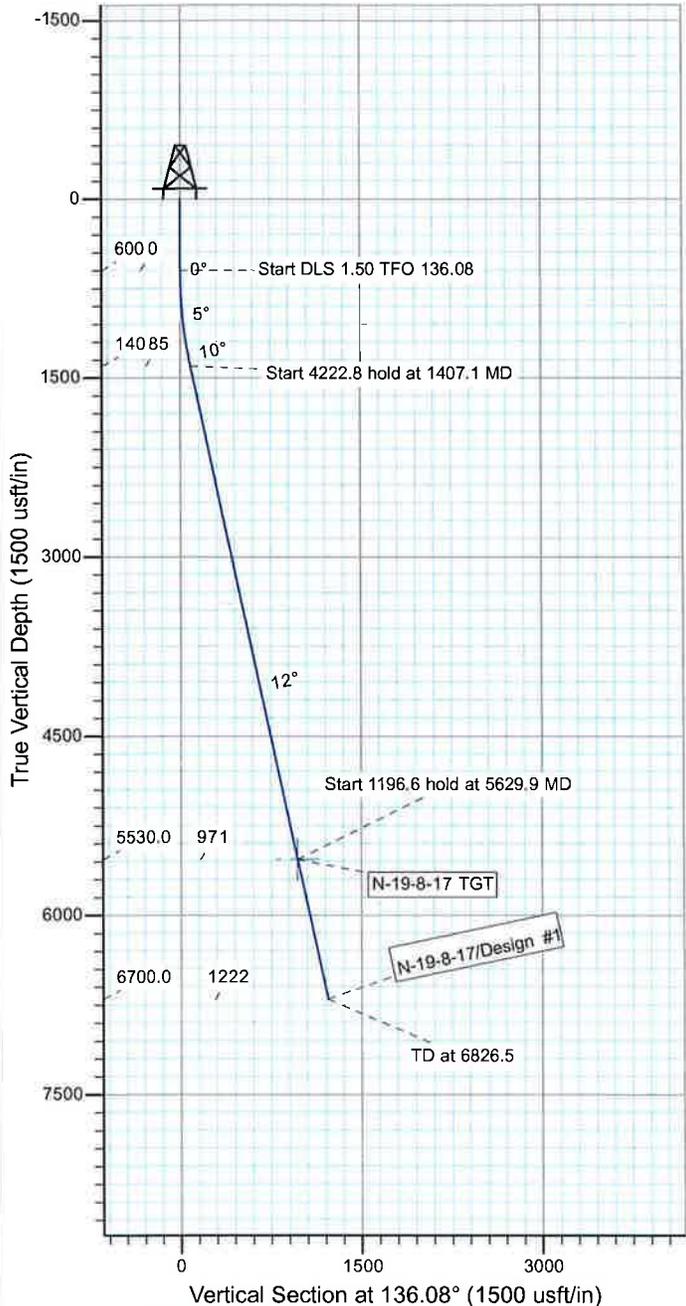
Project: USGS Myton SW (UT)
 Site: SECTION 19 T8S R17E
 Well: N-19-8-17
 Wellbore: Wellbore #1
 Design: Design #1



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	





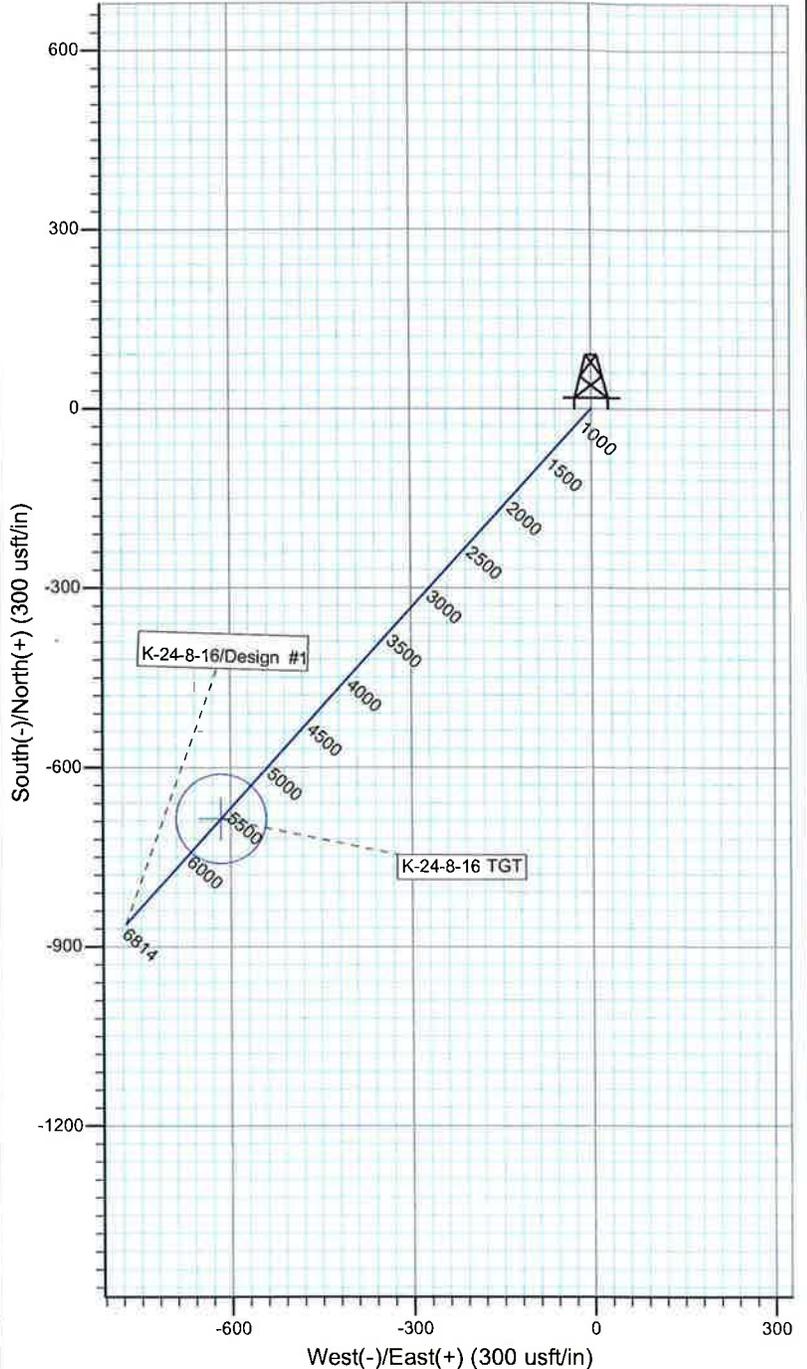
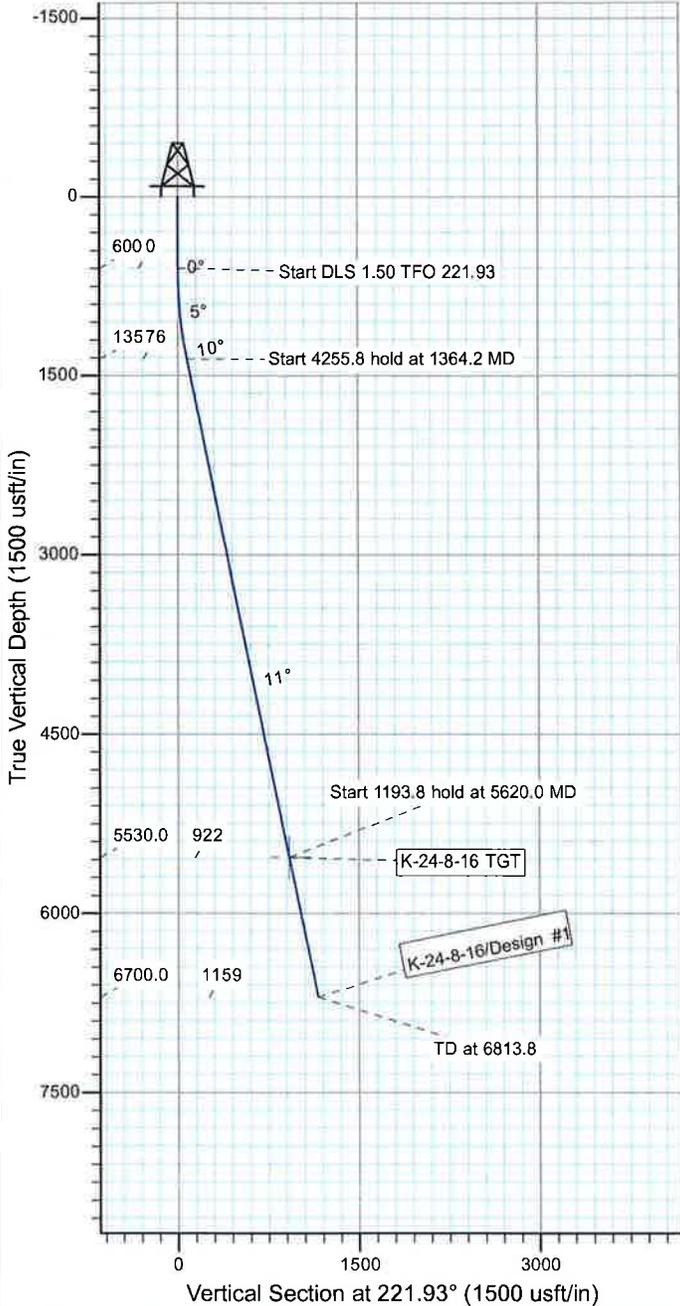
Project: USGS Myton SW (UT)
 Site: SECTION 19 T8S R17E
 Well: K-24-8-16
 Wellbore: Wellbore #1
 Design: Design #1



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	





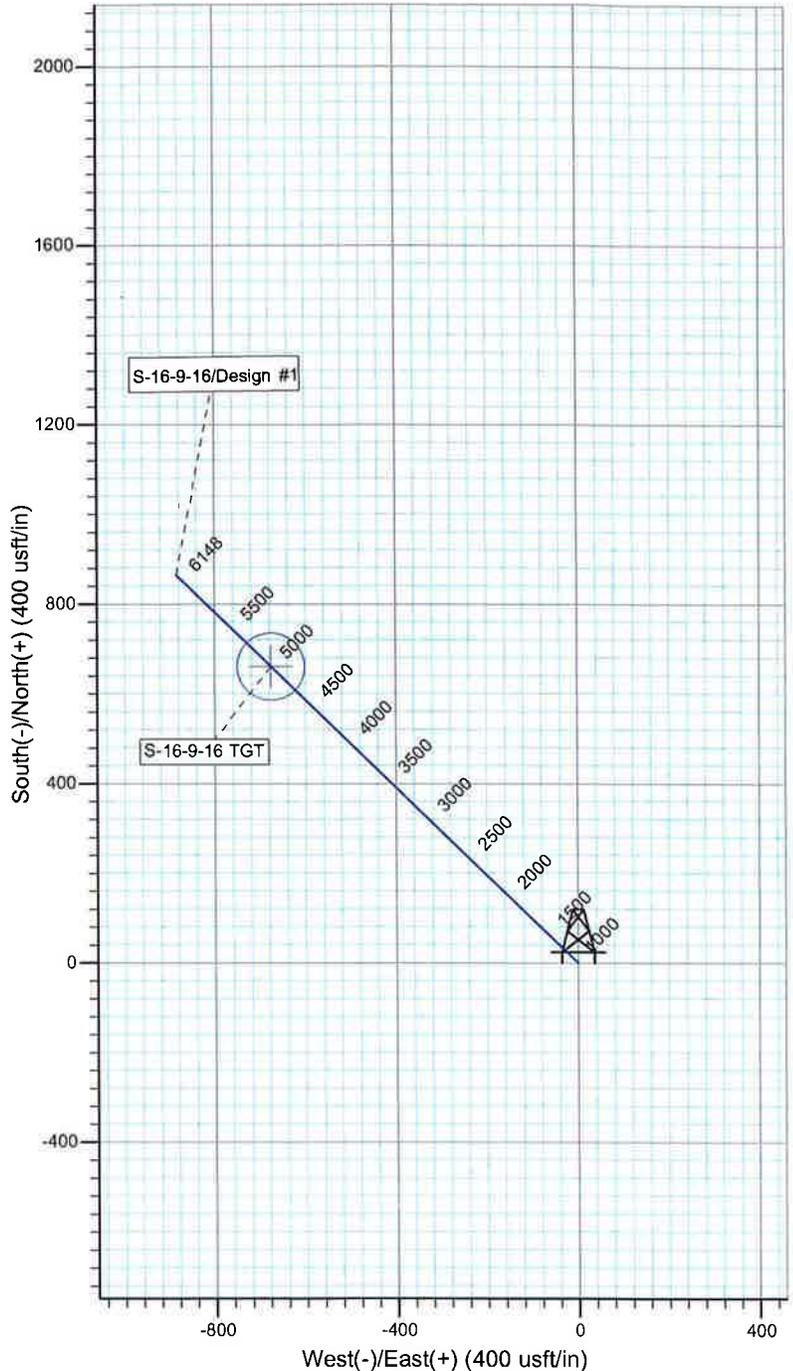
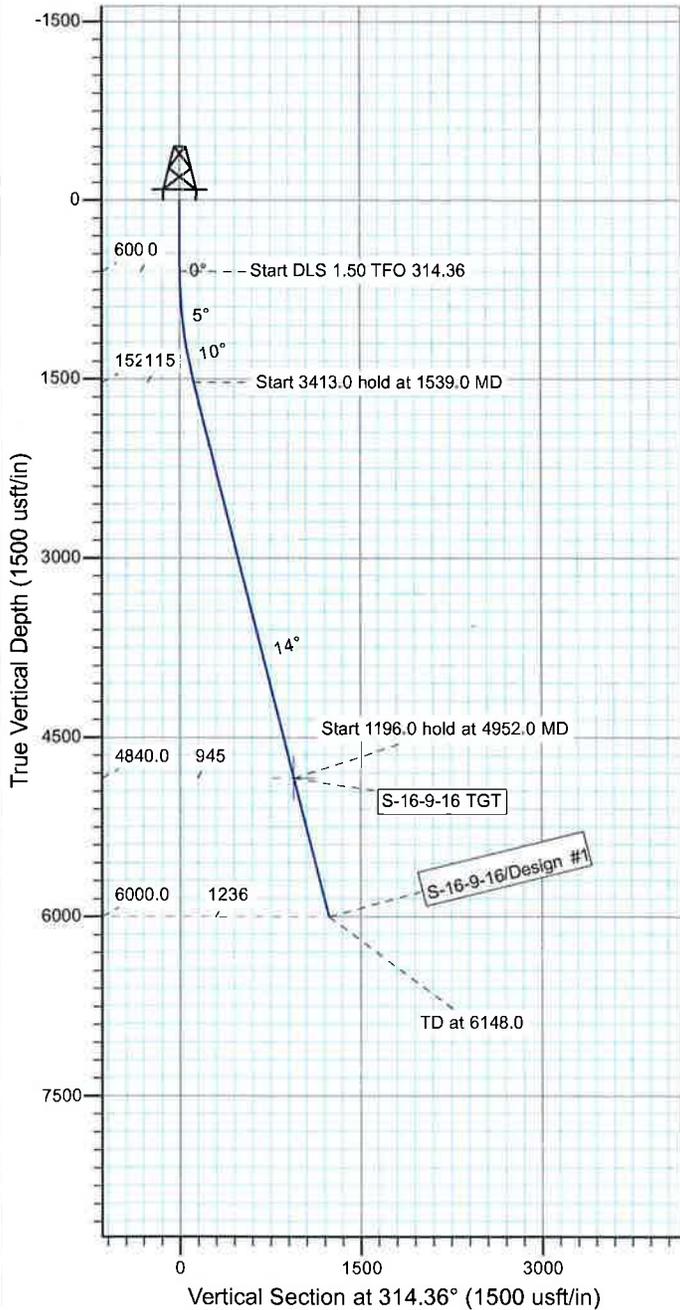
Project: USGS Myton SW (UT)
 Site: SECTION 16 T9S, R16E
 Well: S-16-9-16
 Wellbore: Wellbore #1
 Design: Design #1



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

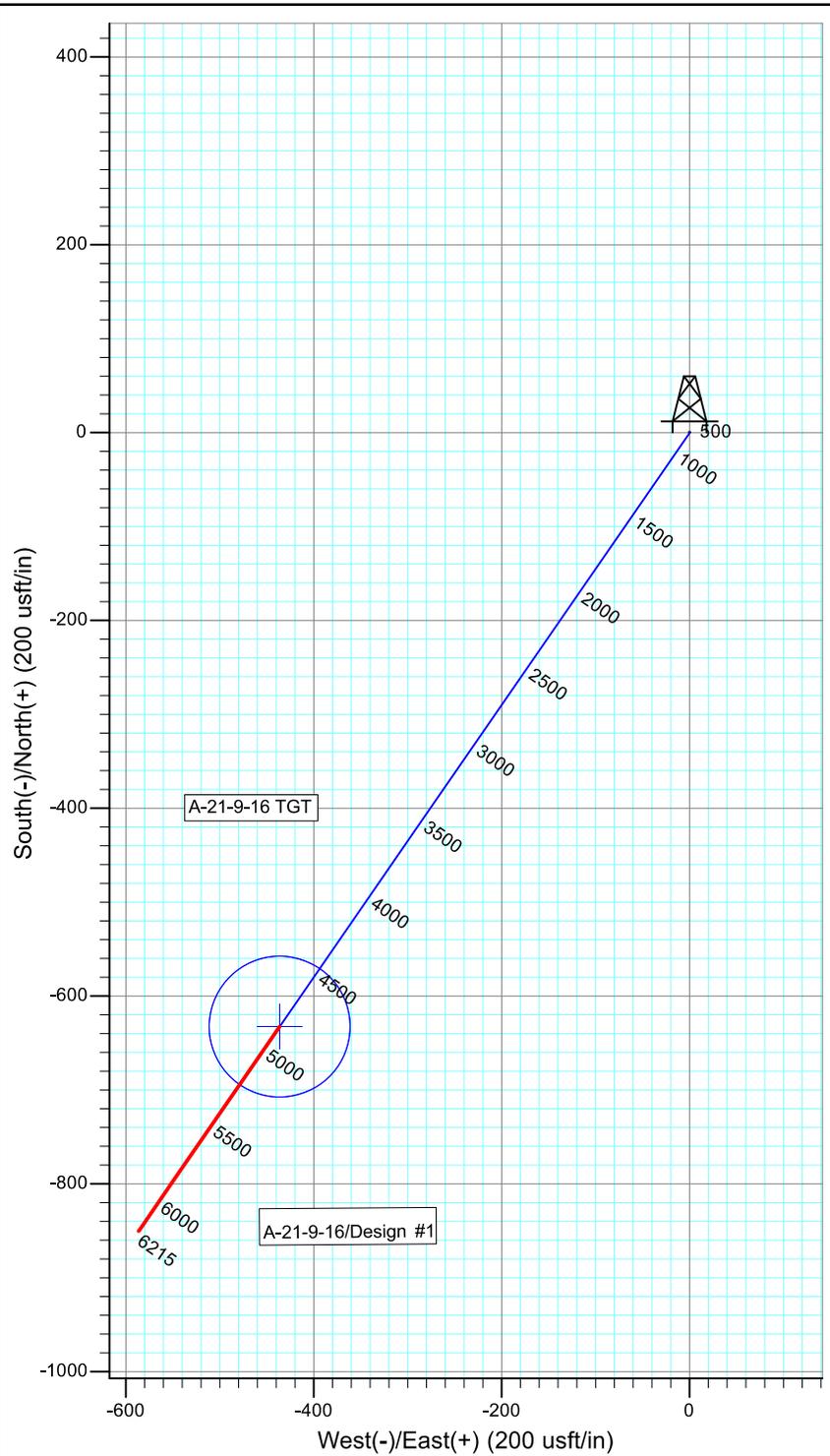
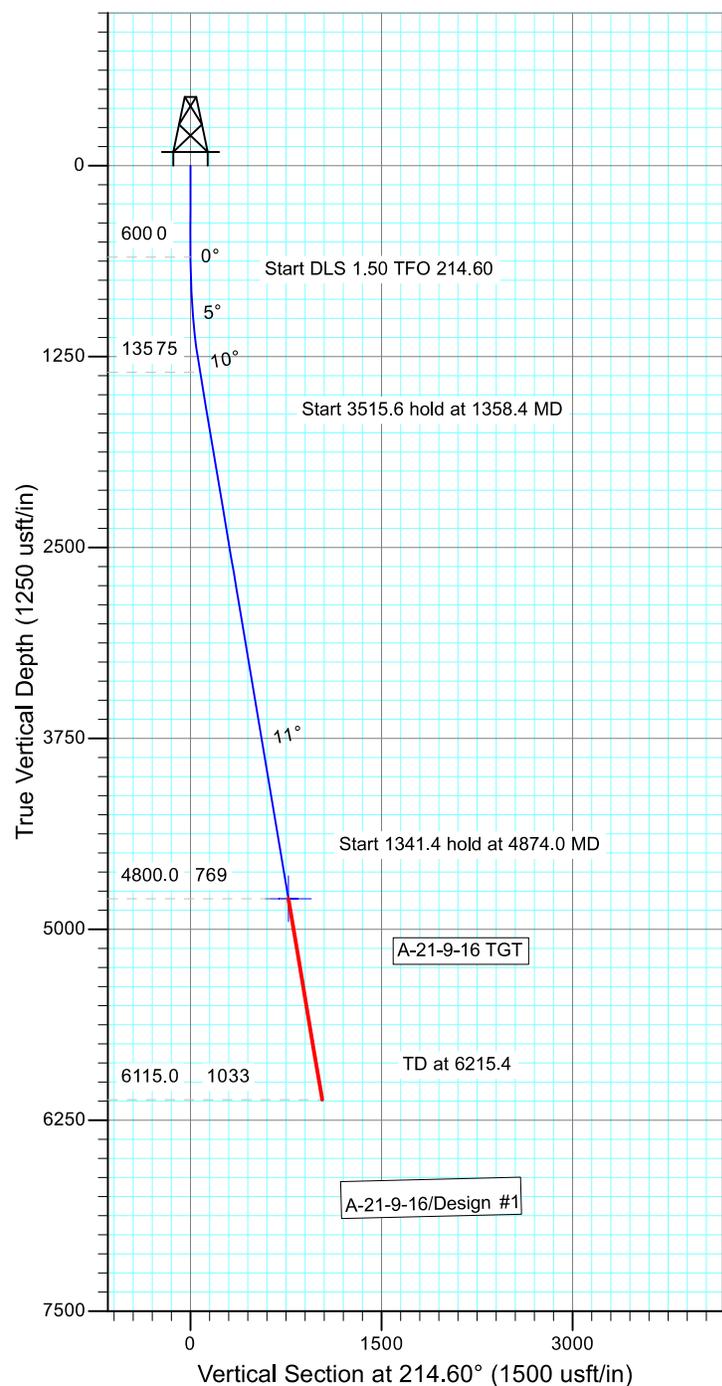
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSEct	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1539.0	14.09	314.36	1529.6	80.3	-82.1	1.50	314.36	114.8	
4	4952.0	14.09	314.36	4840.0	661.0	-676.0	0.00	0.00	945.4	S-16-9-16 TGT
5	6148.0	14.09	314.36	6000.0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

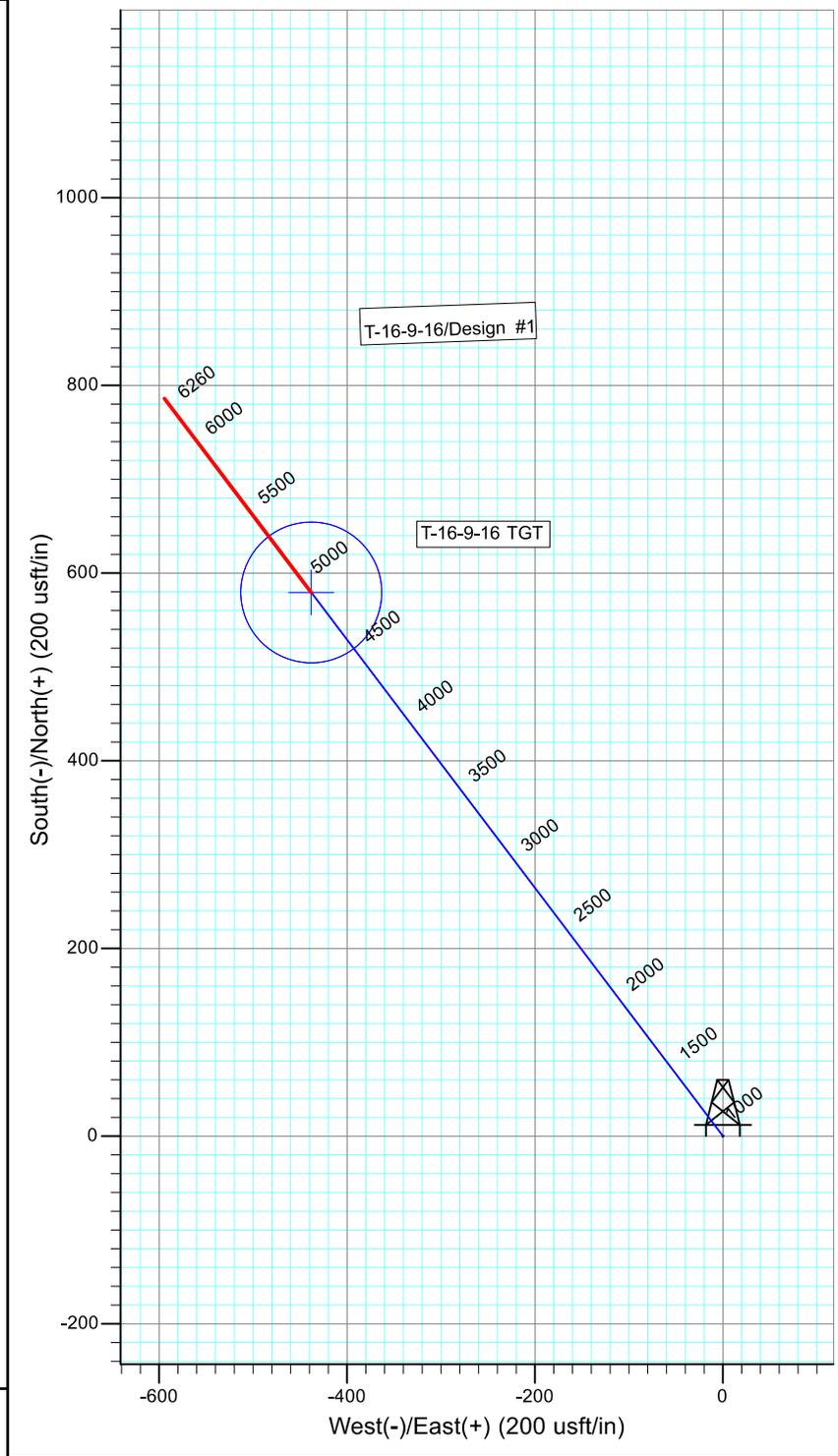
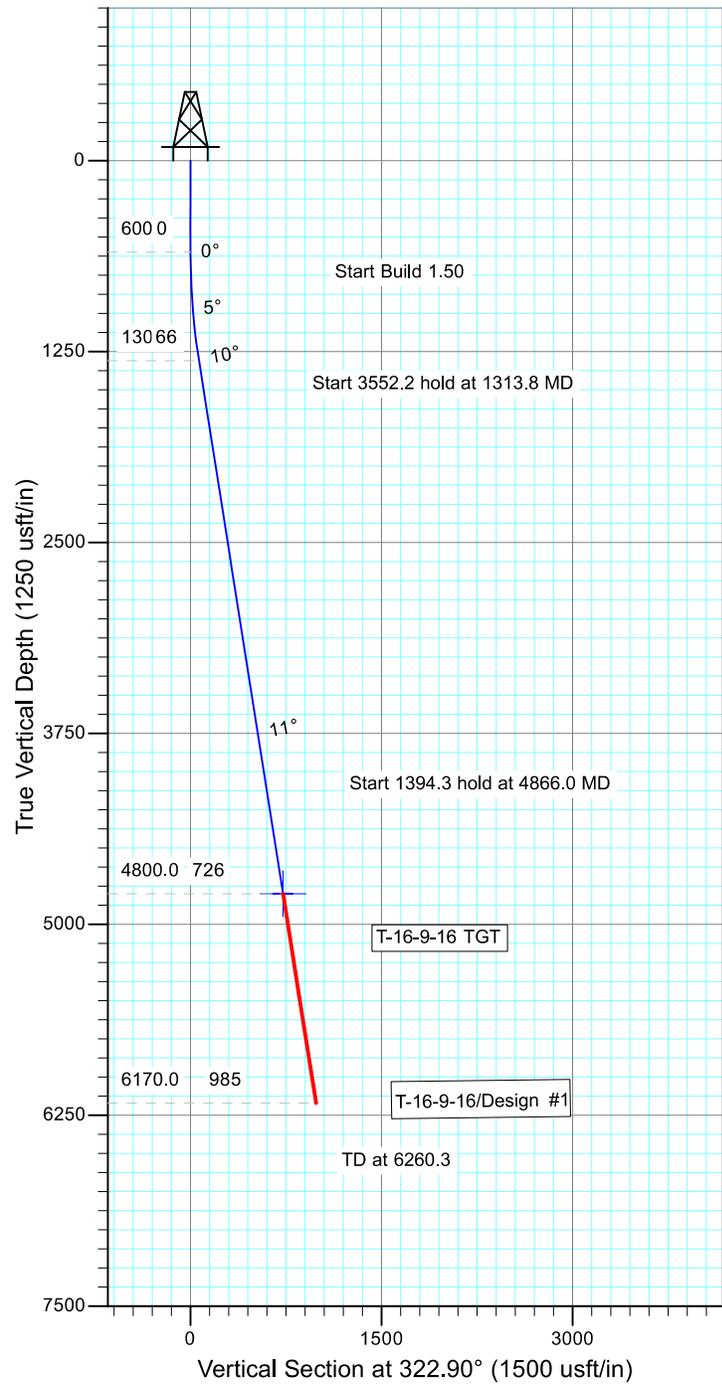
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1358.4	11.38	214.60	1353.4	-61.8	-42.6	1.50	214.60	75.0	
4	4874.0	11.38	214.60	4800.0	-632.6	-436.4	0.00	0.00	768.5	A-21-9-16 TGT
5	6215.4	11.38	214.60	6115.0	-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 Azimuths to True North
M 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	





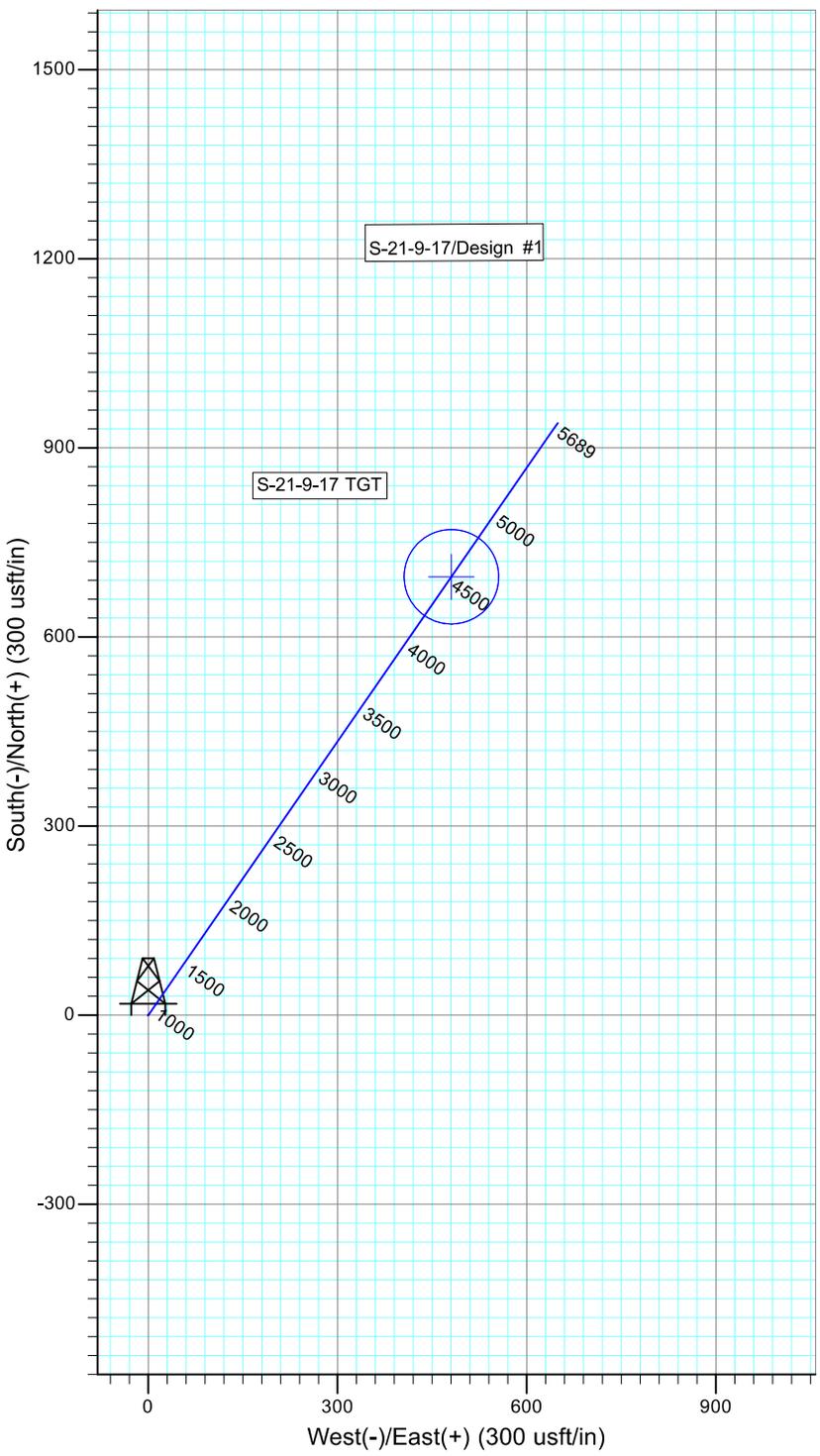
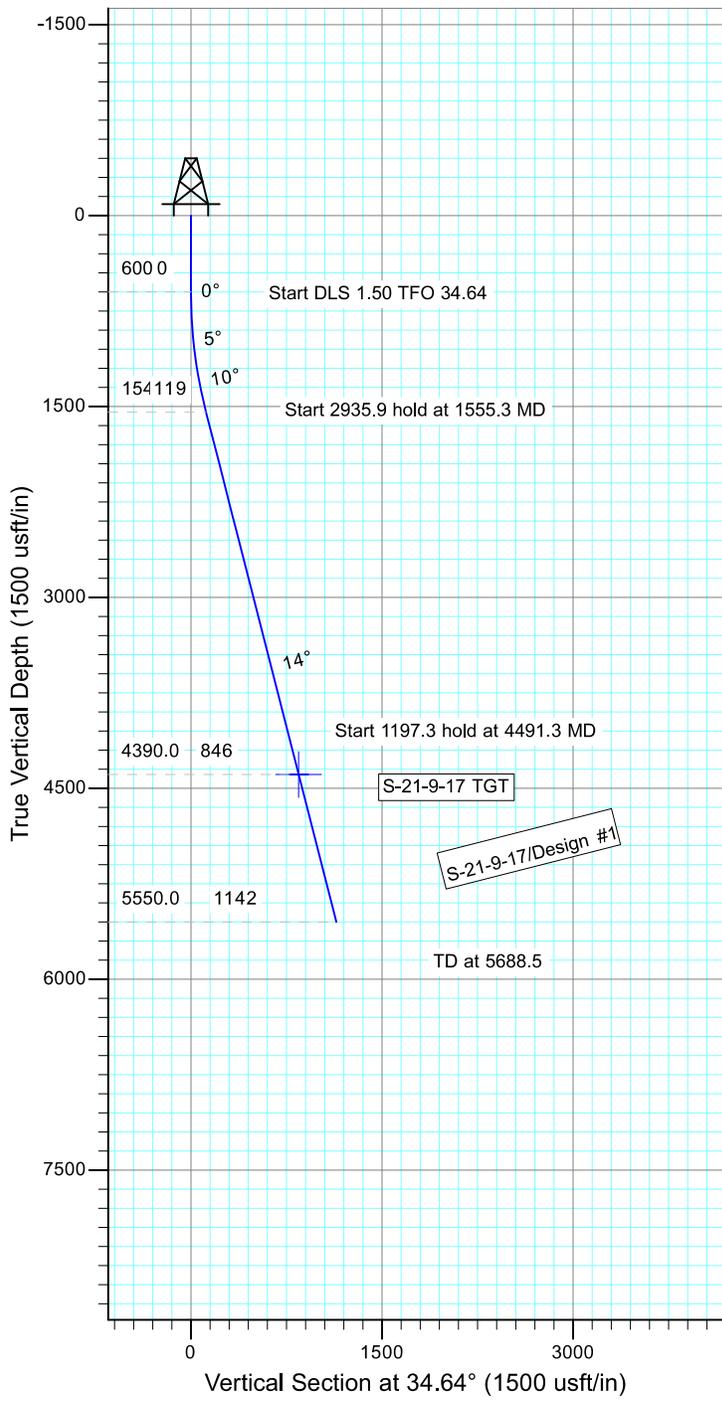
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: S-21-9-17
 Wellbore: Wellbore #1
 Design: Design #1



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	





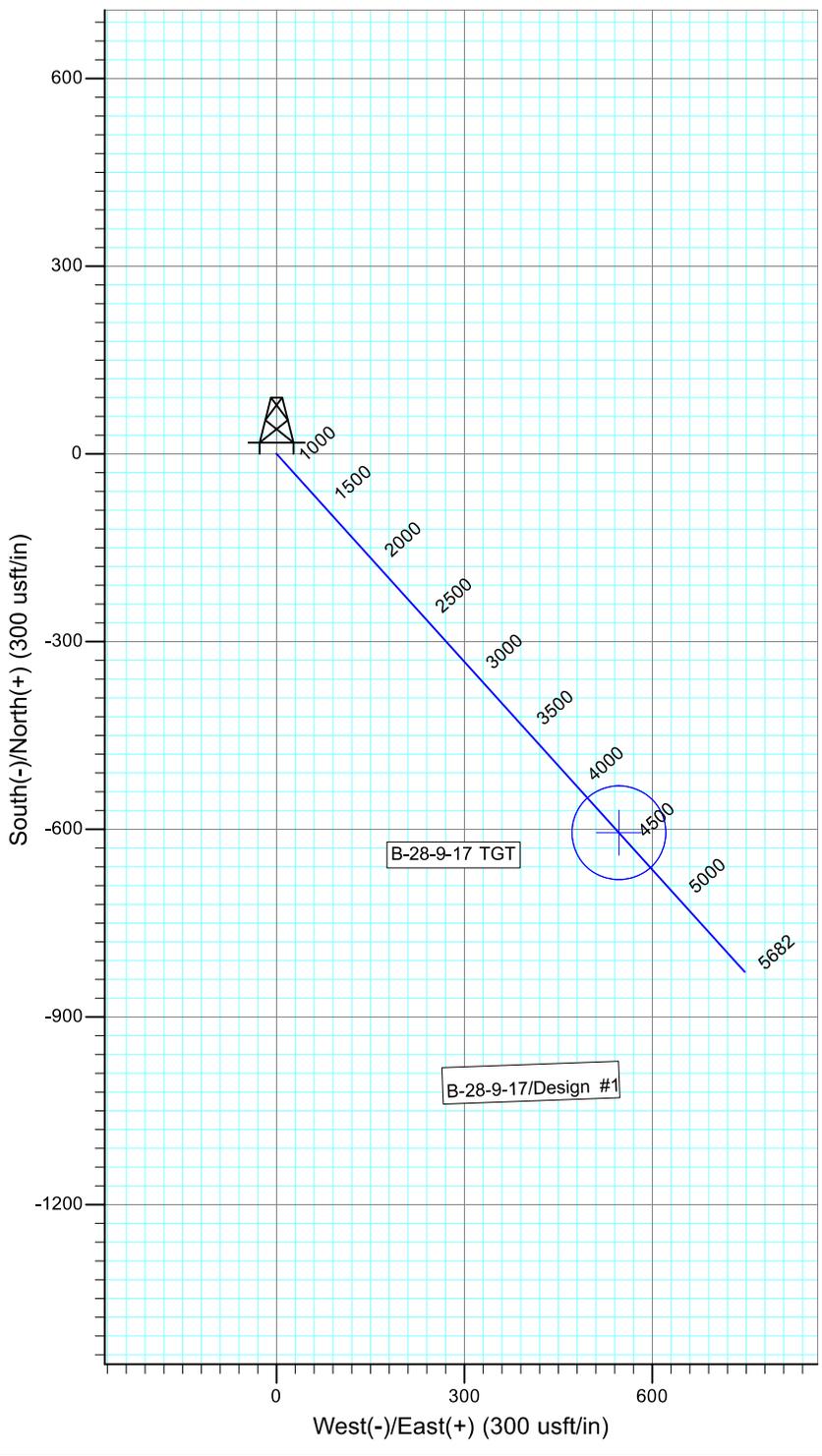
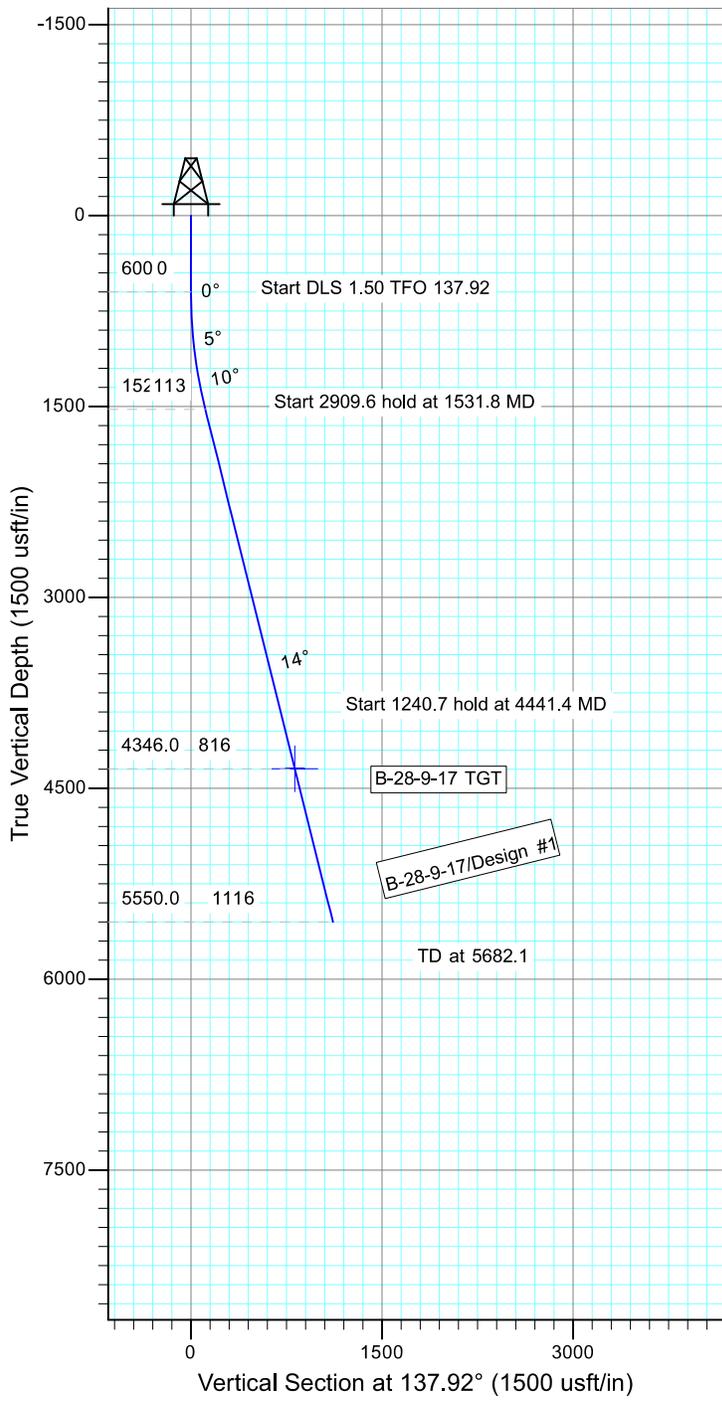
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: B-28-9-17
 Wellbore: Wellbore #1
 Design: Design #1



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	





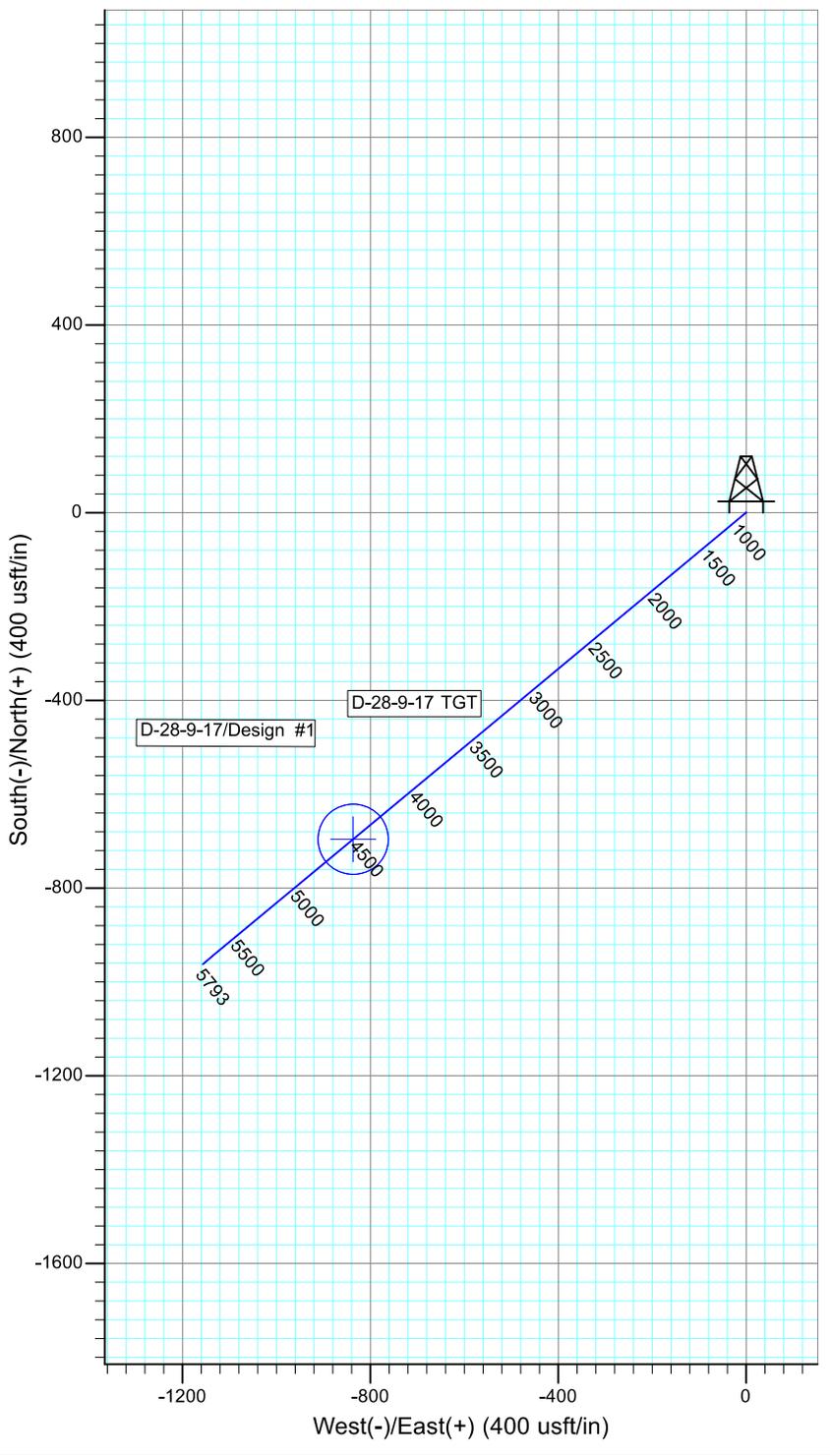
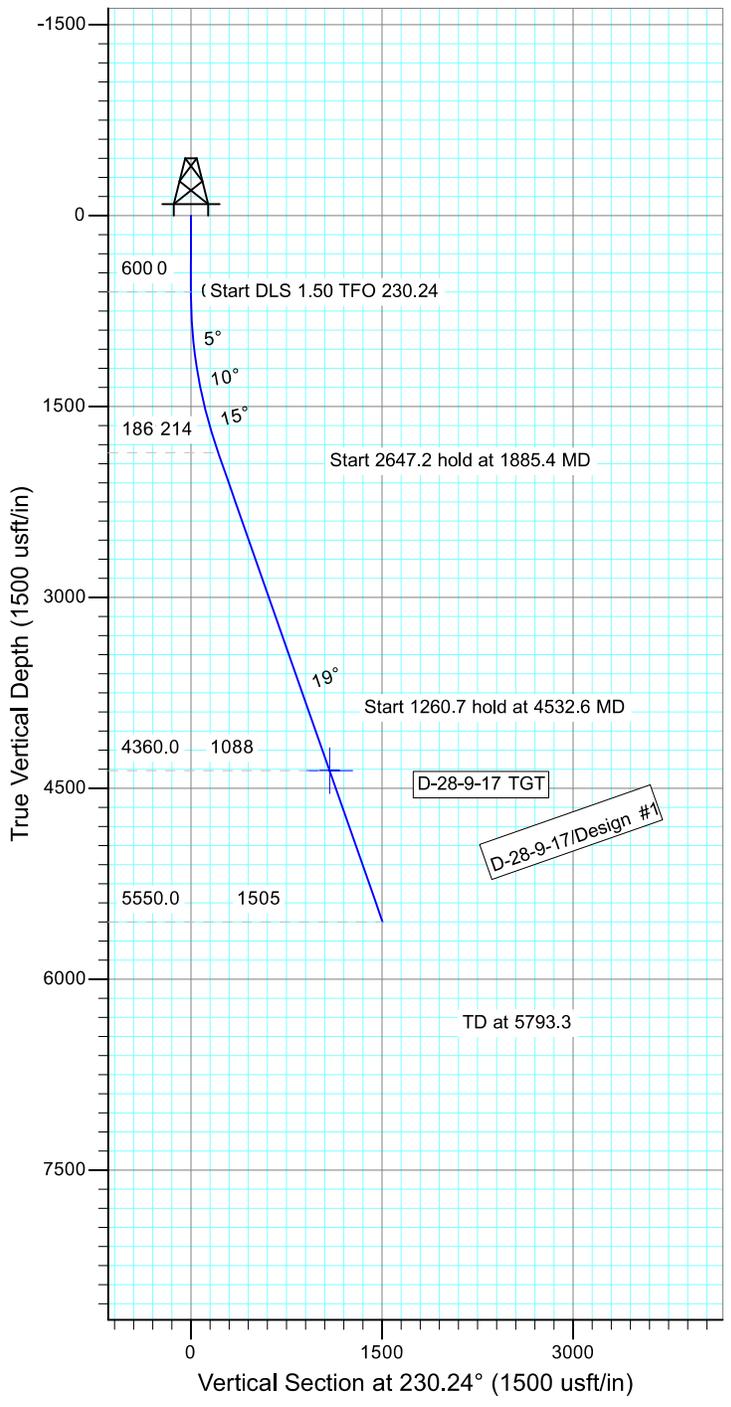
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: D-28-9-17
 Wellbore: Wellbore #1
 Design: Design #1



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	





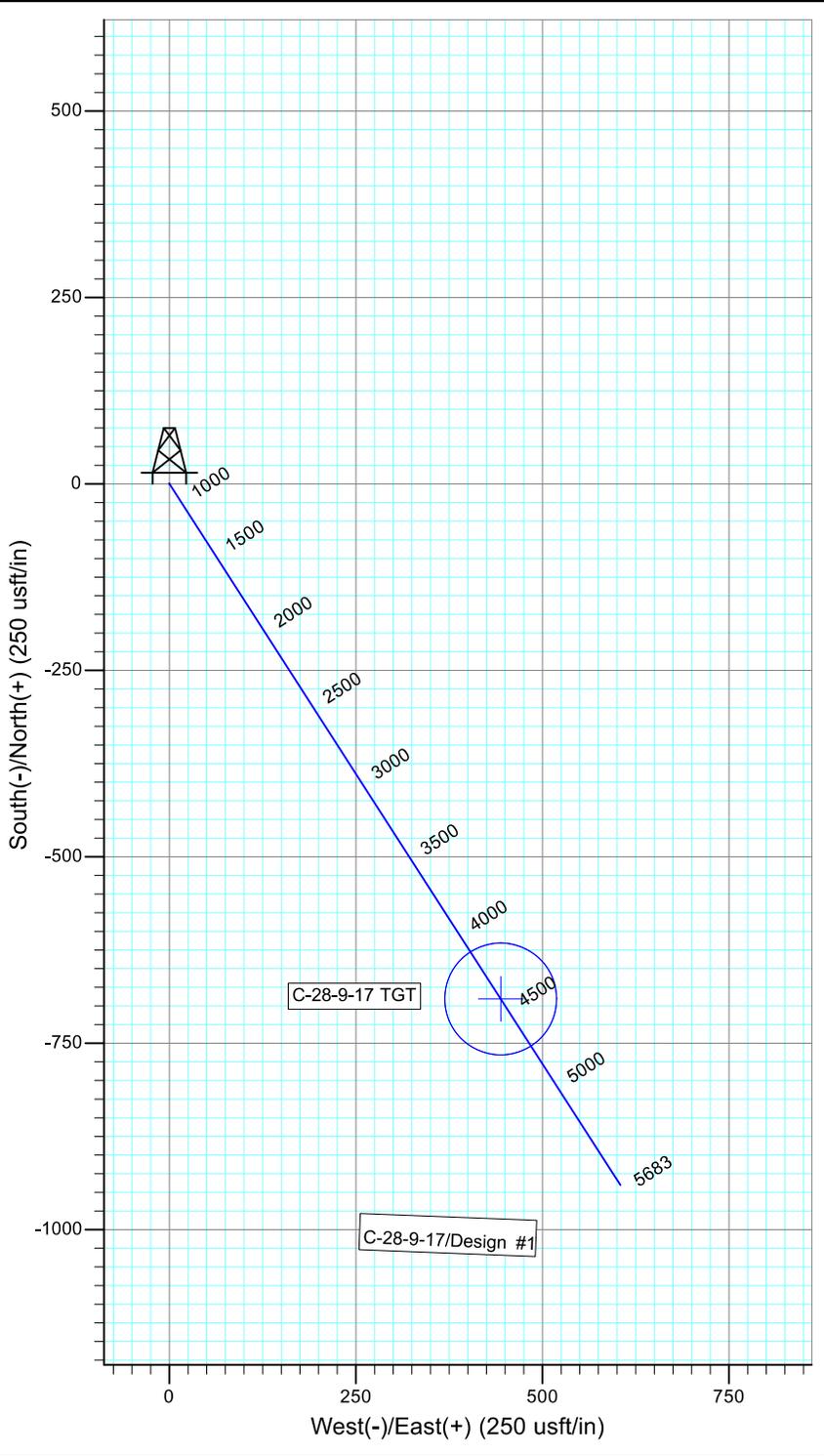
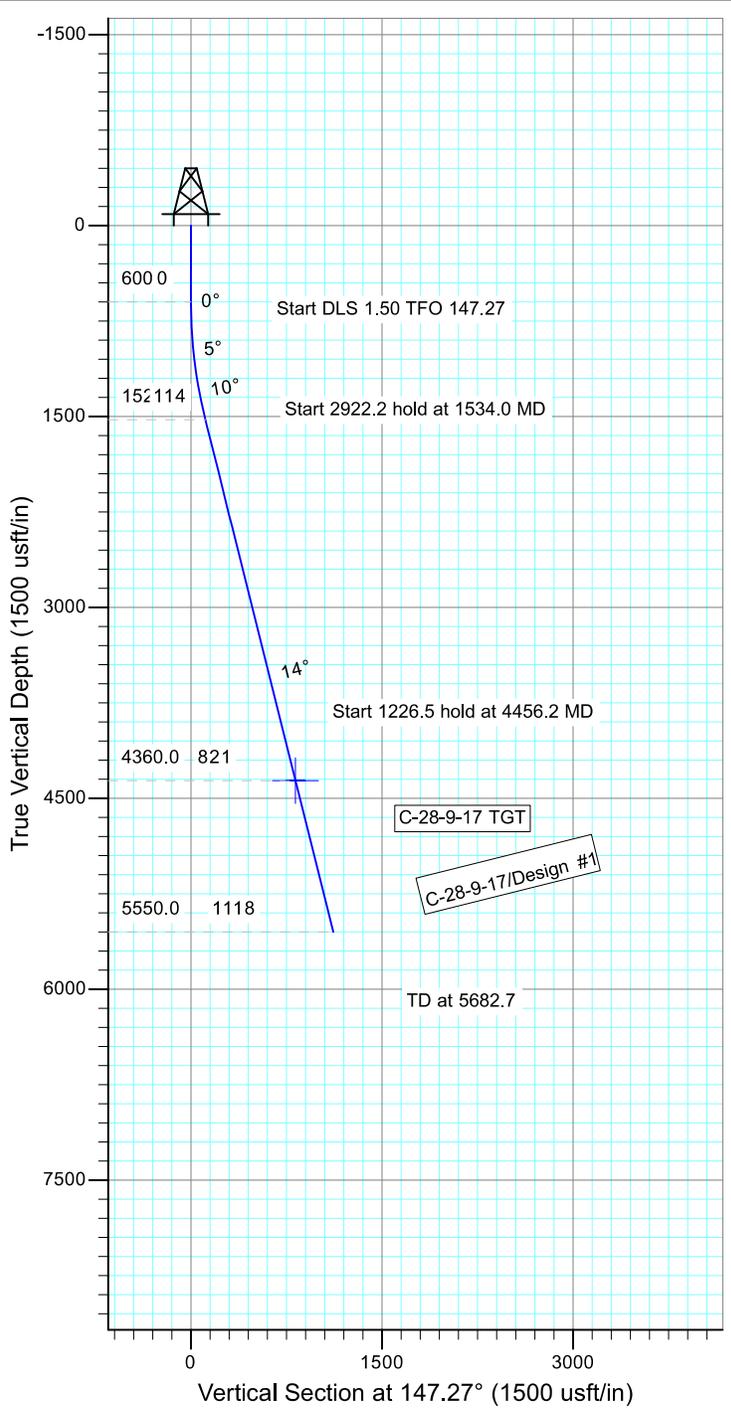
Project: USGS Myton SW (UT)
 Site: SECTION 21 T9, R17
 Well: C-28-9-17
 Wellbore: Wellbore #1
 Design: Design #1



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	





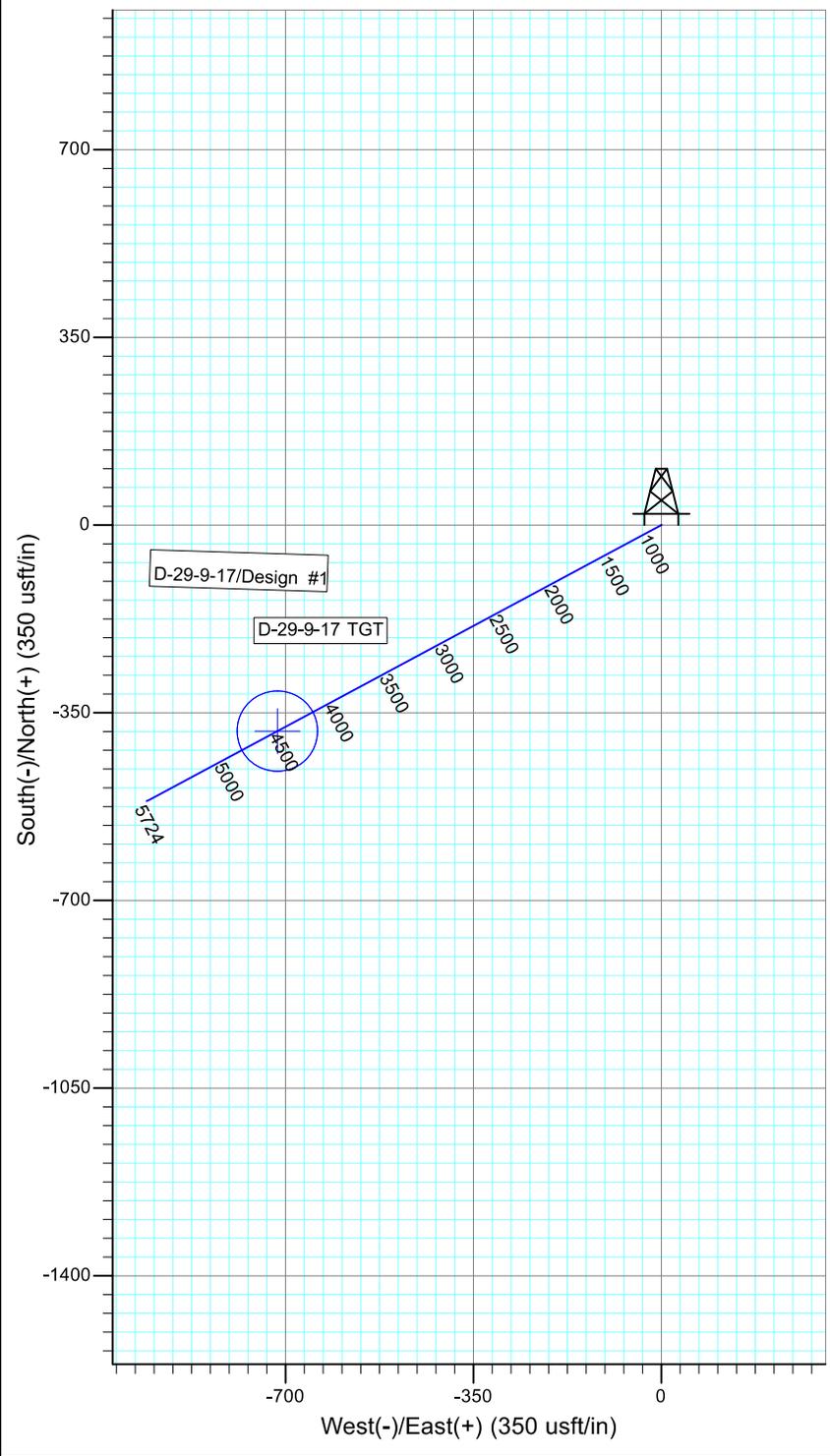
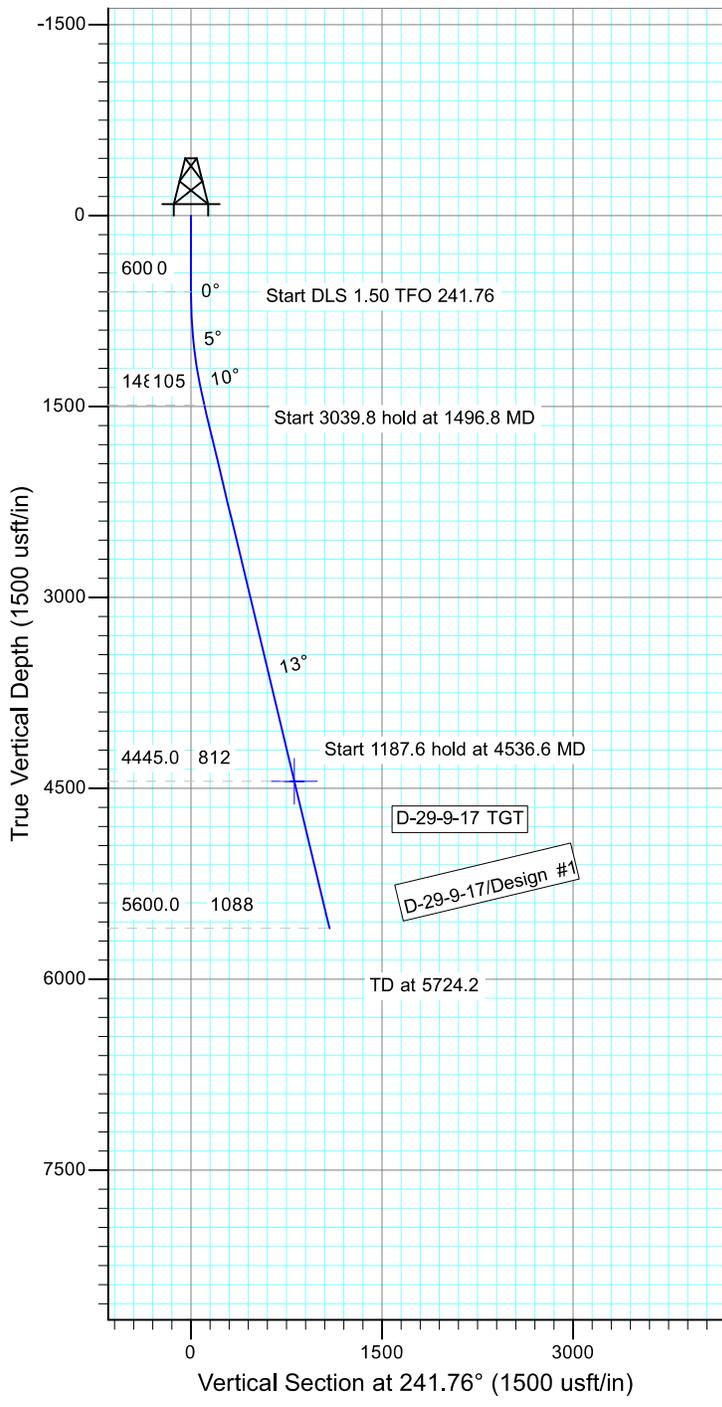
Project: USGS Myton SW (UT)
 Site: SECTION 20 T9S, R17E
 Well: D-29-9-17
 Wellbore: Wellbore #1
 Design: Design #1



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

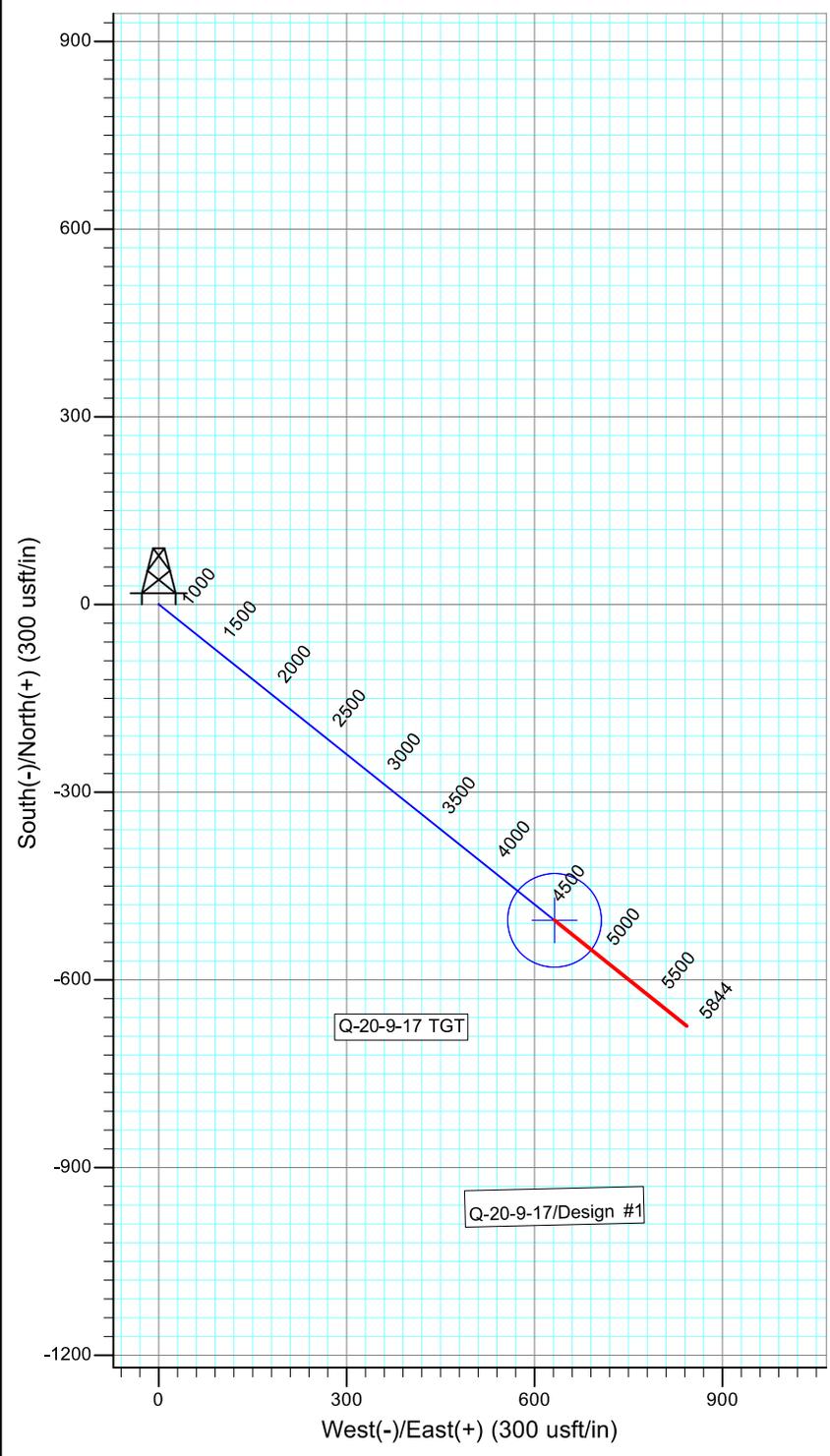
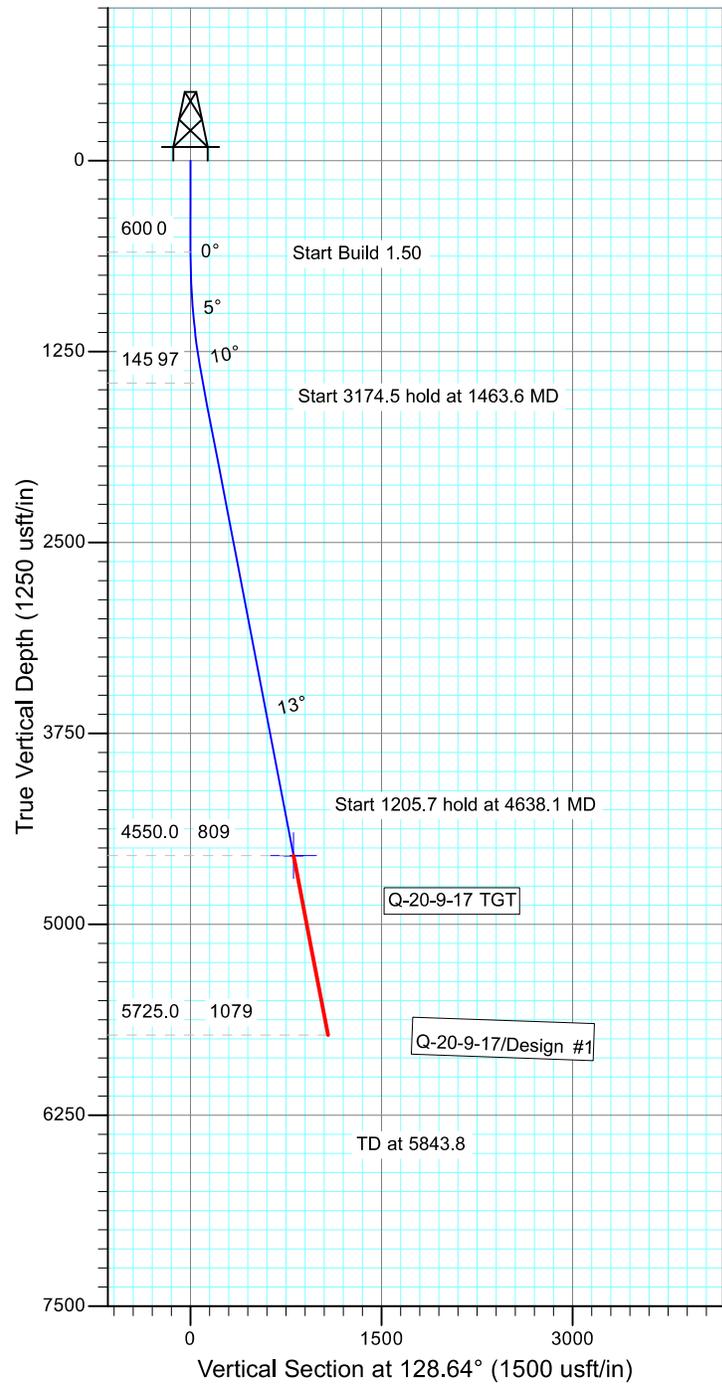
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1496.8	13.45	241.76	1488.6	-49.6	-92.3	1.50	241.76	104.8	
4	4536.6	13.45	241.76	4445.0	-384.2	-715.3	0.00	0.00	812.0	D-29-9-17 TGT
5	5724.2	13.45	241.76	5600.0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

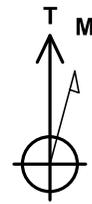
SECTION DETAILS

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	





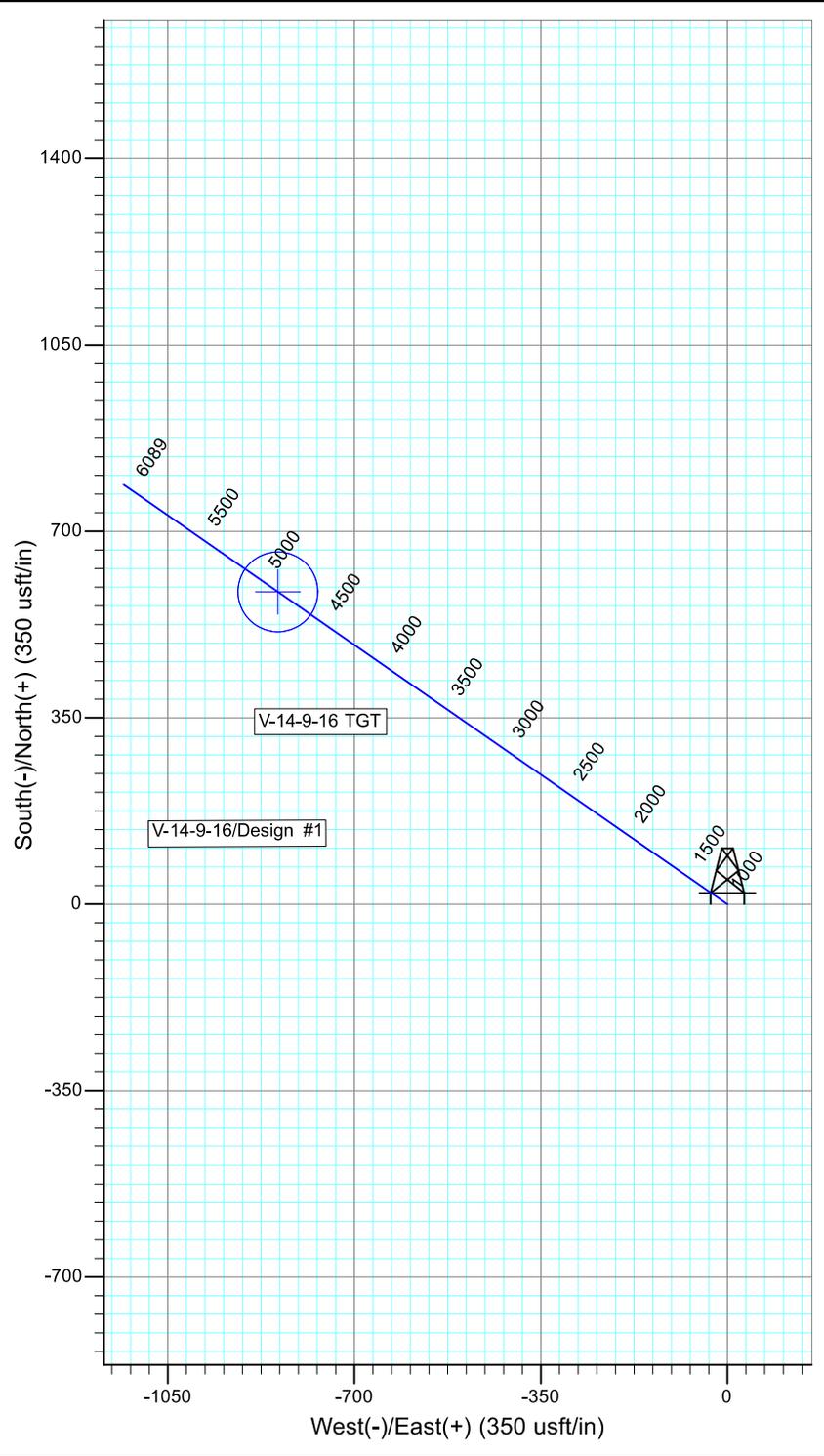
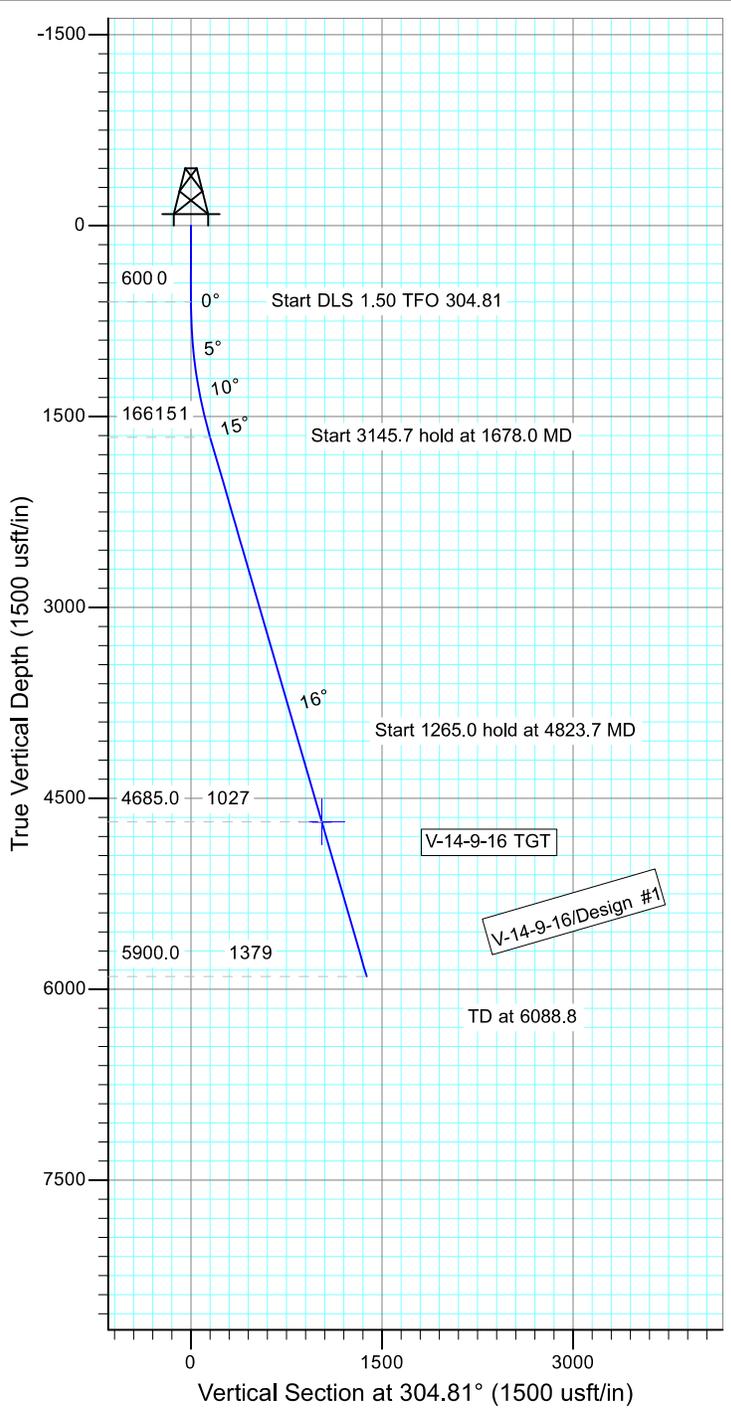
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: V-14-9-16
 Wellbore: Wellbore #1
 Design: Design #1



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)

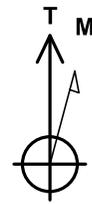
SECTION DETAILS

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	





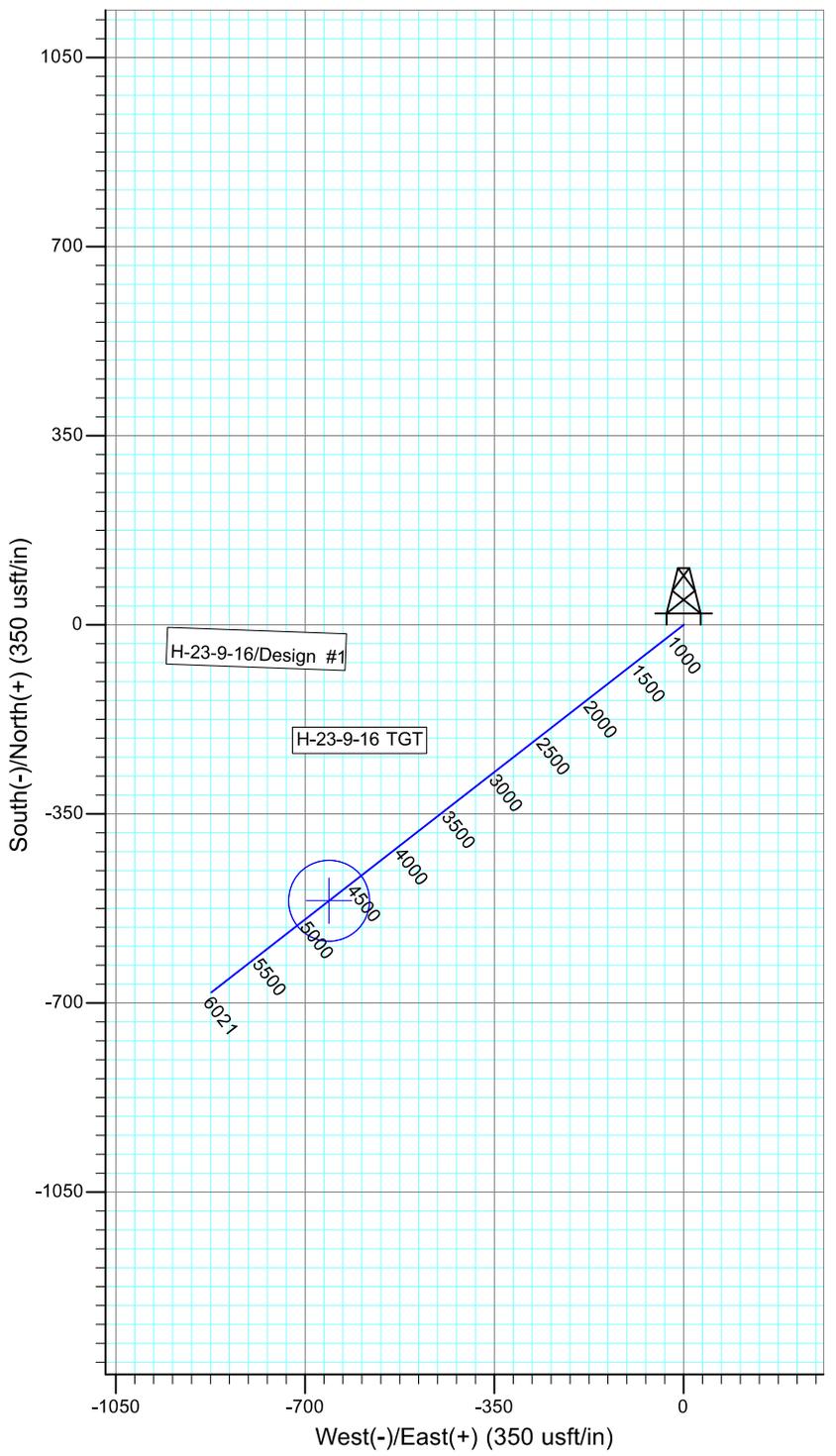
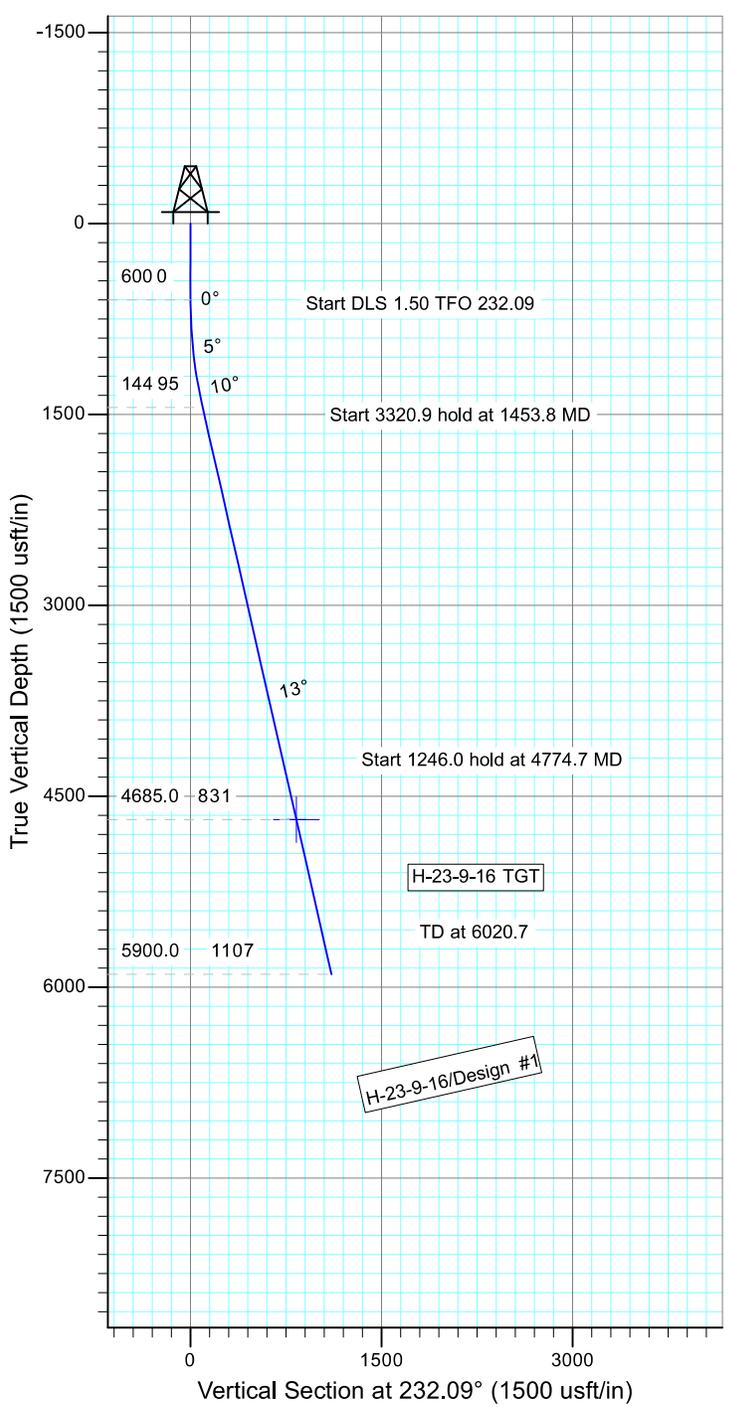
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: H-23-9-16
 Wellbore: Wellbore #1
 Design: Design #1



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	





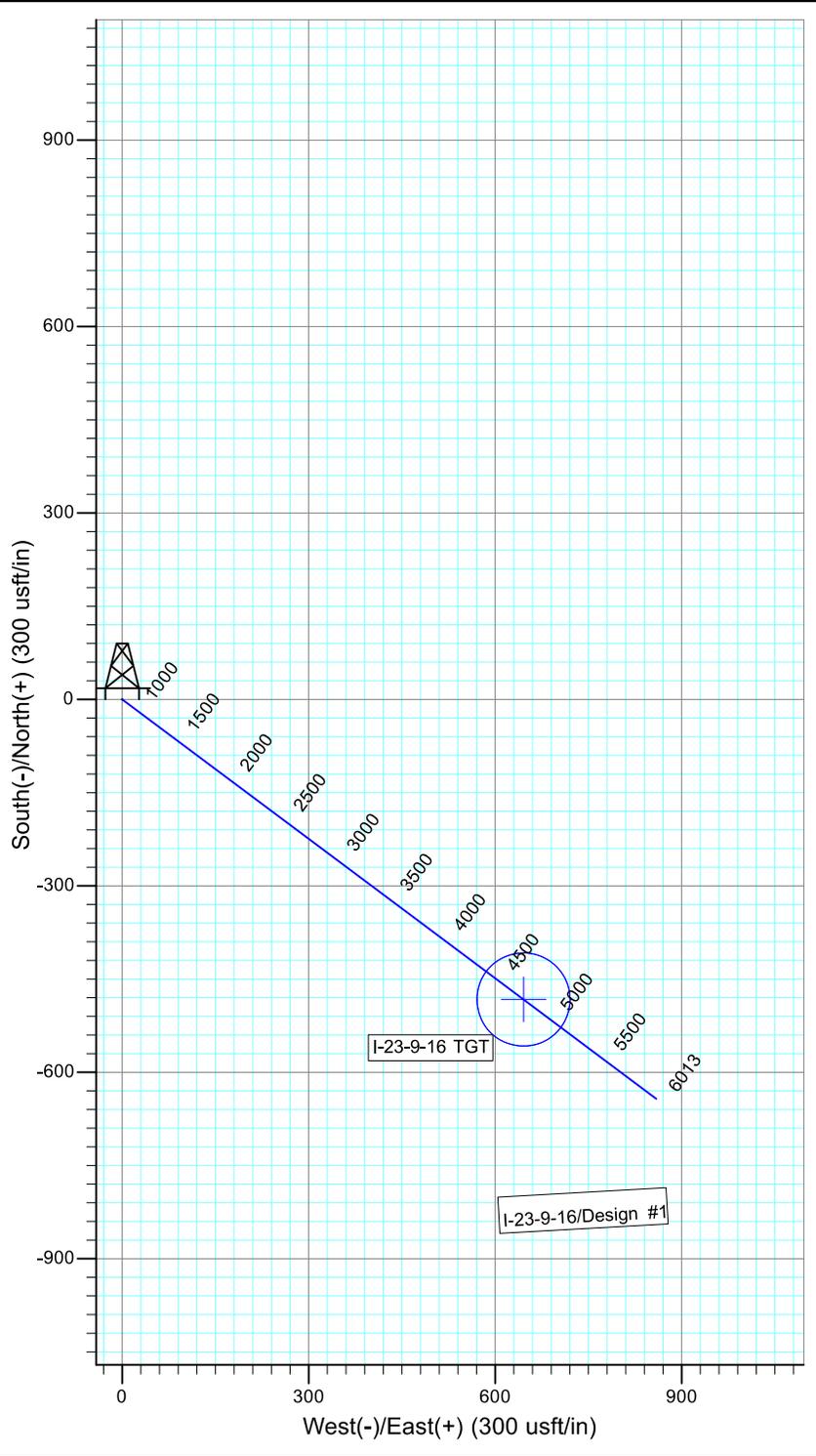
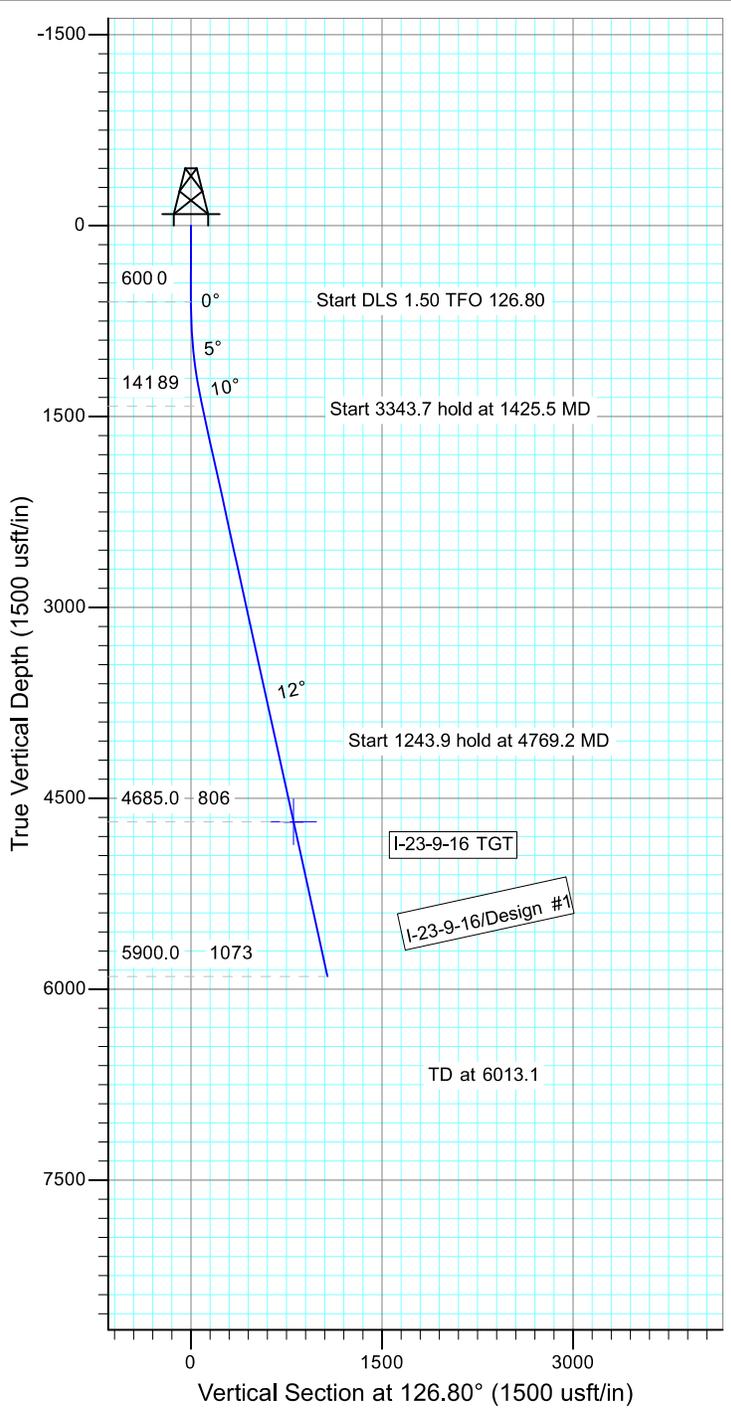
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: I-23-9-16
 Wellbore: Wellbore #1
 Design: Design #1



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	V Sect	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	





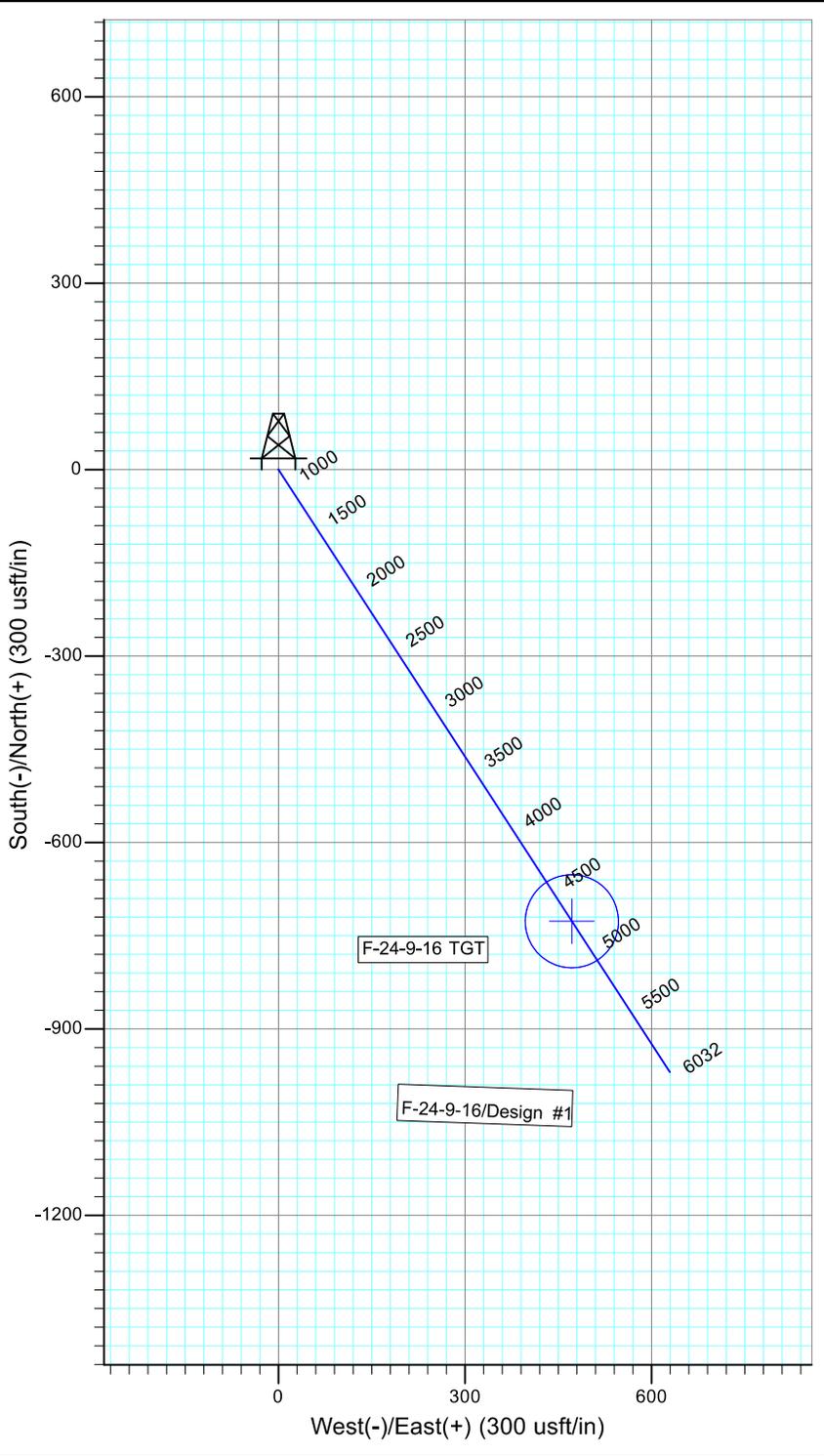
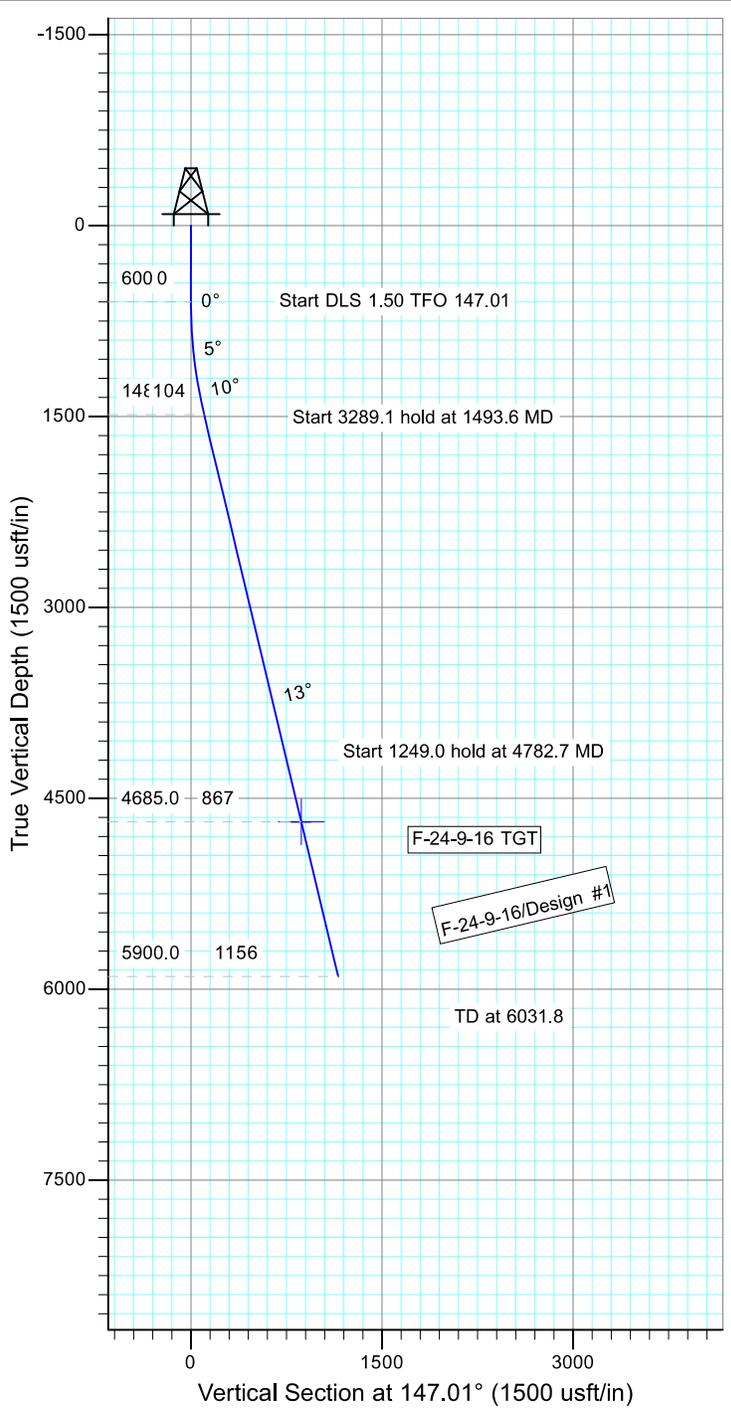
Project: USGS Myton SW (UT)
 Site: SECTION 23 T9, R16
 Well: F-24-9-16
 Wellbore: Wellbore #1
 Design: Design #1



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

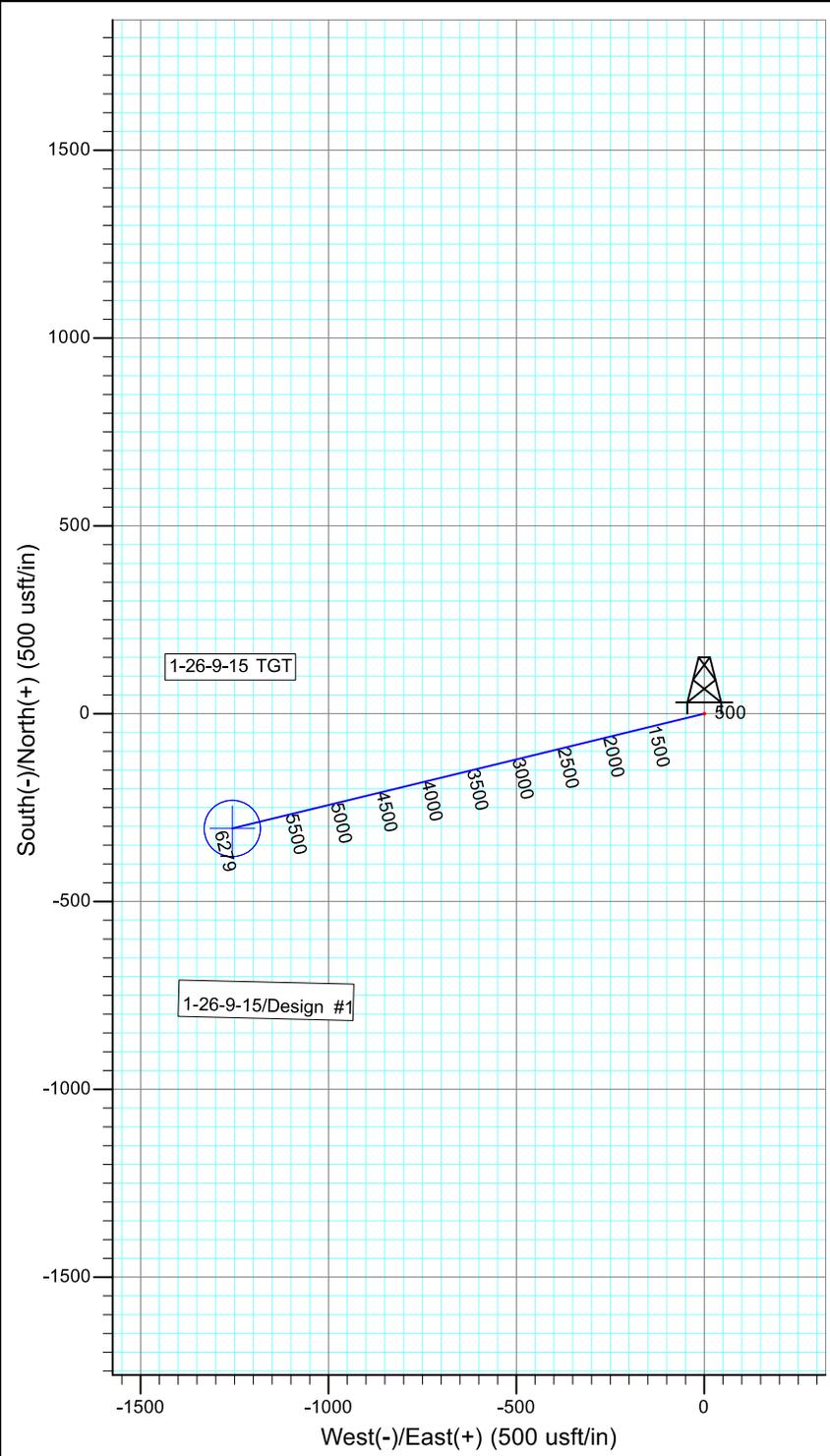
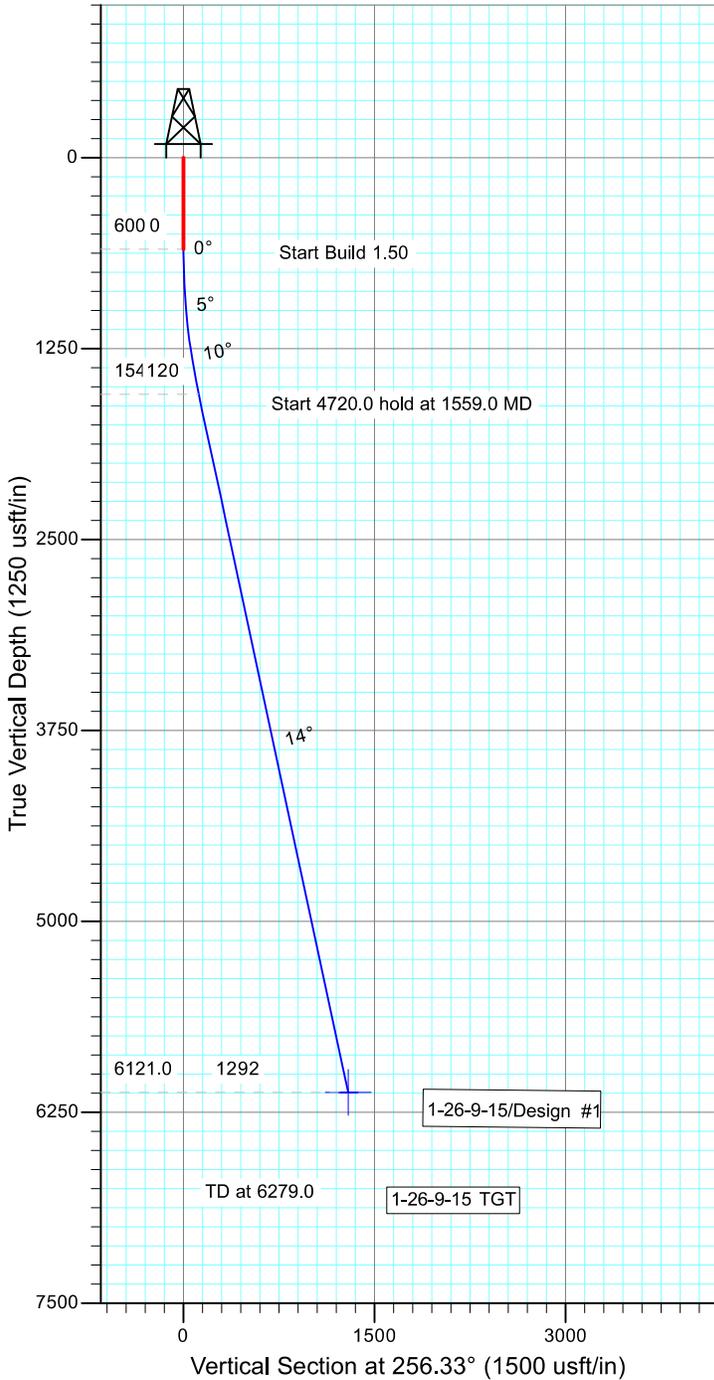
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1493.6	13.40	147.01	1485.5	-87.3	56.7	1.50	147.01	104.1	
4	4782.7	13.40	147.01	4685.0	-726.8	471.8	0.00	0.00	866.5	F-24-9-16 TGT
5	6031.8	13.40	147.01	5900.0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

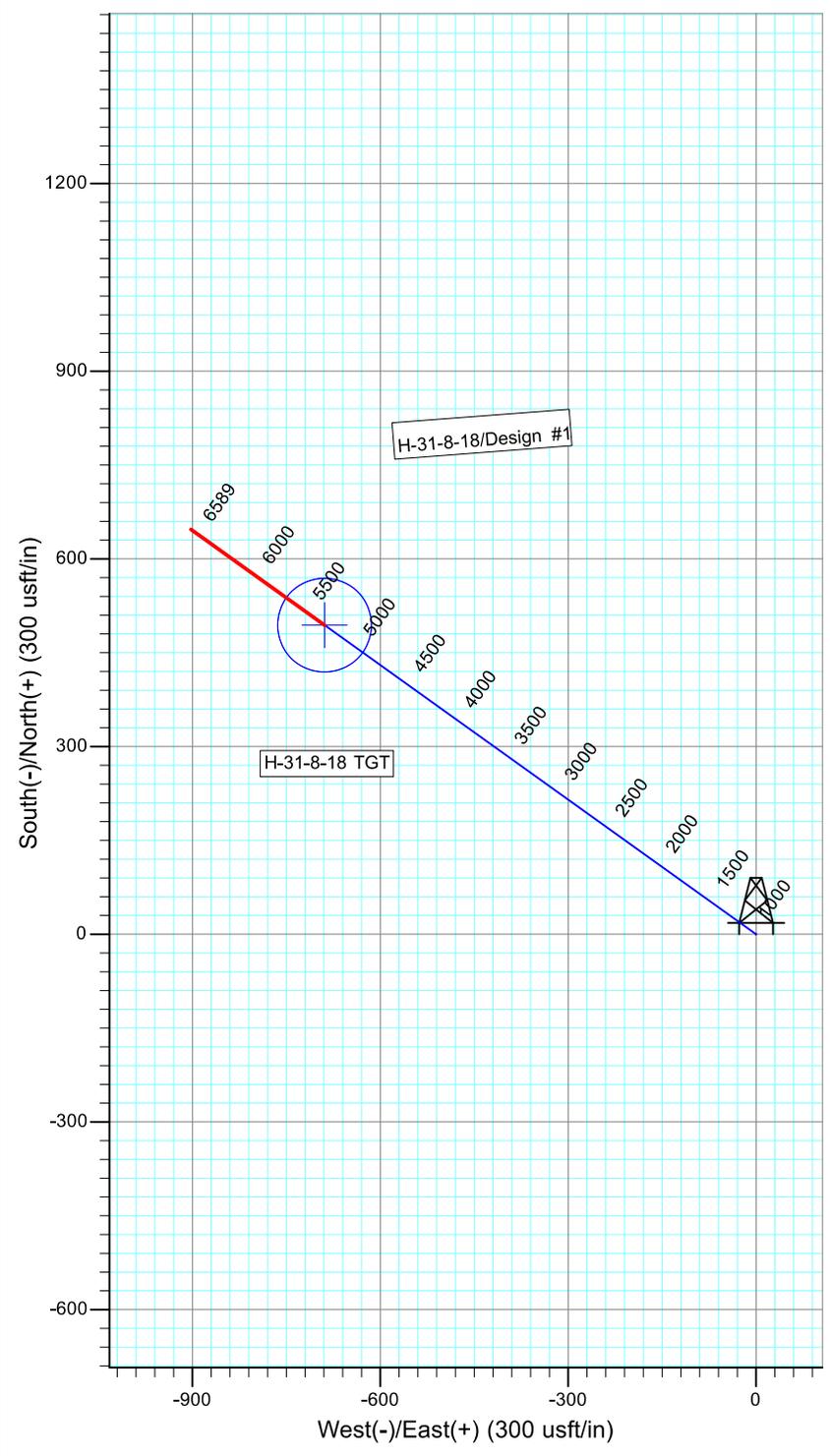
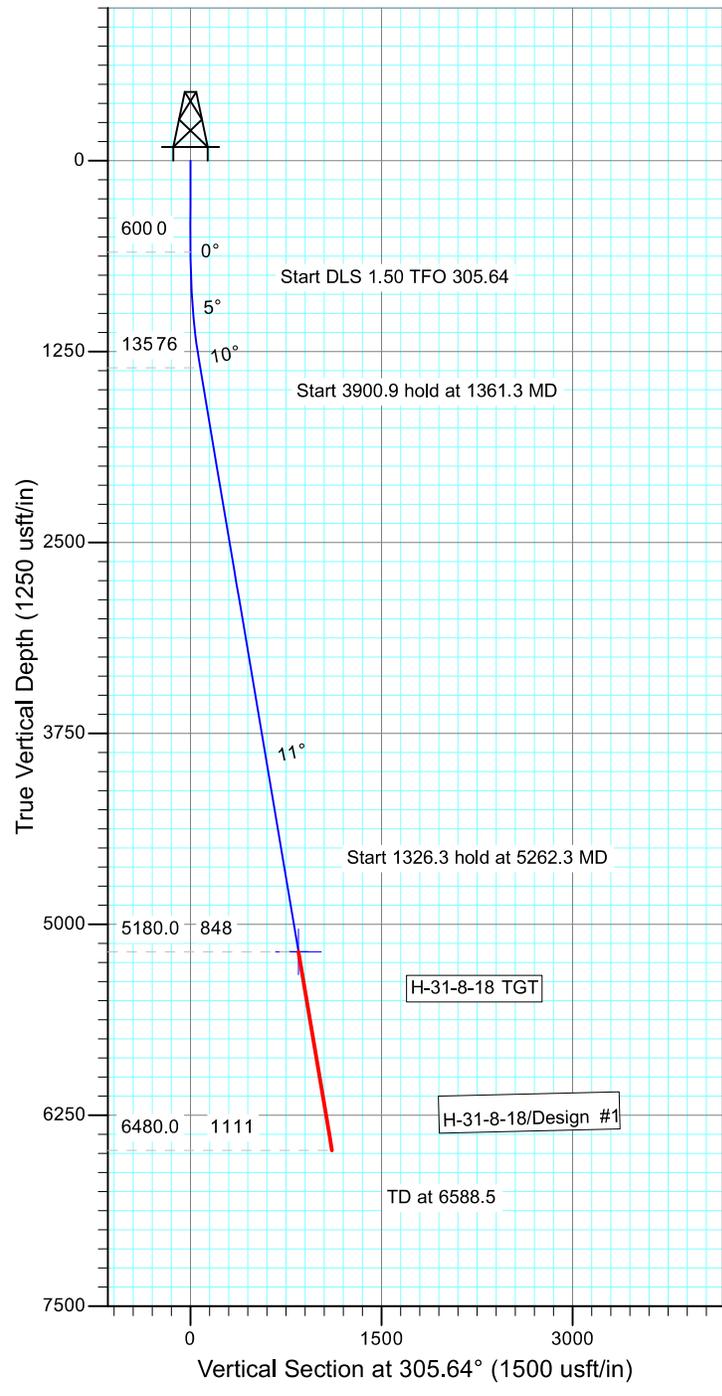
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1559.0	14.39	256.33	1549.0	-28.3	-116.4	1.50	256.33	119.8	
4	6279.0	14.39	256.33	6121.0	-305.5	-1255.8	0.00	0.00	1292.4	1-26-9-15 TGT





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

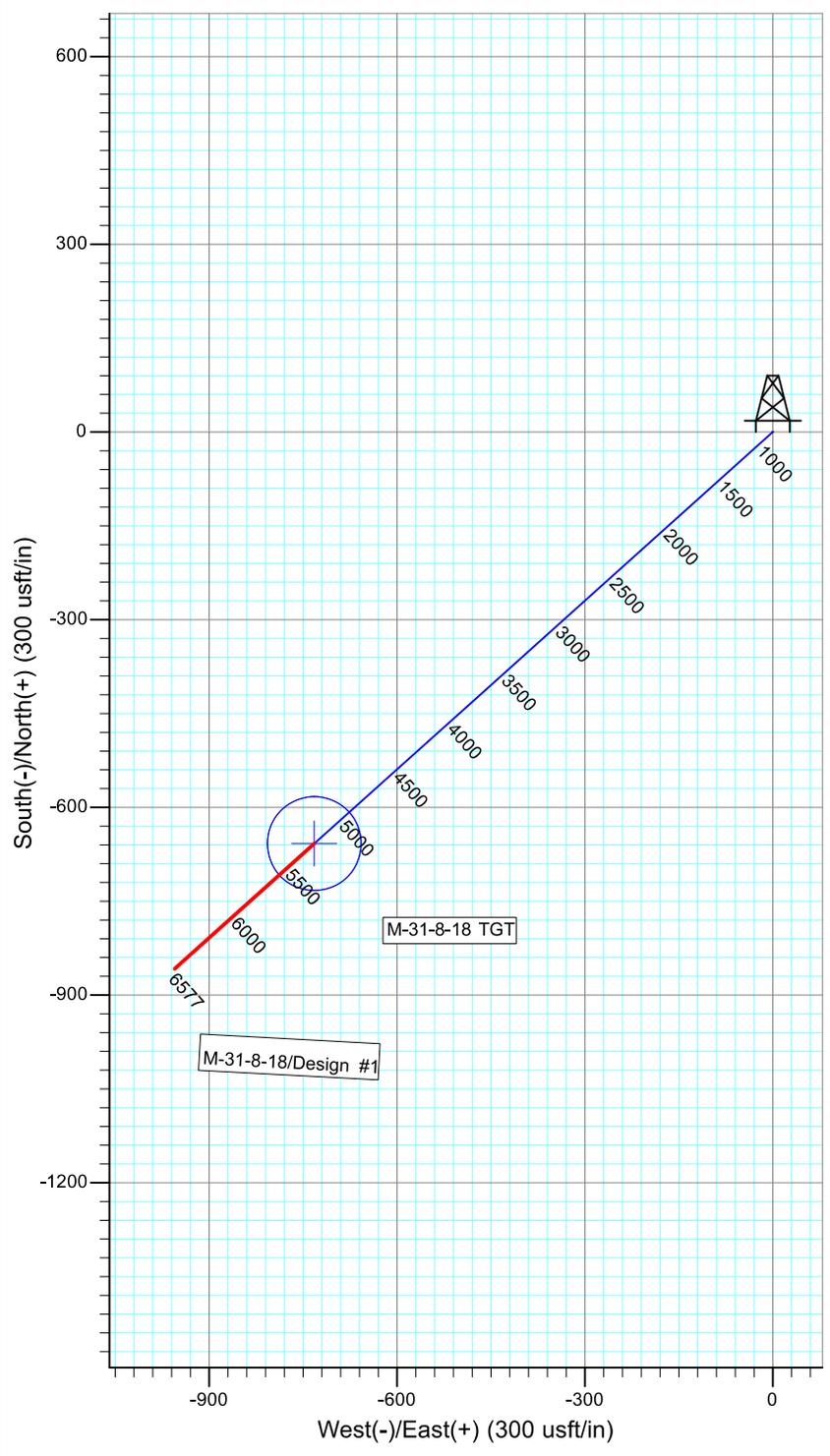
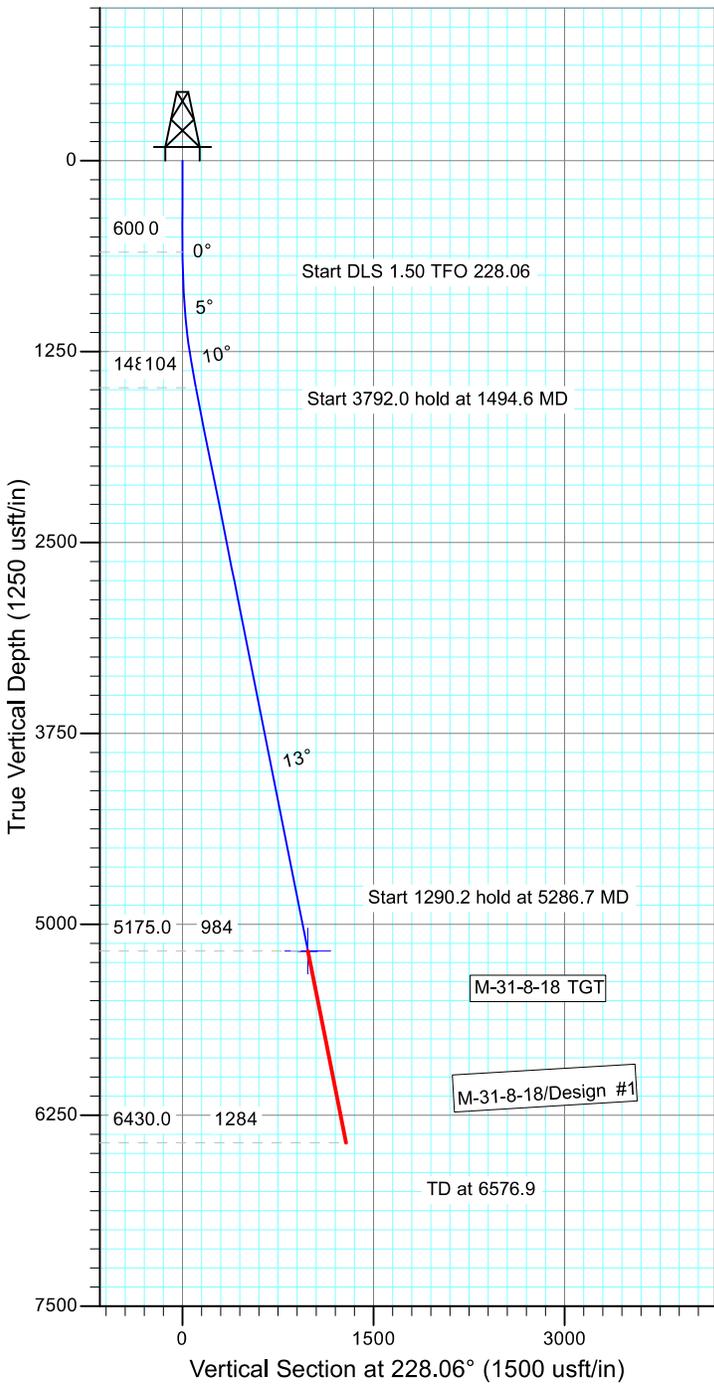
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1361.3	11.42	305.64	1356.3	44.1	-61.5	1.50	305.64	75.6	
4	5262.3	11.42	305.64	5180.0	494.1	-689.1	0.00	0.00	848.0	H-31-8-18 TGT
5	6588.5	11.42	305.64	6480.0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

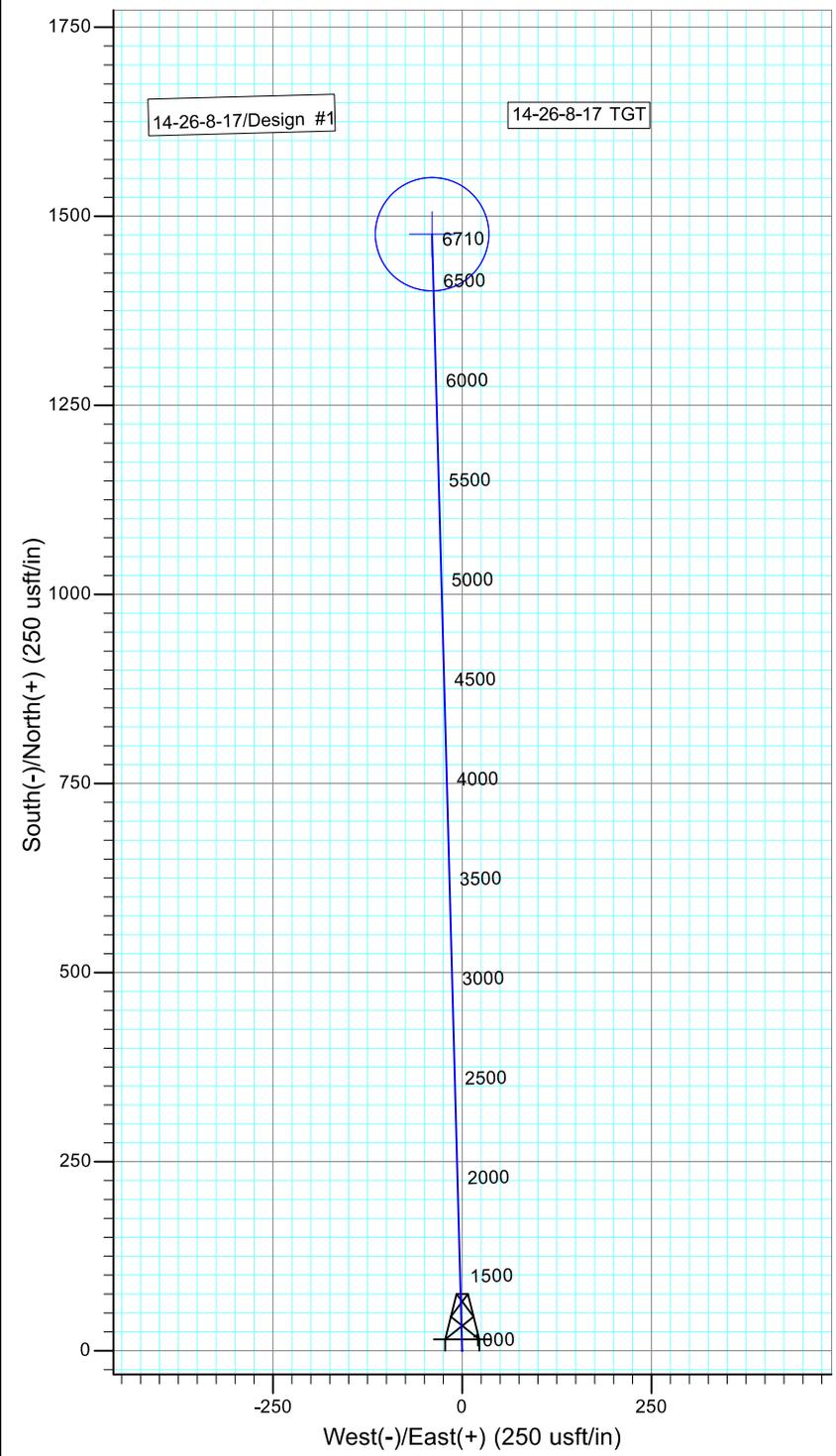
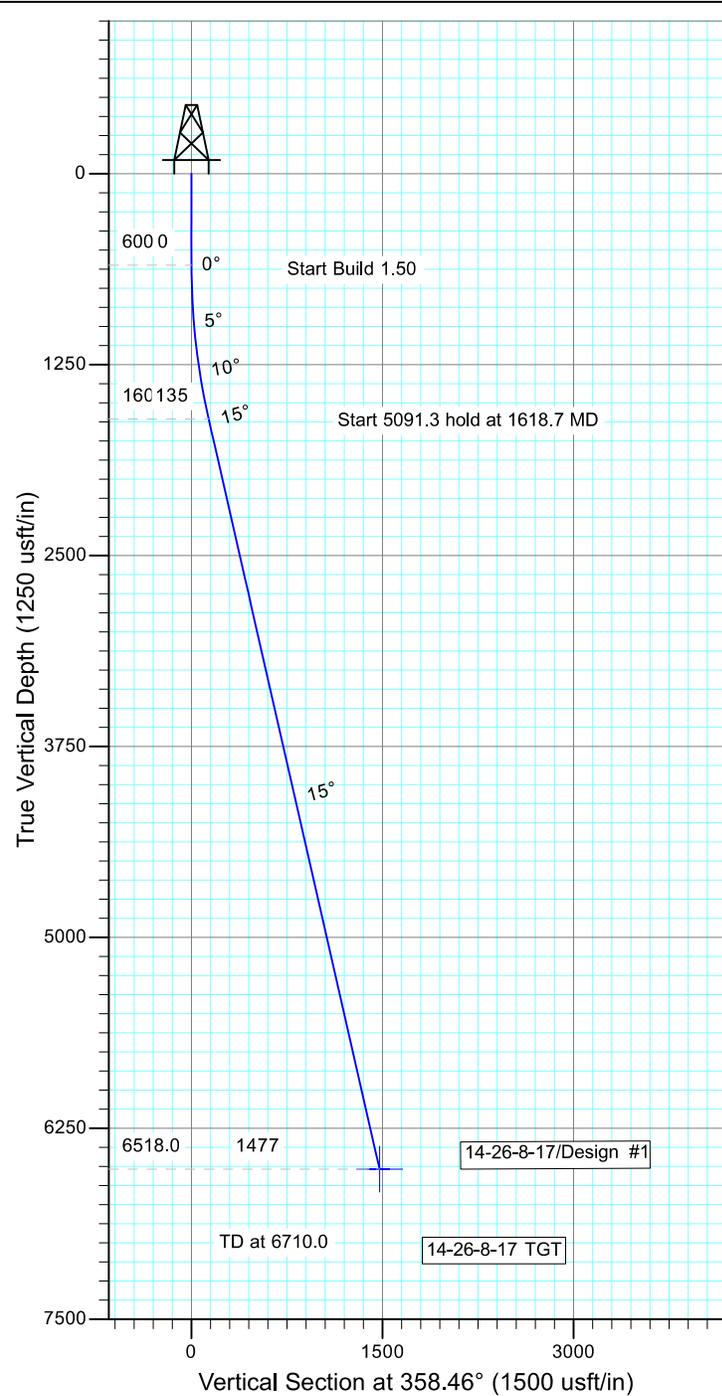
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1494.6	13.42	228.06	1486.5	-69.7	-77.6	1.50	228.06	104.3	
4	5286.7	13.42	228.06	5175.0	-657.9	-732.2	0.00	0.00	984.4	M-31-8-18 TGT
5	6576.9	13.42	228.06	6430.0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



NEWFIELD



VIA ELECTRONIC DELIVERY

July 28, 2014

State of Utah, Division of Oil, Gas and Mining
ATTN: Diana Mason
P.O. Box 145801
Salt Lake City, UT 84114-5801

Newfield Exploration Company

1001 17th Street | Suite 2000
Denver, Colorado 80202
PH 303-893-0102 | FAX 303-893-0103

RE: Directional Drilling
GMBU S-16-9-16
Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R16E Section 16: SESE (ML-16532)
634' FSL 665' FEL

At Target: T9S-R16E Section 16: NWSE (ML-16532)
1512' FSL 1532' FEL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 7/10/14, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing pre-existing roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-323-9770 or by email at ldein@newfield.com. Your consideration in this matter is greatly appreciated.

Sincerely,
Newfield Production Company

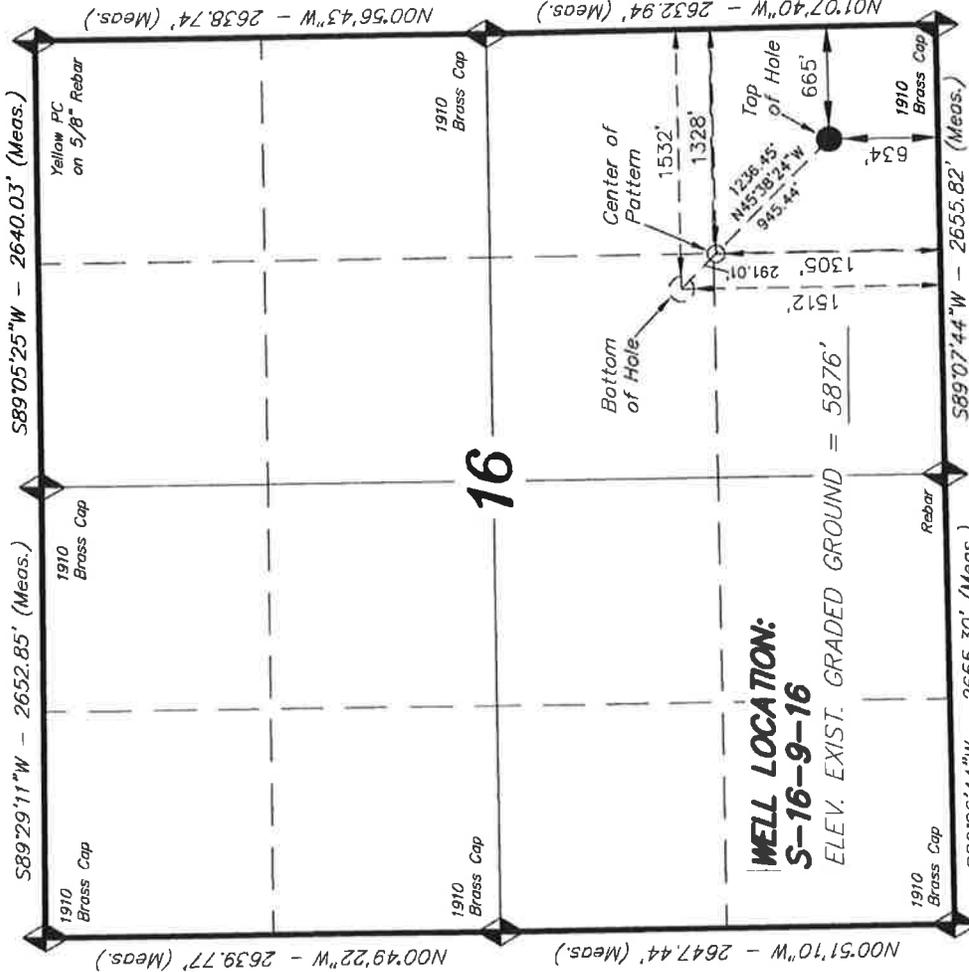
Levi Dein
Landman

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING				FORM 3 AMENDED REPORT <input type="checkbox"/>						
APPLICATION FOR PERMIT TO DRILL				1. WELL NAME and NUMBER GMBU S-10-9-10						
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 MONUMENT BUTTE						
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 mcrozler@newfield.com						
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML-16532		11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>		12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" 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	634FSL605FEL	SESE	10	9.0S	10.0E	S				
Top of Uppermost Producing Zone	1085FSL1105FEL	SESE	10	9.0S	10.0E	S				
At Total Depth	1512FSL1532FEL	NWSE	16	9.0S	10.0E	S				
21. COUNTY DUCHESENE		22. DISTANCE TO NEAREST LEASE LINE (Foot) 1512		23. NUMBER OF ACRES IN DRILLING UNIT 20						
27. ELEVATION - GROUND LEVEL 5870		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1320		26. PROPOSED DEPTH MD:0148 TVD:6000						
		28. BOND NUMBER B001834		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 - 8148	15.5	J-55 LT&C	8.3	Premium Lite High Strength	287	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: mcrozler@newfield.com				
API NUMBER ASSIGNED			APPROVAL							

Received: July 10, 2014

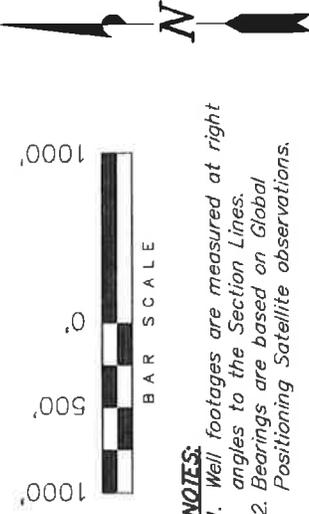
T9S, R16E, S.L.B.&M.

NEWFIELD EXPLORATION COMPANY



WELL LOCATION, S-16-9-16, LOCATED AS SHOWN IN THE SE 1/4 SE 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, S-16-9-16, LOCATED AS SHOWN IN THE NW 1/4 SE 1/4 OF SECTION 16, T9S, R16E, S.L.B.&M. DUCHESNE 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 WELL 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.

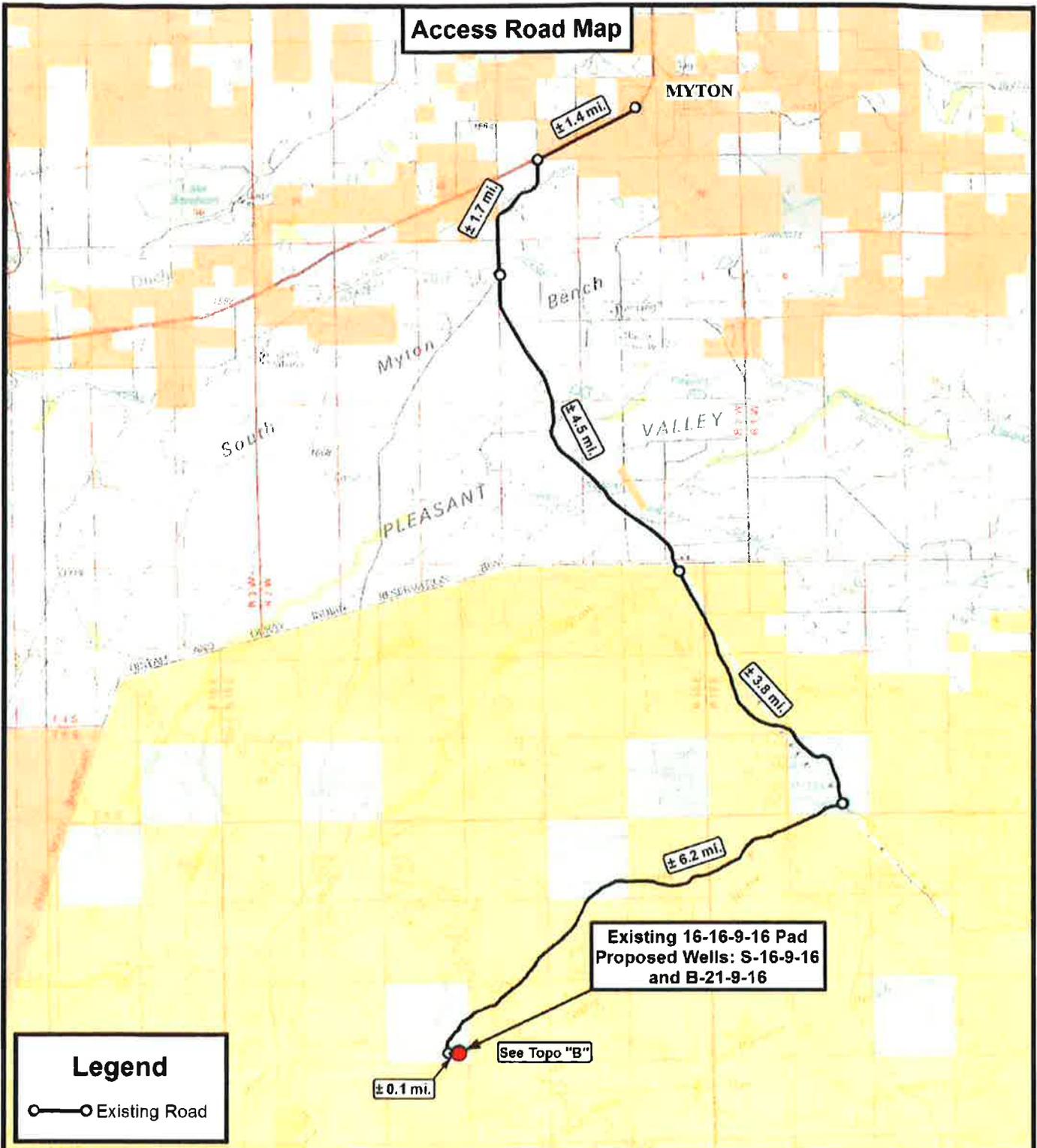
REGISTERED LAND SURVEYOR
 STATE OF UTAH
 06-27-14
 STACY W.

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

DATE SURVEYED:	11-22-13	SURVEYED BY:	G.D.O.	VERSION:
DATE DRAWN:	12-18-13	DRAWN BY:	L.K.	V2
REVISED:	06-27-14 F.T.M.	SCALE:	1" = 1000'	

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'



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

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F: (435) 781-2518



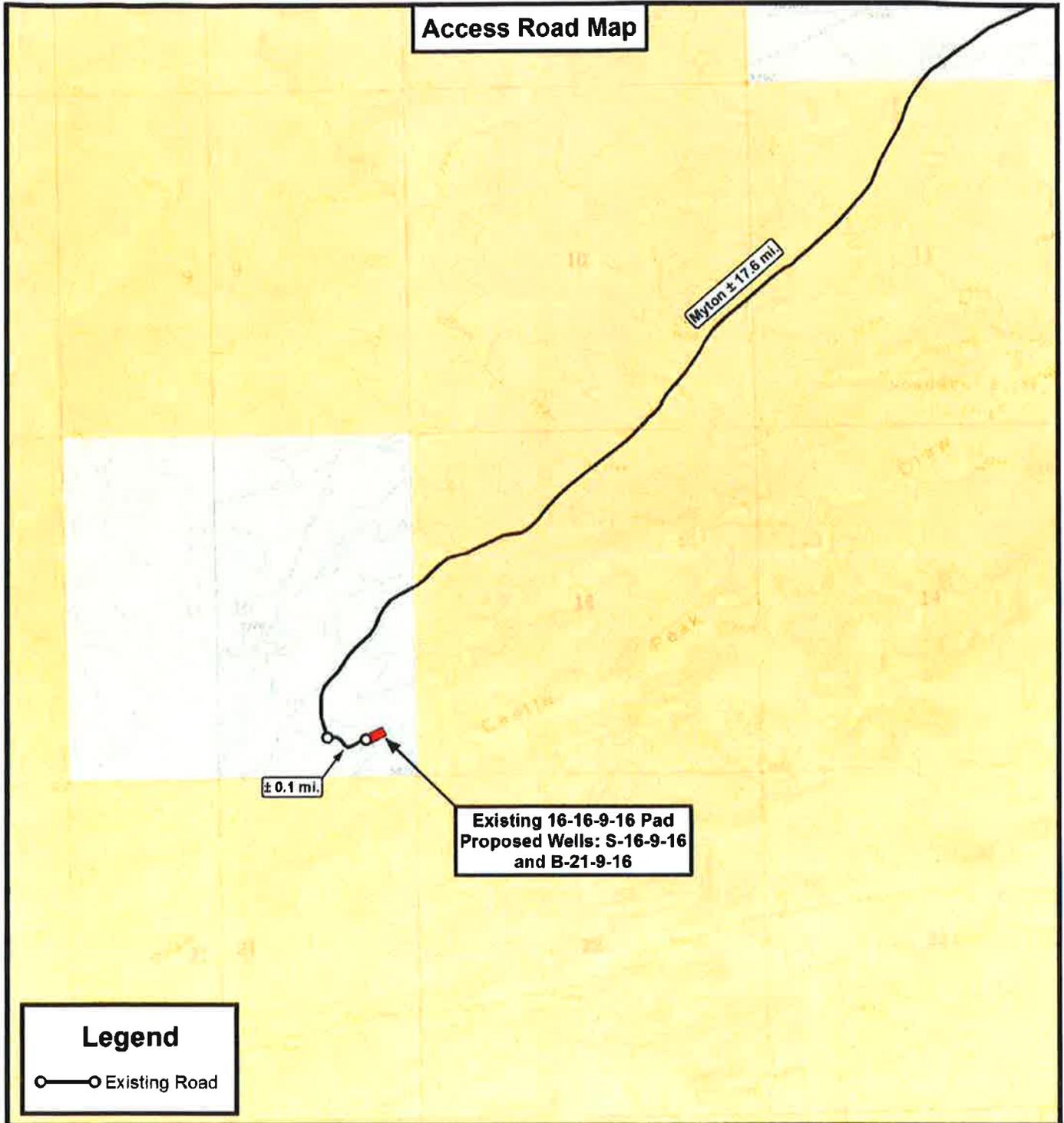
NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16 and B-21-9-16
Sec. 16, T9S, R16E, S.L.B.&M.
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			V2
SCALE:	1:100,000			

TOPOGRAPHIC MAP

SHEET
A



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.
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078
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 F: (435) 781-2518



NEWFIELD EXPLORATION COMPANY

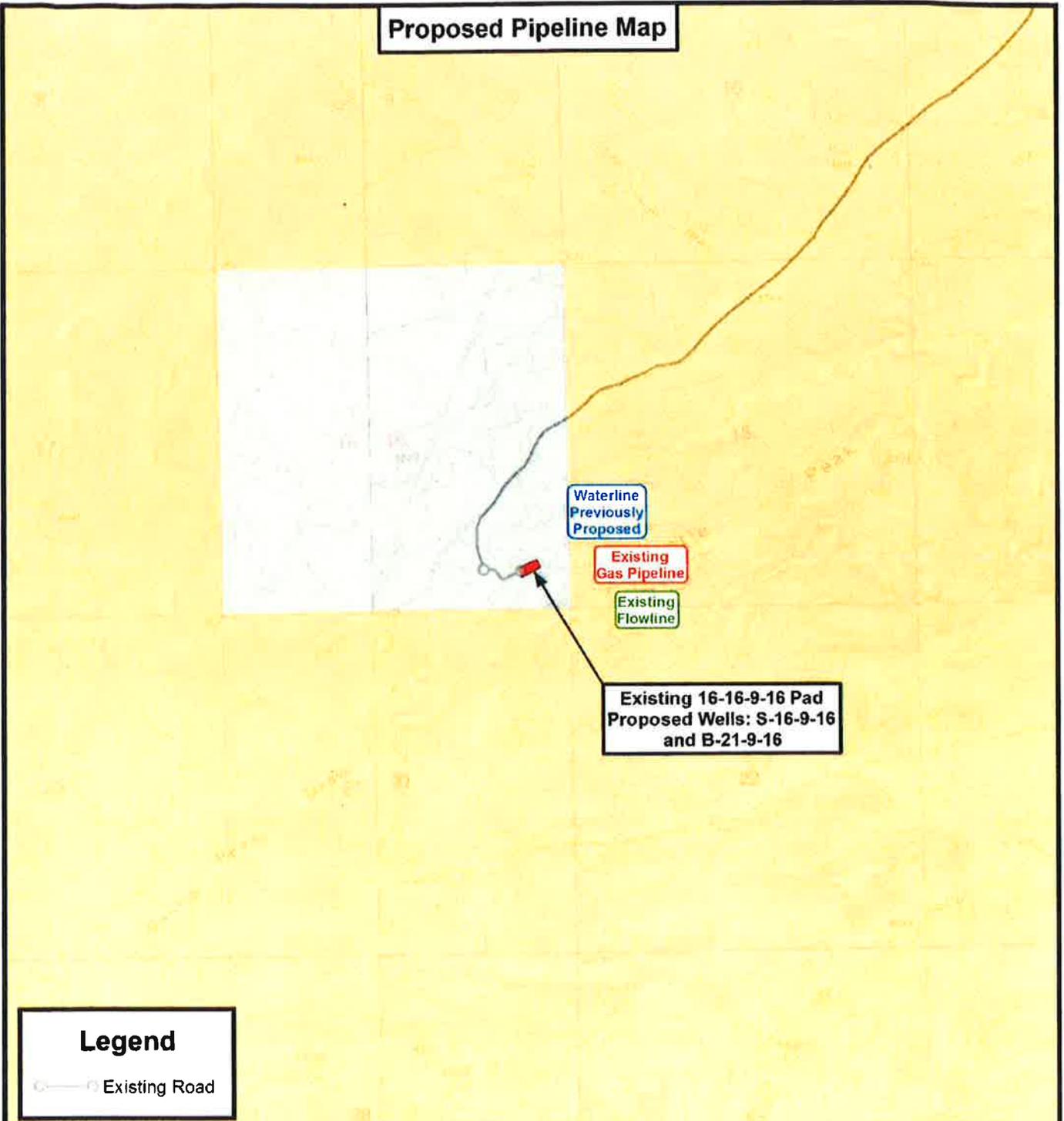
Existing 16-16-9-16 Pad
 Proposed Wells: S-16-9-16 and B-21-9-16
 Sec. 16, T9S, R16E, S.L.B.&M.
 Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			V2
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET
B

Proposed Pipeline 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.

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NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
 Proposed Wells: S-16-9-16 and B-21-9-16
 Sec. 16, T9S, R16E, S.L.B.&M.
 Duchesne County, UT.

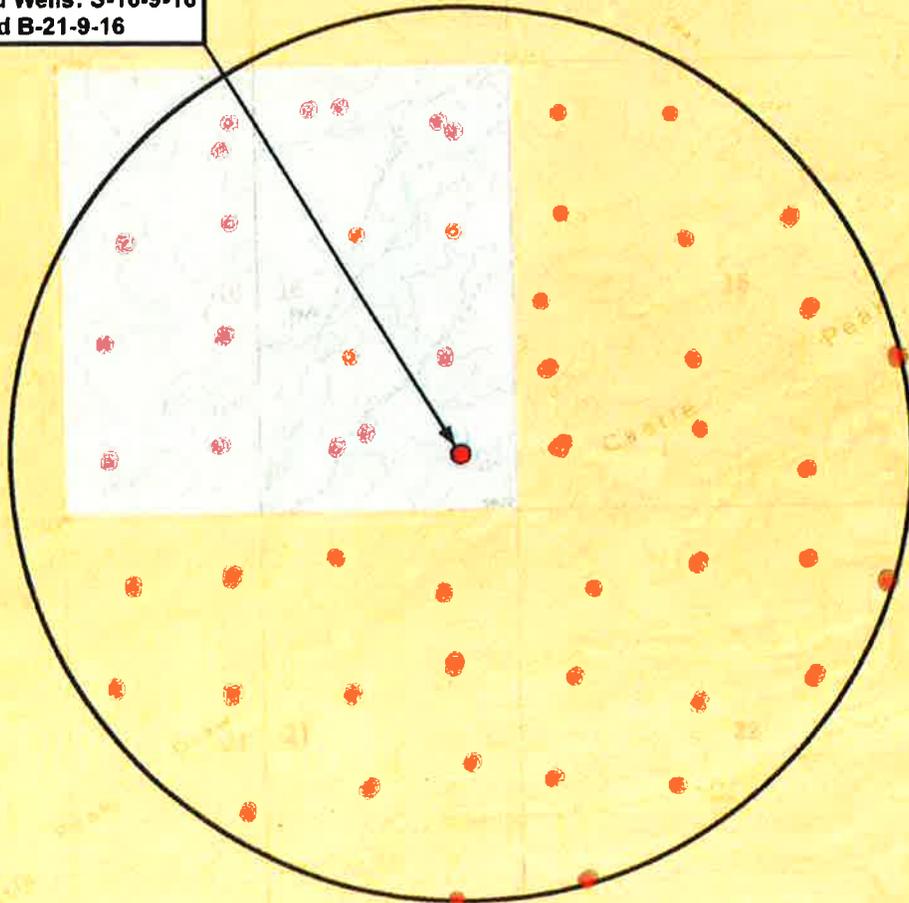
DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			V2
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET
C

Exhibit "B" Map

**Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16
and B-21-9-16**



Legend

-  1 Mile Radius
-  Pad Location

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.**
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

P: (435) 781-2501
F: (435) 781-2518



NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
Proposed Wells: S-16-9-16 and B-21-9-16
Sec. 16, T9S, R16E, S.L.B.&M.
Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.	VERSION:
DATE:	01-09-2014			V2
SCALE:	1" = 2,000'			

TOPOGRAPHIC MAP

SHEET
D

Coordinate Report

Well Number	Feature Type	Latitude (NAD 83) (DMS)	Longitude (NAD 83) (DMS)
16-16-9-16	Surface Hole	40° 01' 31.48" N	110° 07' 01.80" W
S-16-9-16	Surface Hole	40° 01' 31.28" N	110° 07' 01.88" W
B-21-9-16	Surface Hole	40° 01' 31.08" N	110° 07' 01.97" W
S-16-9-16	Center of Pattern	40° 01' 37.91" N	110° 07' 10.44" W
B-21-9-16	Center of Pattern	40° 01' 25.61" N	110° 07' 10.24" W
S-16-9-16	Bottom of Hole	40° 01' 39.95" N	110° 07' 13.07" W
B-21-9-16	Bottom of Hole	40° 01' 23.69" N	110° 07' 13.15" W

Well Number	Feature Type	Latitude (NAD 83) (DD)	Longitude (NAD 83) (DD)
16-16-9-16	Surface Hole	40.025411	110.117167
S-16-9-16	Surface Hole	40.025355	110.117190
B-21-9-16	Surface Hole	40.025300	110.117213
S-16-9-16	Center of Pattern	40.027198	110.119566
B-21-9-16	Center of Pattern	40.023781	110.119512
S-16-9-16	Bottom of Hole	40.027765	110.120298
B-21-9-16	Bottom of Hole	40.023248	110.120318

Well Number	Feature Type	Northing (NAD 83) (UTM Meters)	Longitude (NAD 83) (UTM Meters)
16-16-9-16	Surface Hole	4430950.816	575330.954
S-16-9-16	Surface Hole	4430944.642	575329.047
B-21-9-16	Surface Hole	4430938.468	575327.140
S-16-9-16	Center of Pattern	4431147.142	575124.259
B-21-9-16	Center of Pattern	4430767.951	575132.664
S-16-9-16	Bottom of Hole	4431209.472	575061.223
B-21-9-16	Bottom of Hole	4430708.114	575064.419

Well Number	Feature Type	Latitude (NAD 27) (DMS)	Longitude (NAD 27) (DMS)
16-16-9-16	Surface Hole	40° 01' 31.61" N	110° 06' 59.26" W
S-16-9-16	Surface Hole	40° 01' 31.41" N	110° 06' 59.34" W
B-21-9-16	Surface Hole	40° 01' 31.21" N	110° 06' 59.42" W
S-16-9-16	Center of Pattern	40° 01' 38.05" N	110° 07' 07.89" W
B-21-9-16	Center of Pattern	40° 01' 25.75" N	110° 07' 07.70" W
S-16-9-16	Bottom of Hole	40° 01' 40.09" N	110° 07' 10.53" W
B-21-9-16	Bottom of Hole	40° 01' 23.83" N	110° 07' 10.60" W



Tri State
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NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
 Proposed Wells: S-16-9-16 and B-21-9-16
 Sec. 16, T9S, R16E, S.L.B.&M.
 Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	06-27-14 A.P.C.
DATE:	01-09-2014		
VERSION:	V2		

COORDINATE REPORT

SHEET

1

Coordinate Report

Well Number	Feature Type	Latitude (NAD 27) (DD)	Longitude (NAD 27) (DD)
16-16-9-16	Surface Hole	40.025448	110.116460
S-16-9-16	Surface Hole	40.025393	110.116483
B-21-9-16	Surface Hole	40.025337	110.116506
S-16-9-16	Center of Pattern	40.027235	110.118859
B-21-9-16	Center of Pattern	40.023818	110.118805
S-16-9-16	Bottom of Hole	40.027802	110.119591
B-21-9-16	Bottom of Hole	40.023285	110.119611

Well Number	Feature Type	Northing (NAD 27) (UTM Meters)	Longitude (NAD 27) (UTM Meters)
16-16-9-16	Surface Hole	4430745.484	575393.203
S-16-9-16	Surface Hole	4430739.310	575391.296
B-21-9-16	Surface Hole	4430733.135	575389.389
S-16-9-16	Center of Pattern	4430941.810	575186.504
B-21-9-16	Center of Pattern	4430562.619	575194.913
S-16-9-16	Bottom of Hole	4431004.140	575123.468
B-21-9-16	Bottom of Hole	4430502.781	575126.667



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NEWFIELD EXPLORATION COMPANY

Existing 16-16-9-16 Pad
 Proposed Wells: S-16-9-16 and B-21-9-16
 Sec. 16, T9S, R16E, S.L.B.&M.
 Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED: 06-27-14 A.P.C.
DATE:	01-09-2014	
VERSION:	V2	

COORDINATE REPORT	SHEET 2
--------------------------	-------------------

S-16-9-16

**CLASS I REVIEW OF NEWFIELD EXPLORATION'S
SIX PROPOSED WELLS ON THREE PADS: 16-16-9-16 (PAD)
16-16-9-16 (EXISTING), S-16-9-16 (PROPOSED) & B-21-9-16 (PROPOSED);
13-23-9-16 (PAD) 13-23-9-16 (EXISTING), T-22-9-16 (PROPOSED)
& A-27-9-16 (PROPOSED); AND 14-23-9-16 (PAD) 14-23-9-16 (EXISTING),
Q-23-9-16 (PROPOSED) & D-26-9-16 (PROPOSED)
DUCHESNE COUNTY, UTAH
(T9S, R16E, SEC. 16 AND 23)**

By:

Jacki A. Montgomery

Prepared For:

**Bureau of Land Management
Vernal Field Office
and
State of Utah
School & Institutional Trust Lands
Administration**

Prepared Under Contract With:

**Newfield Exploration Company
Rt. 3 Box 3630
Myton, UT 84052**

Submitted By:

**Montgomery Archaeological Consultants, Inc.
P.O. Box 219
Moab, Utah 84532**

MOAC Report No. 14-068

April 1, 2014

**United States Department of Interior (FLPMA)
Permit No. 14-UT-60122**

**Public Lands Policy Coordination Office
Principal Investigator Permit No. 236**



Paleontological Technical Report for the 16-16-9-16 Well Pad Expansion Survey on SITLA Land, Duchesne County, Utah

Prepared for

Newfield Exploration Company

and

**State of Utah School and Institutional Trust
Lands Administration**

Prepared by

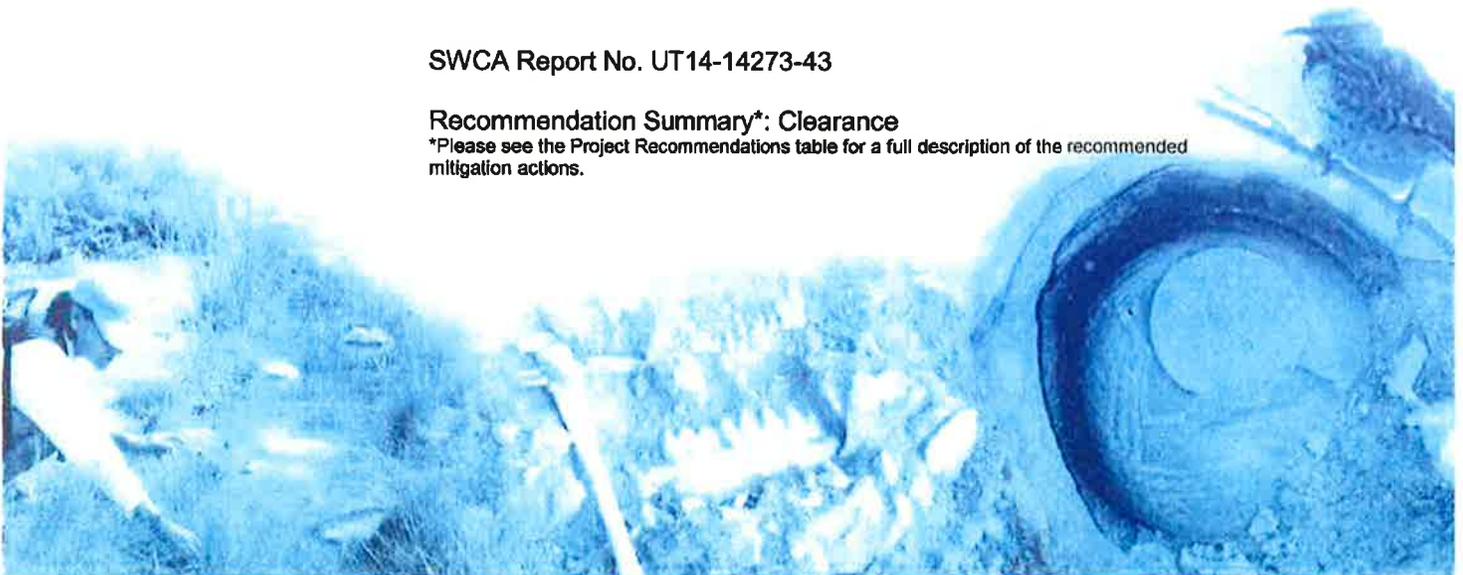
SWCA Environmental Consultants

March 2014

SWCA Report No. UT14-14273-43

Recommendation Summary*: Clearance

*Please see the Project Recommendations table for a full description of the recommended mitigation actions.



Well Name	NEWFIELD PRODUCTION COMPANY GMBU S-16-9-16 43013530420000			
String	SURF	PROD		
Casing Size(")	8.625	5.500		
Setting Depth (TVD)	300	6000		
Previous Shoe Setting Depth (TVD)	0	300		
Max Mud Weight (ppg)	8.3	8.3		
BOPE Proposed (psi)	500	2000		
Casing Internal Yield (psi)	2950	4810		
Operators Max Anticipated Pressure (psi)	2644	8.5		

Calculations	SURF String	8.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	129		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	93	YES	air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	63	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	63	NO	OK
Required Casing/BOPE Test Pressure=		300	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient	

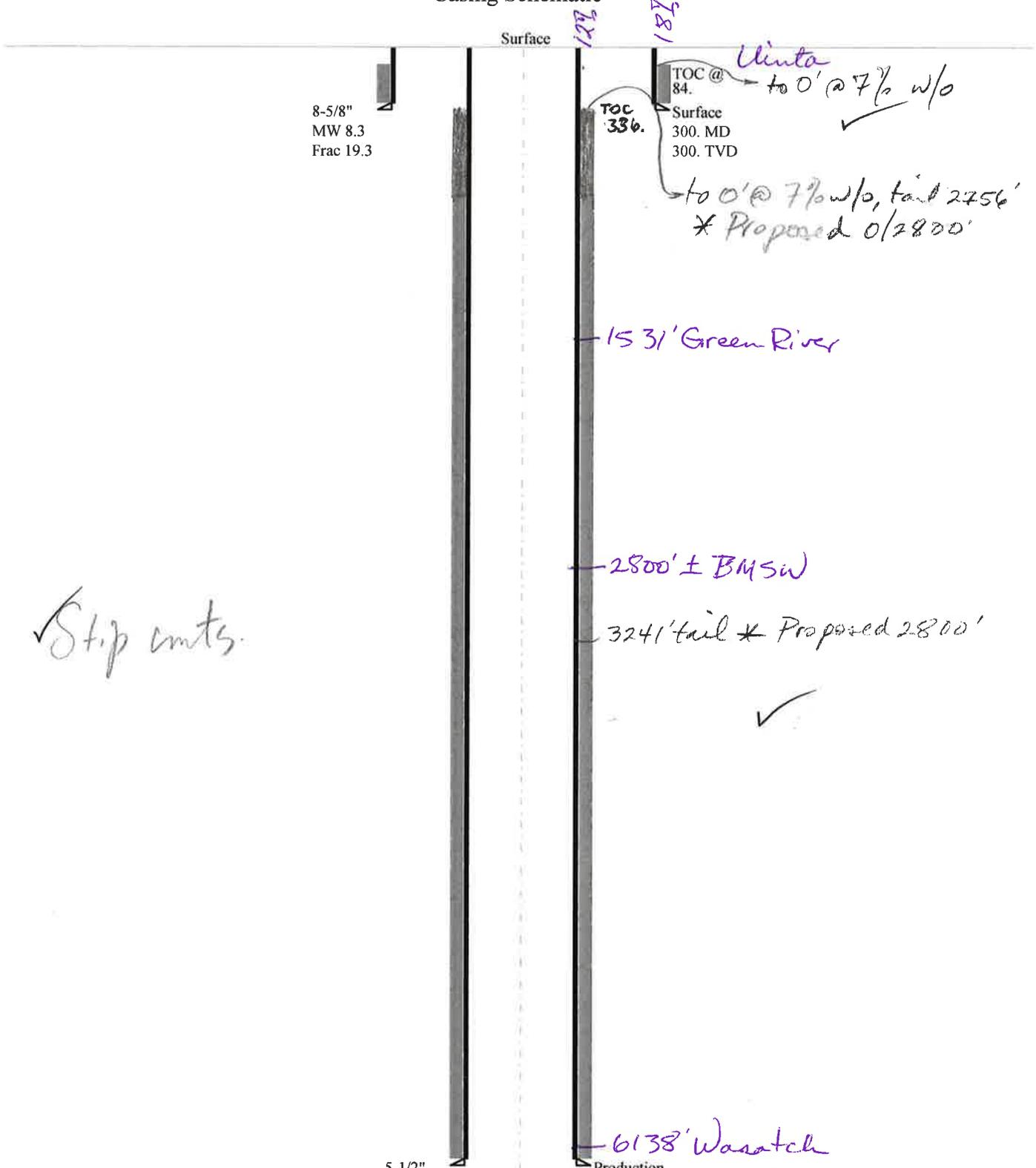
Calculations	PROD String	5.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	2590		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1870	YES	2M BOP rotating head, dbi rams, mud cross, choke manifold
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1270	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1336	NO	
Required Casing/BOPE Test Pressure=		2000	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		300	psi *Assumes 1psi/ft frac gradient	

Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient	

Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient	

43013530420000 GMBU S-16-9-16

Casing Schematic



✓ Strip cmts.

Uinta
TOC @ 84. → to 0' @ 7 1/2 w/o ✓

to 0' @ 7 1/2 w/o, tail 2756'
* Proposed 0/2800'

1531' Green River

2800' ± BMSW

3241' tail * Proposed 2800' ✓

6138' Wasatch

5-1/2"
MW 8.4

Production
6148. MD
6000. TVD

6345	665E
865	884
1499 FSL ✓	1549 FEL ✓ 2m

NW SE Sec 16-9S-16E

Well name:	43013530420000 GMBU S-16-9-16		
Operator:	NEWFIELD PRODUCTION COMPANY		
String type:	Surface	Project ID:	43-013-53042
Location:	DUCHESNE COUNTY		

Design parameters:**Collapse**

Mud weight: 8.300 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 264 psi
Internal gradient: 0.120 psi/ft
Calculated BHP: 300 psi

No backup mud specified.

Minimum design factors:**Collapse:**

Design factor: 1.125

Burst:

Design factor: 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 263 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 78 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 84 ft

Non-directional string.**Re subsequent strings:**

Next setting depth: 6,000 ft
Next mud weight: 8.400 ppg
Next setting BHP: 2,618 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 300 ft
Injection pressure: 300 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	300	8.625	24.00	J-55	ST&C	300	300	7.972	1544
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	129	1370	10.591	300	2950	9.83	6.3	244	38.71 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: September 17, 2014
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 300 ft, a mud weight of 8.3 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43013530420000 GMBU S-16-9-16	
Operator:	NEWFIELD PRODUCTION COMPANY	
String type:	Production	Project ID: 43-013-53042
Location:	DUCHESNE COUNTY	

Design parameters:

Collapse

Mud weight: 8.400 ppg
Internal fluid density: 0.600 ppg

Burst

Max anticipated surface pressure: 1,298 psi
Internal gradient: 0.220 psi/ft
Calculated BHP: 2,618 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on buoyed weight.
Neutral point: 5,362 ft

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 158 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Cement top: 336 ft

Directional well information:

Kick-off point: 600 ft
Departure at shoe: 1237 ft
Maximum dogleg: 1.5 °/100ft
Inclination at shoe: 14.09 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	6148	5.5	15.50	J-55	LT&C	6000	6148	4.825	21709
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2431	4040	1.662	2618	4810	1.84	81.2	217	2.67 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: September 29, 2014
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 6000 ft, a mud weight of 8.4 ppg. An internal gradient of .031 psi/ft was used for collapse from TD to TD. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator NEWFIELD PRODUCTION COMPANY
Well Name GMBU S-16-9-16
API Number 43013530420000 **APD No** 10038 **Field/Unit** MONUMENT BUTTE
Location: 1/4,1/4 SESE **Sec** 16 **Tw** 9.0S **Rng** 16.0E 634 FSL 665 FEL
GPS Coord (UTM) 575329 4430945 **Surface Owner**

Participants

Corie Miller - NFX; Sheri Wysong - BLM; Deena Loyola, Kat Barks & Jim Davis - SITLA

Regional/Local Setting & Topography

This is a new well on an existing well pad. The Host well is the 16-16-9-16. Two new wells are planned for this location at this time. The pad footprint will be expanded to square up the location. The reserve pit will be dug in new undisturbed lands.

Original language from host well:

Completed presite. Floyd Bartlett (DOGM), David Allred (Newfield Production Company), Cory Miller (Tri-state Land Surveying), Jim Davis (SITLA), Daniel Emmett (Utah Division of Wildlife Resources).

The general area is approximately 21 miles southwest of Myton, Utah in the upper Castle Peak area. Castle Peak Draw runs in a northeasterly direction about 14 miles and joins Pariette Draw. Pariette Draw continues in a southeasterly direction about 6 miles and joins the Green River about 6 miles below Ouray Utah. Pariette Draw contains a perennial stream somewhat consisting of irrigation runoff and seepage. No streams springs or seeps occur in the area. An occasional pond constructed to store runoff for livestock or wildlife exists. Drainages are ephemeral only flowing during spring snowmelt or following intense summer rainstorms. Broad flats or rolling topography intersected by drainages with gentle to moderate side-slopes characterize the area. Access to the area from Myton, Utah is following State of Utah Hwy. 40 and Duchesne County and oilfield development roads a distance of 21.4 miles. New construction of 530 feet of new road will be required.

The proposed State #16-16-9-16 oil well location is on the northeast slope of a ridge with the reserve pit beginning near the break of the ridge. Here it is moderately steep but the terrain becomes gentler for the pad as the slope extends northeasterly toward a drainage. A shallow drainage to the east also parallels that side of the location. No drainages intersect the location and no diversions will be required. A constructed catchment pond exists about ¼ mile to the northeast. Its condition is not known. The selected site poses no apparent surface concerns and appears to be a good location for constructing a pad, drilling and operating a well. The area was covered with about 10 inches of snow during the evaluation. Both the surface and minerals are owned by SITLA.

Daniel Emmett representing the Utah Division of Wildlife Resources stated the area is classified as sage grouse brooding habitat and crucial yearlong antelope habitat. He recommended no restriction periods for these two species. Also no other wildlife is expected to be significantly affected. Mr. Emmett gave Mr. Allred of Newfield Production Company and Mr. Davis of SITLA a copy of his evaluation and also a seed mix recommendation to be used when the reserve pit and location are reclaimed.

A 40' x 80' x 8' deep reserve pit is planned in an area of cut on the northwest side of the location. A pit liner is required. Newfield commonly uses a 16 mil liner.

Area was covered with snow. Vegetation is a Deseret shrub type. Identified or expected vegetation consisted of shadscale, mustard weed, horsebrush, broom snakeweed, and spring annuals.

Cattle, prairie dogs, antelope, small mammals and birds. Golden eagle have been sited in the general area.

Moderately deep sandy clay loam with some surface rock.

Surface Use Plan

Current Surface Use

Existing Well Pad

New Road Miles	Well Pad	Src Const Material	Surface Formation
0	Width 200 Length 300	Onsite	UNTA

Ancillary Facilities

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Surrounding Vegetation is a Deseret shrub type. Identified or expected vegetation consisted of shadscale, mustard weed, horsebrush, broom snakeweed, and spring annuals. Location is an existing well pad

Cattle, prairie dogs, antelope, small mammals and birds are found adjacent pad. Golden eagle have been sited in the general area. Ben Williams added that the area is not in the Governors sage grouse management area and has no further issue

Soil Type and Characteristics

previously disturbed or imported materials

Erosion Issues Y

steep slopes with some existing erosion present

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required? Y

carry overland flows to protect reserve pit

Berm Required? Y

Erosion Sedimentation Control Required? N

Paleo Survey Run? N Paleo Potential Observed? N Cultural Survey Run? N Cultural Resources? N

Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)	100 to 200	5
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)		20
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)		0
Affected Populations		
Presence Nearby Utility Conduits	Not Present	0
Final Score		40

1 Sensitivity Level

Characteristics / Requirements

Pit to be dug to a depth of 8'. Because of the likely hood of disturbance to existing sandstone bedrock and clastic materials observed on the surface, pit underlayment is to be used to protect the liner from potential puncture. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete.

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? Y

Other Observations / Comments

Chris Jensen
Evaluator

8/13/2014
Date / Time

**Application for Permit to Drill
Statement of Basis
Utah Division of Oil, Gas and Mining**

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
10038	43013530420000	LOCKED	OW	S	No
Operator	NEWFIELD PRODUCTION COMPANY		Surface Owner-APD		
Well Name	GMBU S-16-9-16		Unit	GMBU (GRRV)	
Field	MONUMENT BUTTE		Type of Work	DRILL	
Location	SESE 16 9S 16E S 634 FSL 665 FEL GPS Coord (UTM) 575324E 4430938N				

Geologic Statement of Basis

Newfield proposes to set 300' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 2,800'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 16. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. Production casing cement should be brought high enough to cover the estimated base of the moderately saline ground water.

Brad Hill
APD Evaluator

9/17/2014
Date / Time

Surface Statement of Basis

Location is proposed in a good location although outside the spacing window typical of a 20 acre directional well. Access road enters the pad from the West. The landowner and its representatives were in attendance for the pre-site inspection.

The soil type and topography at present do not combine to pose a significant threat to erosion or sediment/ pollution transport in these regional climate conditions although, below a ridge, overland flows come onto site and flood pad.

Usual construction standards of the Operator do not appear to be adequate for the proposed purpose as submitted. The access road will need to have winged trenches to divert flows out onto the wild as well as a hump at pad edge. For this reason I have asked for a felt subliner.

I recognize no special flora or animal species or cultural resources on site that the proposed action may harm. This is Pronghorn and wintering Eagle habitat. The location was not previously surveyed for cultural and paleontological resources (as the operator saw fit). I have advised the operator take all measures necessary to comply with ESA and MBTA and that actions insure no disturbance to species that may have not been seen during onsite visit.

The location should be bermed to prevent fluids from entering or leaving the confines of the pad. Fencing around the reserve pit will be necessary to prevent wildlife and livestock from entering. A synthetic liner of 16 mils (minimum) should be utilized in the reserve pit. Measures (BMP's) shall be taken to protect steep slopes and topsoil pile from erosion, sedimentation and stability issues. A diversion is to be built sufficient to conduct overland or channel flow from off the ridge above and prevent it from flooding the reserve pit.

Chris Jensen
Onsite Evaluator

8/13/2014
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	Drainages above the proposed pad shall be diverted around the location. Flows from steep slopes onto the pad adjacent the reserve pit will be diverted to protect flooding of pit
Surface	Measures (BMP's) shall be taken to protect steep slopes and topsoil pile from erosion, sedimentation and stability issues.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/10/2014

API NO. ASSIGNED: 43013530420000

WELL NAME: GMBU S-16-9-16

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 646-4825

CONTACT: Mandie Crozier

PROPOSED LOCATION: SESE 16 090S 160E

Permit Tech Review:

SURFACE: 0634 FSL 0665 FEL

Engineering Review:

BOTTOM: 1512 FSL 1532 FEL

Geology Review:

COUNTY: DUCHESNE

LATITUDE: 40.02529

LONGITUDE: -110.11725

UTM SURF EASTINGS: 575324.00

NORTHINGS: 4430938.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 3 - State

LEASE NUMBER: ML-16532

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 3 - State

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: STATE - B001834
- 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: 5 - Statement of Basis - bhill
 12 - Cement Volume (3) - hmacdonald
 15 - Directional - dmason
 25 - Surface Casing - hmacdonald
 27 - Other - bhill



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. BAZA
Division Director

Permit To Drill

Well Name: GMBU S-16-9-16
API Well Number: 43013530420000
Lease Number: ML-16532
Surface Owner: STATE
Approval Date: 10/9/2014

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:

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.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

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).

Cement volume for the 5 1/2" production string shall be determined from actual hole diameter in order to place lead cement from the pipe setting depth back to surface and tail cement to above the base of moderately saline water as indicated in the submitted drilling plan.

Surface casing shall be cemented to the surface.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

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
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

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 "J. Rogers", written in a cursive style.

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: ML-16532	
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)	
8. WELL NAME and NUMBER: GMBU S-16-9-16	
9. API NUMBER: 43013530420000	
9. FIELD and POOL or WILDCAT: MONUMENT BUTTE	
9. COUNTY: DUCHESNE	
STATE: UTAH	
1. TYPE OF WELL Oil Well	
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY	
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052	
PHONE NUMBER: 435 646-4825 Ext	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0634 FSL 0665 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 16 Township: 09.0S Range: 16.0E Meridian: S	

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: 10/9/2015	<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
September 15, 2015
Oil, Gas and Mining

Date: _____
By: 

NAME (PLEASE PRINT) Mandie Crozier	PHONE NUMBER 435 646-4825	TITLE Regulatory Tech
SIGNATURE N/A	DATE 9/14/2015	



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 43013530420000

API: 43013530420000

Well Name: GMBU S-16-9-16

Location: 0634 FSL 0665 FEL QTR SESE SEC 16 TWNP 090S RNG 160E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 10/9/2014

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: 9/14/2015

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER: ML-16532
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 S-16-9-16
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY	9. API NUMBER: 43013530420000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052	PHONE NUMBER: 435 646-4825 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0634 FSL 0665 FEL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SESE Section: 16 Township: 09.0S Range: 16.0E Meridian: S	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE COUNTY: DUCHESNE 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: 10/9/2016	<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
<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
September 20, 2016
Oil, Gas and Mining

Date: _____
By: 

NAME (PLEASE PRINT) Mandie Crozier	PHONE NUMBER 435 646-4825	TITLE Regulatory Tech
SIGNATURE N/A	DATE 9/19/2016	



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 43013530420000

API: 43013530420000

Well Name: GMBU S-16-9-16

Location: 0634 FSL 0665 FEL QTR SESE SEC 16 TWNP 090S RNG 160E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 10/9/2014

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.

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- 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: 9/19/2016

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY