

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>		<b>1. WELL NAME and NUMBER</b> GMBU M-21-9-16
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		<b>3. FIELD OR WILDCAT</b> MONUMENT BUTTE
<b>4. TYPE OF WELL</b> Oil Well      Coalbed Methane Well: NO		<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> GMBU (GRRV)
<b>6. NAME OF OPERATOR</b> NEWFIELD PRODUCTION COMPANY		<b>7. OPERATOR PHONE</b> 435 646-4825
<b>8. ADDRESS OF OPERATOR</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. OPERATOR E-MAIL</b> mcrozier@newfield.com
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU-64379	<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>	<b>12. SURFACE OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>	<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>	<b>19. SLANT</b> 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	2107 FNL 1926 FWL	SEnw	21	9.0 S	16.0 E	S
Top of Uppermost Producing Zone	2555 FNL 2396 FWL	SEnw	21	9.0 S	16.0 E	S
At Total Depth	2276 FSL 2481 FEL	NWSE	21	9.0 S	16.0 E	S

<b>21. COUNTY</b> DUCHEсне	<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 2276	<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 20
<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 955	<b>26. PROPOSED DEPTH</b> MD: 5996    TVD: 5834	
<b>27. ELEVATION - GROUND LEVEL</b> 6022	<b>28. BOND NUMBER</b> WYB000493	<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 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 - 5996	15.5	J-55 LT&C	8.3	Premium Lite High Strength	276	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

<b>NAME</b> Heather Calder	<b>TITLE</b> Production Technician	<b>PHONE</b> 435 646-4936
<b>SIGNATURE</b>	<b>DATE</b> 07/31/2013	<b>EMAIL</b> hcalder@newfield.com
<b>API NUMBER ASSIGNED</b> 43013523400000	<b>APPROVAL</b>   Permit Manager	

NEWFIELD PRODUCTION COMPANY  
 GMBU M-21-9-16  
 AT SURFACE: SE/NW SECTION 21, 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' – 3,555'
Green River	3,555'
Wasatch	6,110'
<b>Proposed TD</b>	5,996'(MD) 5,834' (TVD)

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

Green River Formation (Oil)      3,555' – 6,110'

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 <sub>3</sub> ) (mg/l)
Dissolved Bicarbonate (NaHCO <sub>3</sub> ) (mg/l)	Dissolved Chloride (Cl) (mg/l)
Dissolved Sulfate (SO <sub>4</sub> ) (mg/l)	Dissolved Total Solids (TDS) (mg/l)

4. **PROPOSED CASING PROGRAM**

a. **Casing Design: GMBU M-21-9-16**

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'	5,996'	15.5	J-55	LTC	4,810 2.52	4,040 2.12	217,000 2.33

Assumptions:

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

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

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

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

b. **Cementing Design: GMBU M-21-9-16**

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
			ft <sup>3</sup>			
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17
			161			
Prod casing Lead	3,996'	Prem Lite II w/ 10% gel + 3% KCl	276	30%	11.0	3.26
			900			
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363	30%	14.3	1.24
			451			

- \*Actual volume pumped will be 15% over the caliper log
- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
  - Compressive strength of tail cement: 2500 psi @ 24 hours

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

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

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

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

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

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

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

From surface to  $\pm 300$  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  $\pm 300$  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 PBDT 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

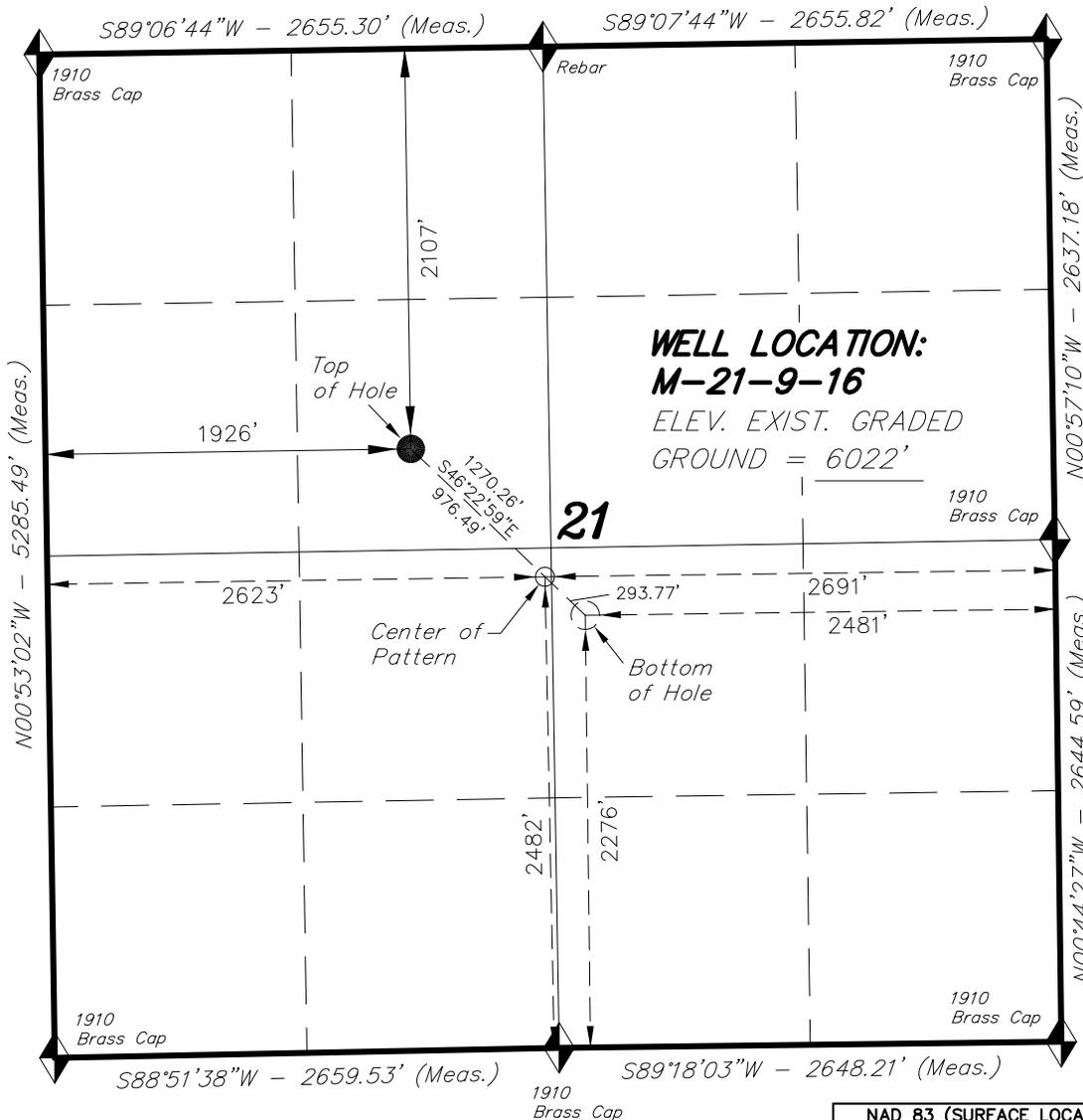
bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

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

It is anticipated that the drilling operations will commence the fourth quarter of 2013, and take approximately seven (7) days from spud to rig release.

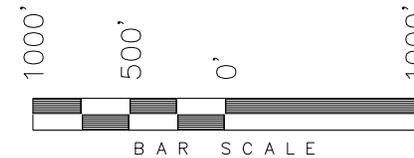
# T9S, R16E, S.L.B.&M.

## NEWFIELD EXPLORATION COMPANY



WELL LOCATION, M-21-9-16, LOCATED AS SHOWN IN THE SE 1/4 NW 1/4 OF SECTION 21, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, M-21-9-16, LOCATED AS SHOWN IN THE NW 1/4 SE 1/4 OF SECTION 21, 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 PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR  
 No. 189377  
 12-26-12  
 STACY W. STEWART  
 REGISTERED LAND SURVEYOR  
 REGISTRATION No. 189377  
 STATE OF UTAH

◆ = SECTION CORNERS LOCATED

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

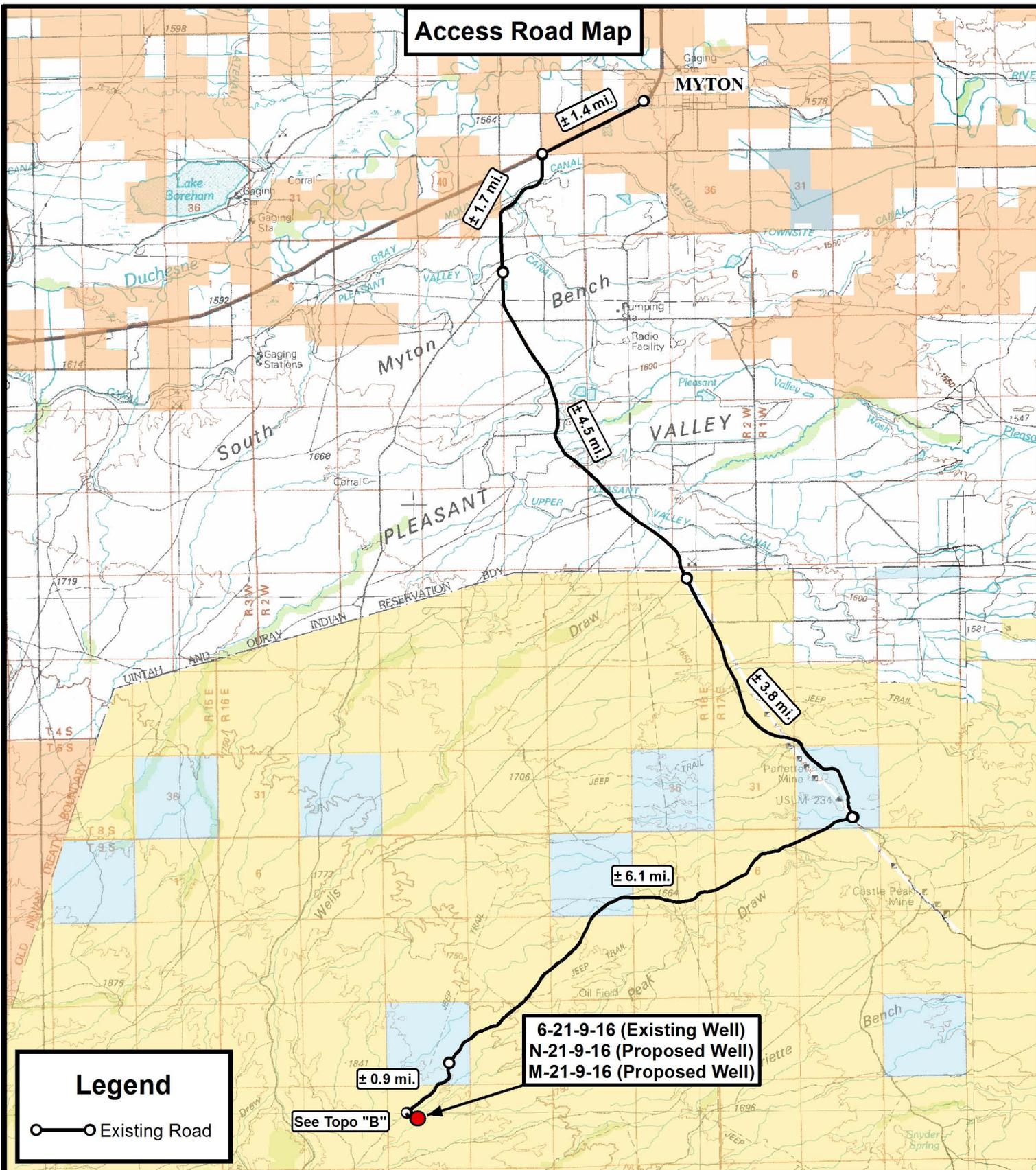
<b>NAD 83 (SURFACE LOCATION)</b>	
LATITUDE = 40°01'04.20"	
LONGITUDE = 110°07'36.79"	
<b>NAD 27 (SURFACE LOCATION)</b>	
LATITUDE = 40°01'04.33"	
LONGITUDE = 110°07'34.25"	
<b>NAD 83 (CENTER OF PATTERN)</b>	<b>NAD 83 (BOTTOM HOLE LOCATION)</b>
LATITUDE = 40°00'57.44"	LATITUDE = 40°00'55.40"
LONGITUDE = 110°07'27.84"	LONGITUDE = 110°07'25.15"
<b>NAD 27 (CENTER OF PATTERN)</b>	<b>NAD 27 (BOTTOM HOLE LOCATION)</b>
LATITUDE = 40°00'57.57"	LATITUDE = 40°00'55.54"
LONGITUDE = 110°07'25.30"	LONGITUDE = 110°07'22.61"

### TRI STATE LAND SURVEYING & CONSULTING

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

DATE SURVEYED: 11-29-12	SURVEYED BY: S.H.	VERSION:
DATE DRAWN: 12-26-12	DRAWN BY: V.H.	V1
REVISED:	SCALE: 1" = 1000'	

**Access Road Map**



**Legend**

○—○ Existing Road

See Topo "B"

±0.9 mi.

±1.4 mi.

±1.7 mi.

±4.5 mi.

±3.8 mi.

±6.1 mi.

6-21-9-16 (Existing Well)  
 N-21-9-16 (Proposed Well)  
 M-21-9-16 (Proposed Well)

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

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 F: (435) 781-2518



**NEWFIELD EXPLORATION COMPANY**

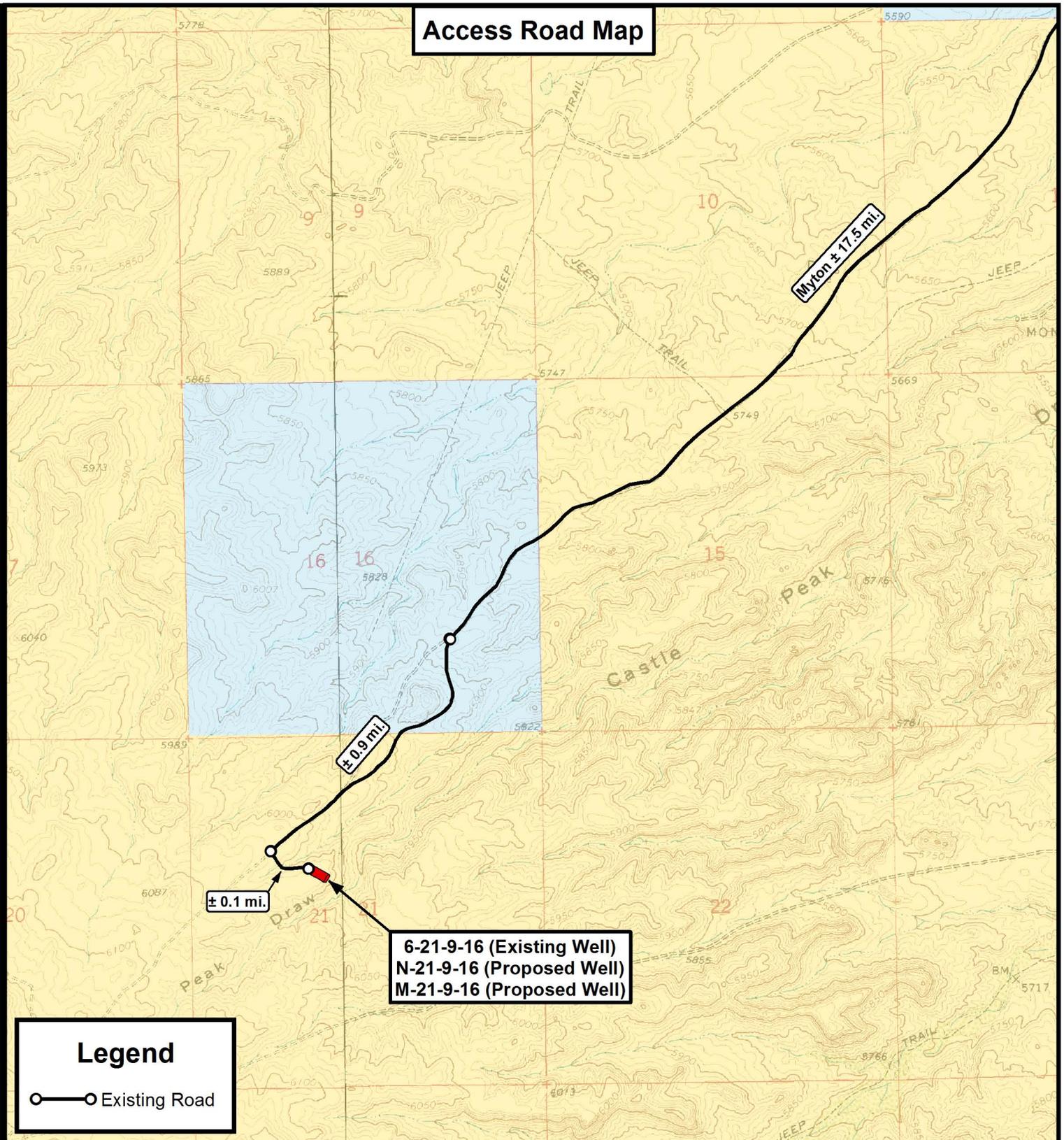
6-21-9-16 (Existing Well)  
 N-21-9-16 (Proposed Well)  
 M-21-9-16 (Proposed Well)  
 SEC. 21, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	VERSION:
DATE:	01-08-2013		<b>V1</b>
SCALE:	1:100,000		

**TOPOGRAPHIC MAP**

SHEET  
**A**

**Access Road Map**



**6-21-9-16 (Existing Well)  
N-21-9-16 (Proposed Well)  
M-21-9-16 (Proposed Well)**

**Legend**

○ — ○ Existing Road

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



**Tri State  
Land Surveying, Inc.**  
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DATE:	01-08-2013		<b>V1</b>
SCALE:	1" = 2,000'		



**NEWFIELD EXPLORATION COMPANY**

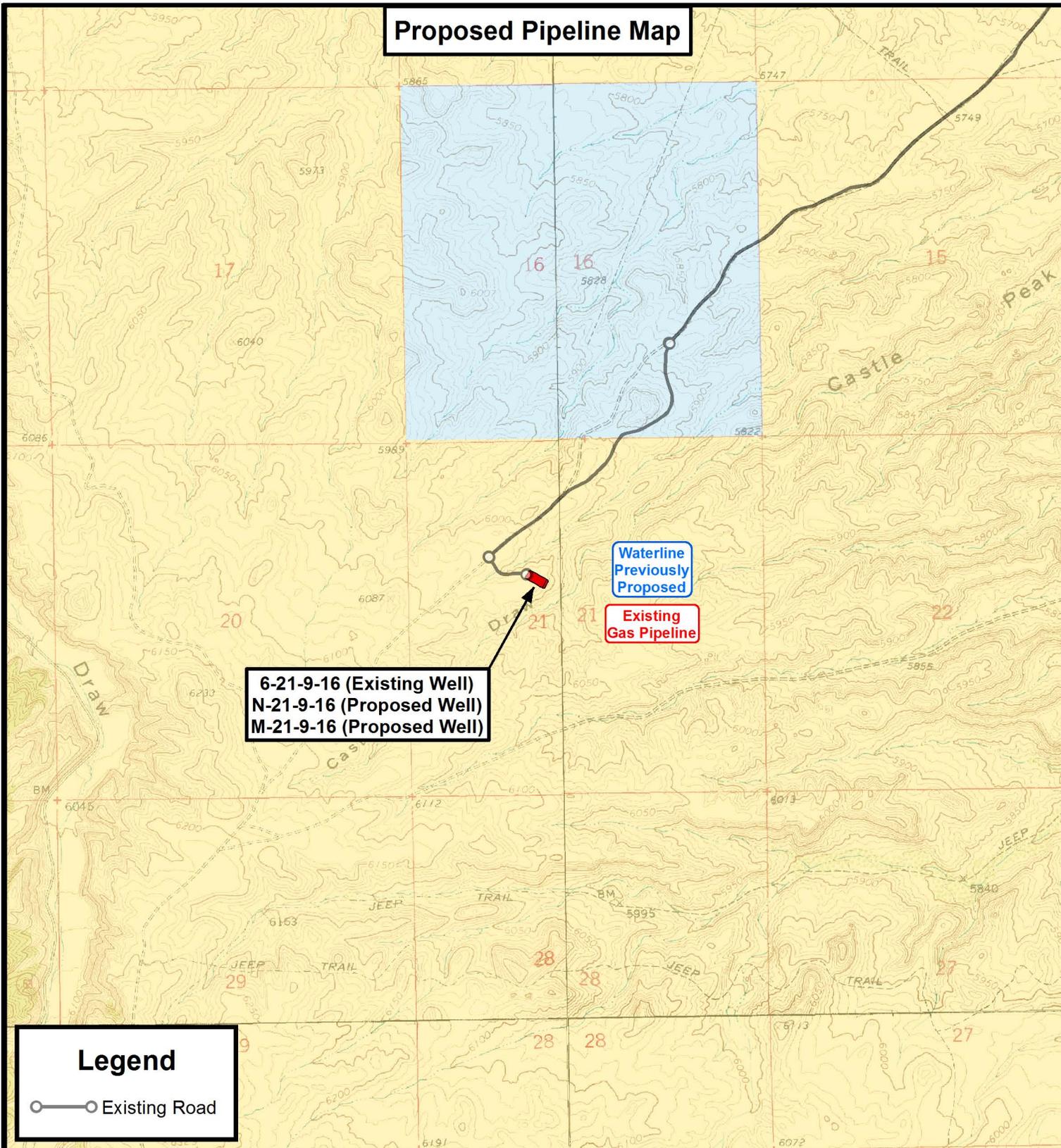
6-21-9-16 (Existing Well)  
N-21-9-16 (Proposed Well)  
M-21-9-16 (Proposed Well)

SEC. 21, T9S, R16E, S.L.B.&M. Duchesne County, UT.

**TOPOGRAPHIC MAP**

SHEET **B**

**Proposed Pipeline Map**



**6-21-9-16 (Existing Well)**  
**N-21-9-16 (Proposed Well)**  
**M-21-9-16 (Proposed Well)**

**Waterline  
Previously  
Proposed**

**Existing  
Gas Pipeline**

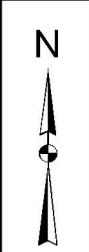
**Legend**

○—○ 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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Land Surveying, Inc.**  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

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 F: (435) 781-2518



**NEWFIELD EXPLORATION COMPANY**

6-21-9-16 (Existing Well)  
 N-21-9-16 (Proposed Well)  
 M-21-9-16 (Proposed Well)

SEC. 21, T9S, R16E, S.L.B.&M. Duchesne County, UT.

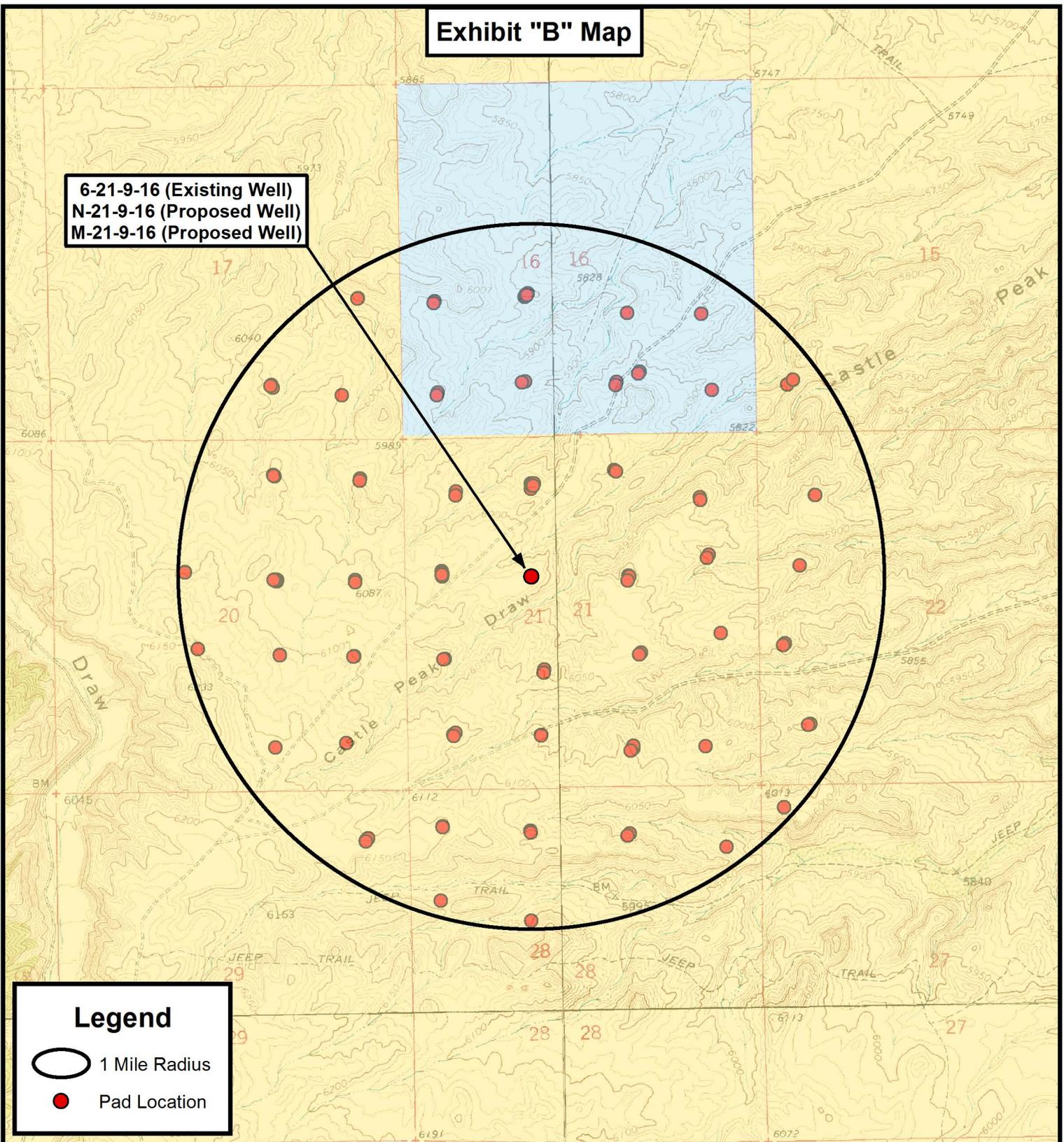
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DATE:	01-08-2013		<b>V1</b>
SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET **C**

**Exhibit "B" Map**

6-21-9-16 (Existing Well)  
 N-21-9-16 (Proposed Well)  
 M-21-9-16 (Proposed Well)



**Legend**

-  1 Mile Radius
-  Pad Location

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**NEWFIELD EXPLORATION COMPANY**

6-21-9-16 (Existing Well)  
 N-21-9-16 (Proposed Well)  
 M-21-9-16 (Proposed Well)  
 SEC. 21, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	VERSION:
DATE:	01-08-2013		<b>V1</b>
SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET  
**D**

## Coordinate Report

Well Number	Feature Type	Latitude (NAD 83) (DMS)	Longitude (NAD 83) (DMS)
6-21-9-16	Surface Hole	40° 01' 04.09" N	110° 07' 37.32" W
N-21-9-16	Surface Hole	40° 01' 04.15" N	110° 07' 37.06" W
M-21-9-16	Surface Hole	40° 01' 04.20" N	110° 07' 36.79" W
N-21-9-16	Center of Pattern	40° 00' 57.62" N	110° 07' 44.88" W
M-21-9-16	Center of Pattern	40° 00' 57.44" N	110° 07' 27.85" W
N-21-9-16	Bottom of Hole	40° 00' 55.69" N	110° 07' 47.20" W
M-21-9-16	Bottom of Hole	40° 00' 55.40" N	110° 07' 25.15" W
Well Number	Feature Type	Latitude (NAD 83) (DD)	Longitude (NAD 83) (DD)
6-21-9-16	Surface Hole	40.017803	110.127034
N-21-9-16	Surface Hole	40.017818	110.126961
M-21-9-16	Surface Hole	40.017833	110.126887
N-21-9-16	Center of Pattern	40.016007	110.129134
M-21-9-16	Center of Pattern	40.015955	110.124401
N-21-9-16	Bottom of Hole	40.015471	110.129777
M-21-9-16	Bottom of Hole	40.015390	110.123654
Well Number	Feature Type	Northing (NAD 83) (UTM Meters)	Longitude (NAD 83) (UTM Meters)
6-21-9-16	Surface Hole	4430098.171	574497.273
N-21-9-16	Surface Hole	4430099.880	574503.505
M-21-9-16	Surface Hole	4430101.589	574509.737
N-21-9-16	Center of Pattern	4429897.024	574320.009
M-21-9-16	Center of Pattern	4429895.198	574723.947
N-21-9-16	Bottom of Hole	4429836.952	574265.671
M-21-9-16	Bottom of Hole	4429833.107	574788.389
Well Number	Feature Type	Latitude (NAD 27) (DMS)	Longitude (NAD 27) (DMS)
6-21-9-16	Surface Hole	40° 01' 04.23" N	110° 07' 34.78" W
N-21-9-16	Surface Hole	40° 01' 04.28" N	110° 07' 34.51" W
M-21-9-16	Surface Hole	40° 01' 04.33" N	110° 07' 34.25" W
N-21-9-16	Center of Pattern	40° 00' 57.76" N	110° 07' 42.34" W
M-21-9-16	Center of Pattern	40° 00' 57.57" N	110° 07' 25.30" W
N-21-9-16	Bottom of Hole	40° 00' 55.83" N	110° 07' 44.65" W
M-21-9-16	Bottom of Hole	40° 00' 55.54" N	110° 07' 22.61" W



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### NEWFIELD EXPLORATION COMPANY

6-21-9-16 (Existing Well)  
N-21-9-16 (Proposed Well)  
M-21-9-16 (Proposed Well)  
SEC. 21, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY: A.P.C.  
DATE: 01-08-2013  
VERSION: V1

REVISED:

**COORDINATE REPORT**

SHEET

**1**

RECEIVED: July 31, 2013





# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)  
SECTION 21 T9S, R16E  
M-21-9-16**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**07 January, 2013**





**Payzone Directional**  
Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well M-21-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	M-21-9-16 @ 6034.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	M-21-9-16 @ 6034.0ft (Original Well Elev)
<b>Site:</b>	SECTION 21 T9S, R16E	<b>North Reference:</b>	True
<b>Well:</b>	M-21-9-16	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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

<b>Site</b>	SECTION 21 T9S, R16E				
<b>Site Position:</b>		<b>Northing:</b>	7,178,195.78 ft	<b>Latitude:</b>	40° 1' 4.650 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,023,590.50 ft	<b>Longitude:</b>	110° 7' 54.390 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.88 °

<b>Well</b>	M-21-9-16, SHL LAT: 40 01 04.20 LONG: -110 07 36.79					
<b>Well Position</b>	<b>+N/-S</b>	-45.6 ft	<b>Northing:</b>	7,178,171.23 ft	<b>Latitude:</b>	40° 1' 4.200 N
	<b>+E/-W</b>	1,369.2 ft	<b>Easting:</b>	2,024,960.23 ft	<b>Longitude:</b>	110° 7' 36.790 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	6,034.0 ft	<b>Ground Level:</b>	6,022.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	11/20/2012	11.15	65.72	52,101

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	133.62

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	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	
1,602.2	15.03	133.62	1,590.7	-90.2	94.6	1.50	1.50	13.33	133.62	
4,863.1	15.03	133.62	4,740.0	-673.7	706.9	0.00	0.00	0.00	0.00	M-21-9-16 TGT
5,995.8	15.03	133.62	5,834.0	-876.3	919.6	0.00	0.00	0.00	0.00	



**Payzone Directional**  
Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well M-21-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	M-21-9-16 @ 6034.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	M-21-9-16 @ 6034.0ft (Original Well Elev)
<b>Site:</b>	SECTION 21 T9S, R16E	<b>North Reference:</b>	True
<b>Well:</b>	M-21-9-16	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
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	133.62	700.0	-0.9	0.9	1.3	1.50	1.50	0.00
800.0	3.00	133.62	799.9	-3.6	3.8	5.2	1.50	1.50	0.00
900.0	4.50	133.62	899.7	-8.1	8.5	11.8	1.50	1.50	0.00
1,000.0	6.00	133.62	999.3	-14.4	15.1	20.9	1.50	1.50	0.00
1,100.0	7.50	133.62	1,098.6	-22.5	23.7	32.7	1.50	1.50	0.00
1,200.0	9.00	133.62	1,197.5	-32.4	34.0	47.0	1.50	1.50	0.00
1,300.0	10.50	133.62	1,296.1	-44.1	46.3	64.0	1.50	1.50	0.00
1,400.0	12.00	133.62	1,394.2	-57.6	60.4	83.5	1.50	1.50	0.00
1,500.0	13.50	133.62	1,491.7	-72.8	76.4	105.5	1.50	1.50	0.00
1,602.2	15.03	133.62	1,590.7	-90.2	94.6	130.7	1.50	1.50	0.00
1,700.0	15.03	133.62	1,685.2	-107.7	113.0	156.1	0.00	0.00	0.00
1,800.0	15.03	133.62	1,781.8	-125.6	131.8	182.0	0.00	0.00	0.00
1,900.0	15.03	133.62	1,878.3	-143.5	150.6	208.0	0.00	0.00	0.00
2,000.0	15.03	133.62	1,974.9	-161.4	169.3	233.9	0.00	0.00	0.00
2,100.0	15.03	133.62	2,071.5	-179.3	188.1	259.8	0.00	0.00	0.00
2,200.0	15.03	133.62	2,168.1	-197.1	206.9	285.8	0.00	0.00	0.00
2,300.0	15.03	133.62	2,264.7	-215.0	225.7	311.7	0.00	0.00	0.00
2,400.0	15.03	133.62	2,361.2	-232.9	244.4	337.6	0.00	0.00	0.00
2,500.0	15.03	133.62	2,457.8	-250.8	263.2	363.6	0.00	0.00	0.00
2,600.0	15.03	133.62	2,554.4	-268.7	282.0	389.5	0.00	0.00	0.00
2,700.0	15.03	133.62	2,651.0	-286.6	300.8	415.5	0.00	0.00	0.00
2,800.0	15.03	133.62	2,747.5	-304.5	319.5	441.4	0.00	0.00	0.00
2,900.0	15.03	133.62	2,844.1	-322.4	338.3	467.3	0.00	0.00	0.00
3,000.0	15.03	133.62	2,940.7	-340.3	357.1	493.3	0.00	0.00	0.00
3,100.0	15.03	133.62	3,037.3	-358.2	375.9	519.2	0.00	0.00	0.00
3,200.0	15.03	133.62	3,133.9	-376.1	394.6	545.1	0.00	0.00	0.00
3,300.0	15.03	133.62	3,230.4	-394.0	413.4	571.1	0.00	0.00	0.00
3,400.0	15.03	133.62	3,327.0	-411.9	432.2	597.0	0.00	0.00	0.00
3,500.0	15.03	133.62	3,423.6	-429.8	451.0	623.0	0.00	0.00	0.00
3,600.0	15.03	133.62	3,520.2	-447.7	469.8	648.9	0.00	0.00	0.00
3,700.0	15.03	133.62	3,616.8	-465.5	488.5	674.8	0.00	0.00	0.00
3,800.0	15.03	133.62	3,713.3	-483.4	507.3	700.8	0.00	0.00	0.00
3,900.0	15.03	133.62	3,809.9	-501.3	526.1	726.7	0.00	0.00	0.00
4,000.0	15.03	133.62	3,906.5	-519.2	544.9	752.6	0.00	0.00	0.00
4,100.0	15.03	133.62	4,003.1	-537.1	563.6	778.6	0.00	0.00	0.00
4,200.0	15.03	133.62	4,099.6	-555.0	582.4	804.5	0.00	0.00	0.00
4,300.0	15.03	133.62	4,196.2	-572.9	601.2	830.5	0.00	0.00	0.00
4,400.0	15.03	133.62	4,292.8	-590.8	620.0	856.4	0.00	0.00	0.00
4,500.0	15.03	133.62	4,389.4	-608.7	638.7	882.3	0.00	0.00	0.00
4,600.0	15.03	133.62	4,486.0	-626.6	657.5	908.3	0.00	0.00	0.00
4,700.0	15.03	133.62	4,582.5	-644.5	676.3	934.2	0.00	0.00	0.00
4,800.0	15.03	133.62	4,679.1	-662.4	695.1	960.1	0.00	0.00	0.00
4,863.1	15.03	133.62	4,740.0	-673.7	706.9	976.5	0.00	0.00	0.00
4,900.0	15.03	133.62	4,775.7	-680.3	713.8	986.1	0.00	0.00	0.00
5,000.0	15.03	133.62	4,872.3	-698.2	732.6	1,012.0	0.00	0.00	0.00
5,100.0	15.03	133.62	4,968.8	-716.1	751.4	1,037.9	0.00	0.00	0.00
5,200.0	15.03	133.62	5,065.4	-733.9	770.2	1,063.9	0.00	0.00	0.00



## Payzone Directional

## Planning Report

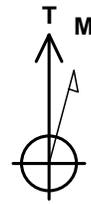


<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well M-21-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	M-21-9-16 @ 6034.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	M-21-9-16 @ 6034.0ft (Original Well Elev)
<b>Site:</b>	SECTION 21 T9S, R16E	<b>North Reference:</b>	True
<b>Well:</b>	M-21-9-16	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,300.0	15.03	133.62	5,162.0	-751.8	789.0	1,089.8	0.00	0.00	0.00	
5,400.0	15.03	133.62	5,258.6	-769.7	807.7	1,115.8	0.00	0.00	0.00	
5,500.0	15.03	133.62	5,355.2	-787.6	826.5	1,141.7	0.00	0.00	0.00	
5,600.0	15.03	133.62	5,451.7	-805.5	845.3	1,167.6	0.00	0.00	0.00	
5,700.0	15.03	133.62	5,548.3	-823.4	864.1	1,193.6	0.00	0.00	0.00	
5,800.0	15.03	133.62	5,644.9	-841.3	882.8	1,219.5	0.00	0.00	0.00	
5,900.0	15.03	133.62	5,741.5	-859.2	901.6	1,245.4	0.00	0.00	0.00	
5,995.8	15.03	133.62	5,834.0	-876.3	919.6	1,270.3	0.00	0.00	0.00	

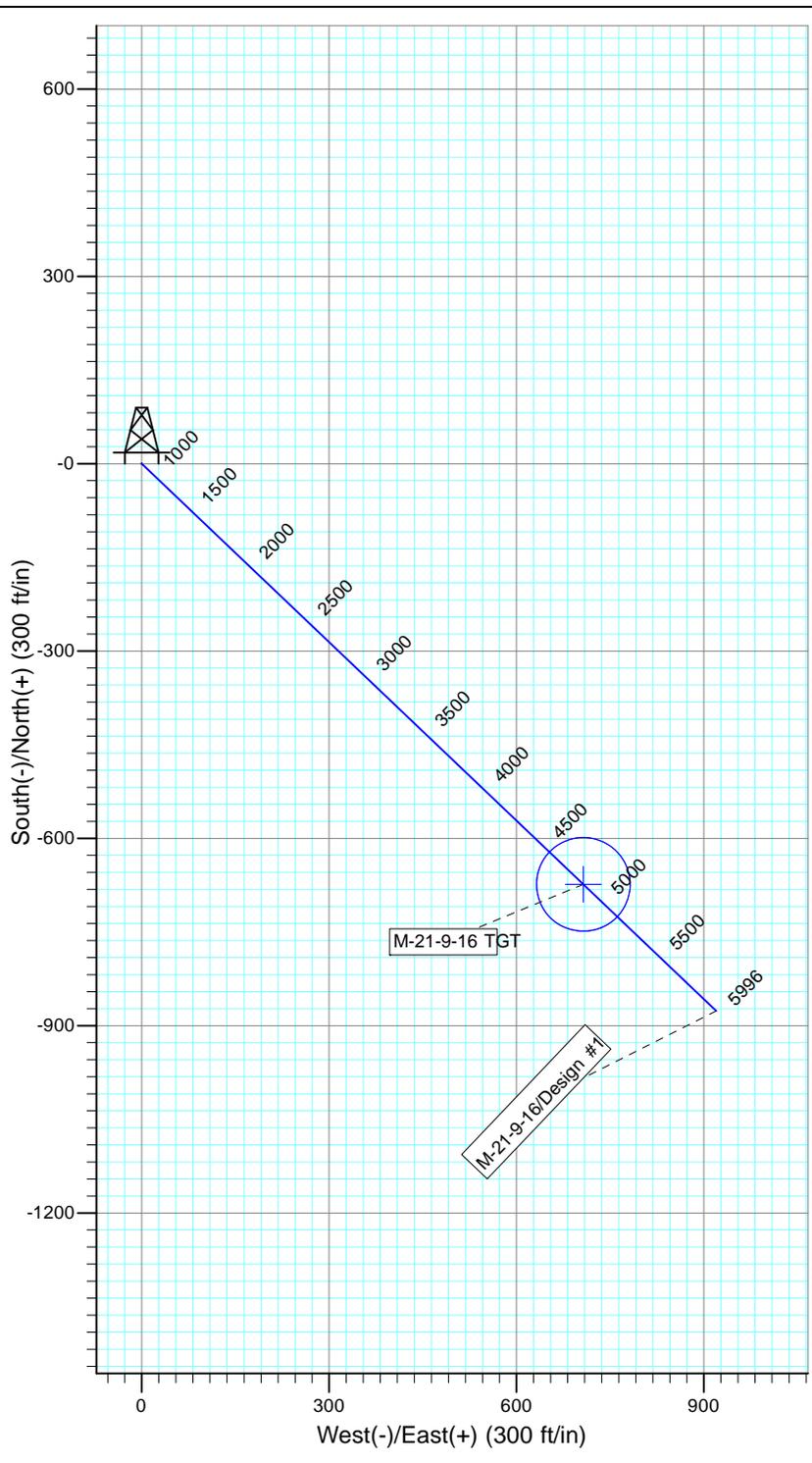
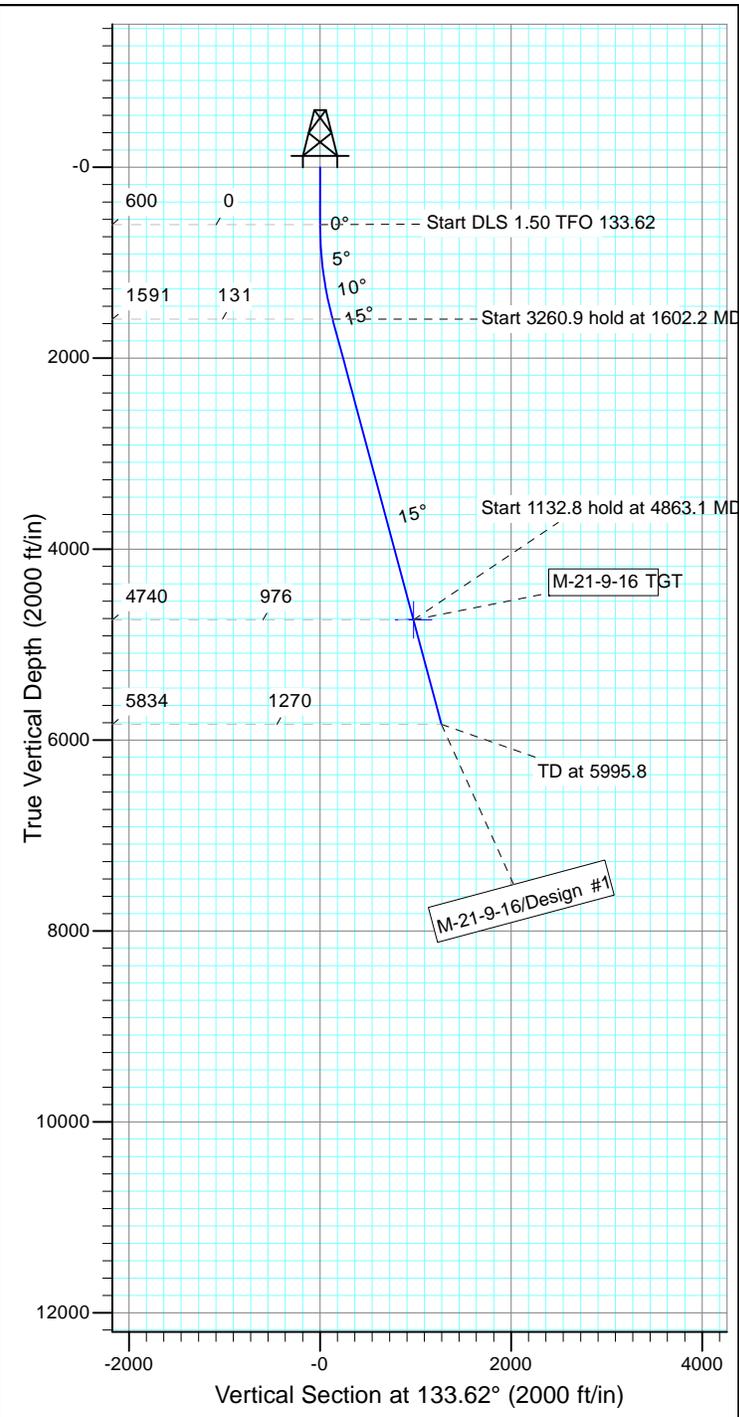


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: M-21-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.15°

Magnetic Field  
 Strength: 52100.9snT  
 Dip Angle: 65.72°  
 Date: 11/20/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
M-21-9-16 TGT	4740.0	-673.7	706.9	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1602.2	15.03	133.62	1590.7	-90.2	94.6	1.50	133.62	130.7	
4	4863.1	15.03	133.62	4740.0	-673.7	706.9	0.00	0.00	976.5	M-21-9-16 TGT
5	5995.8	15.03	133.62	5834.0	-876.3	919.6	0.00	0.00	1270.3	



**NEWFIELD PRODUCTION COMPANY  
GMBU M-21-9-16  
AT SURFACE: SE/NW SECTION 21, 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 M-21-9-16 located in the SE 1/4 NW 1/4 Section 21, 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 west; proceed in a southwesterly direction – 7.0 miles  $\pm$  to it's junction with the beginning of the access road to the existing 6-21-9-16 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 6-21-9-16 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. MOAC Report # 13-168 7/11/13, prepared by Montgomery Archaeological Consultants. . Paleontological Resource Survey prepared by, SWCA Environmental Consultants, Report No. UT13-14273-49, May 2013. See attached report cover pages, Exhibit "D".

**Water Disposal**

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

**Additional Surface Stipulations**

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

**Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU M-21-9-16, 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 M-21-9-16, 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 #M-21-9-16, Section 21, Township 9S, Range 16E: Lease UTU-64379 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, Federal Bond #WYB000493.

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

\_\_\_\_\_  
Date 7/30/13

\_\_\_\_\_  
Heather Calder  
Production Technician  
Newfield Production Company

### Typical 2M BOP stack configuration



2M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

# NEWFIELD EXPLORATION COMPANY

## WELL PAD INTERFERENCE PLAT

6-21-9-16 (Existing Well)

N-21-9-16 (Proposed Well)

M-21-9-16 (Proposed Well)

Pad Location: SENW Section 21, T9S, R16E, S.L.B.&M.

### RELATIVE COORDINATES From Top Hole to C.O.P.

WELL	NORTH	EAST
N-21-9-16	-669'	-599'
M-21-9-16	-674'	707'

### RELATIVE COORDINATES From Top Hole to Bottom Hole

WELL	NORTH	EAST
N-21-9-16	-867'	-776'
M-21-9-16	-876'	920'

### LATITUDE & LONGITUDE Surface position of Wells (NAD 83)

WELL	LATITUDE	LONGITUDE
6-21-9-16	40° 01' 04.09"	110° 07' 37.32"
N-21-9-16	40° 01' 04.15"	110° 07' 37.06"
M-21-9-16	40° 01' 04.20"	110° 07' 36.79"

### LATITUDE & LONGITUDE Center of Pattern (NAD 83)

WELL	LATITUDE	LONGITUDE
N-21-9-16	40° 00' 57.62"	110° 07' 44.88"
M-21-9-16	40° 00' 57.44"	110° 07' 27.84"

### LATITUDE & LONGITUDE Bottom Hole Position (NAD 83)

WELL	LATITUDE	LONGITUDE
N-21-9-16	40° 00' 55.69"	110° 07' 47.20"
M-21-9-16	40° 00' 55.40"	110° 07' 25.15"

### TOP HOLE FOOTAGES

N-21-9-16  
2113' FNL & 1906' FWL

M-21-9-16  
2107' FNL & 1926' FWL

### CENTER OF PATTERN FOOTAGES

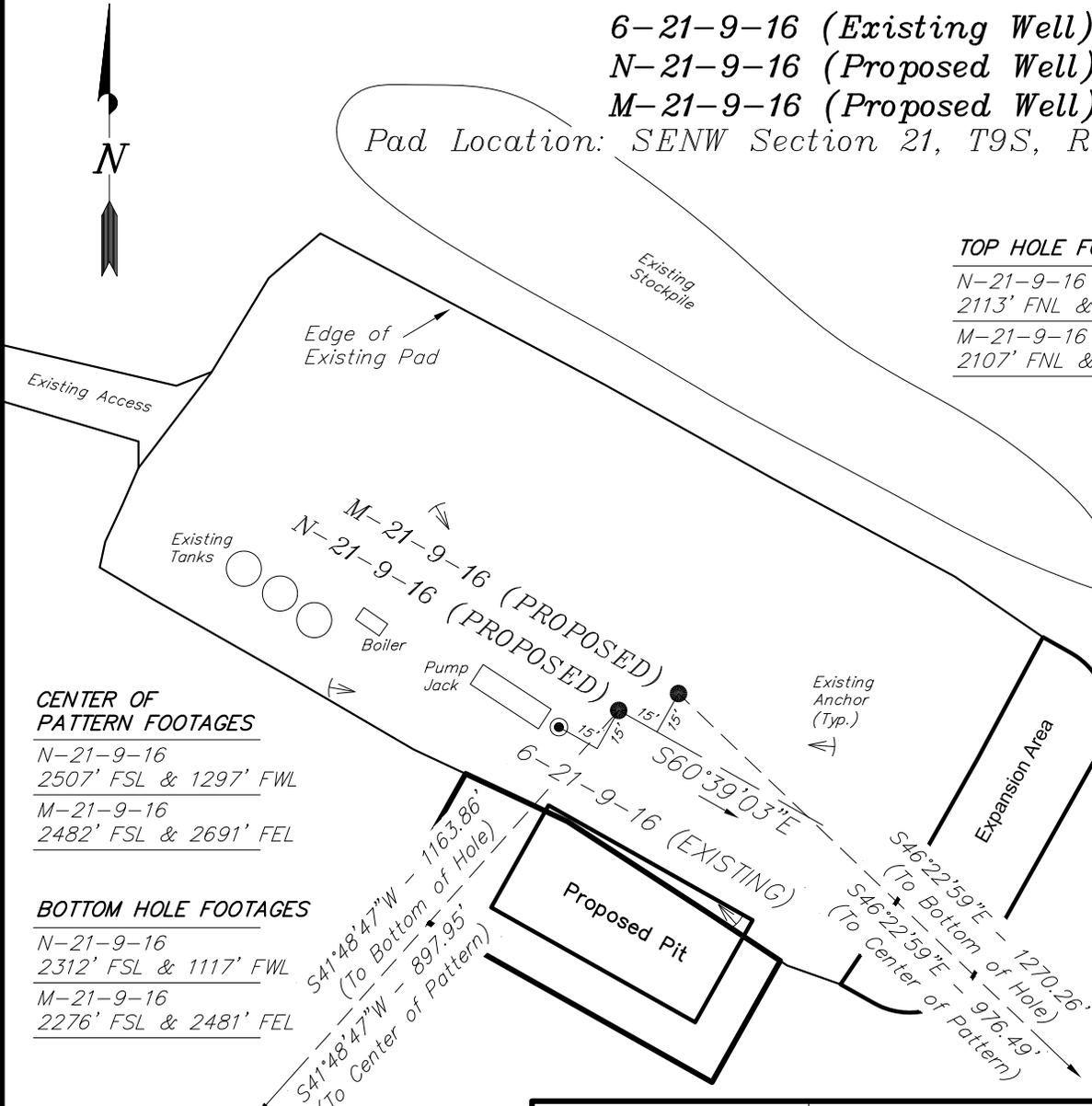
N-21-9-16  
2507' FSL & 1297' FWL

M-21-9-16  
2482' FSL & 2691' FEL

### BOTTOM HOLE FOOTAGES

N-21-9-16  
2312' FSL & 1117' FWL

M-21-9-16  
2276' FSL & 2481' FEL



**Note:**  
Bearings are based  
on GPS Observations.

SURVEYED BY: S.H.	DATE SURVEYED: 11-29-12	VERSION:
DRAWN BY: V.H.	DATE DRAWN: 12-26-12	V1
SCALE: 1" = 60'	REVISED:	

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

# NEWFIELD EXPLORATION COMPANY

## LOCATION LAYOUT

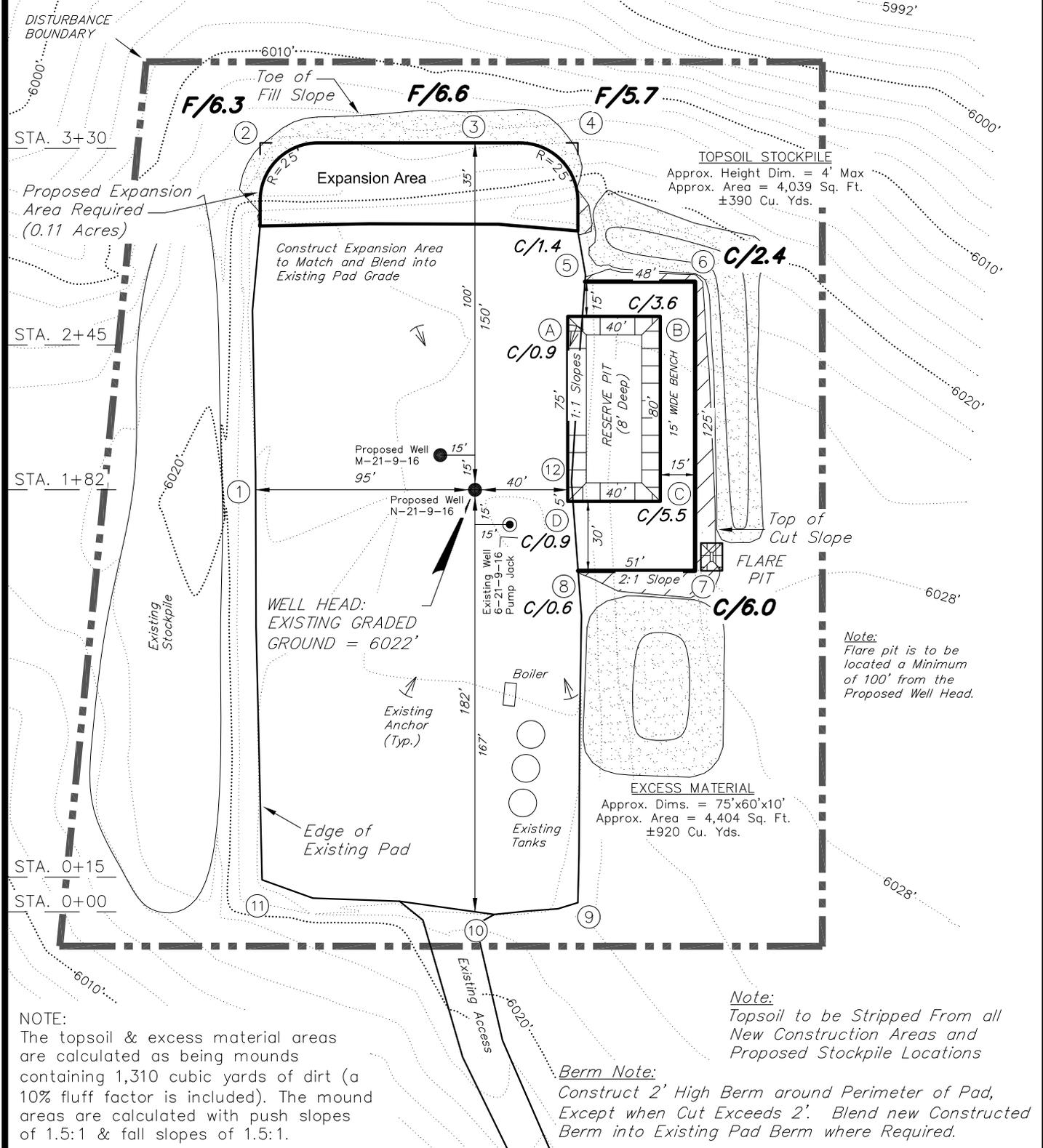
6-21-9-16 (Existing Well)

N-21-9-16 (Proposed Well)

M-21-9-16 (Proposed Well)

Pad Location: SENW Section 21, T9S, R16E, S.L.B.&M.

5992'



**NOTE:**  
The topsoil & excess material areas are calculated as being mounds containing 1,310 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.

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

**Note:**  
Topsoil to be Stripped From all New Construction Areas and Proposed Stockpile Locations

**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: S.H.	DATE SURVEYED: 11-29-12	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 12-26-12	V1
SCALE: 1" = 60'	REVISED:	

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

# NEWFIELD EXPLORATION COMPANY

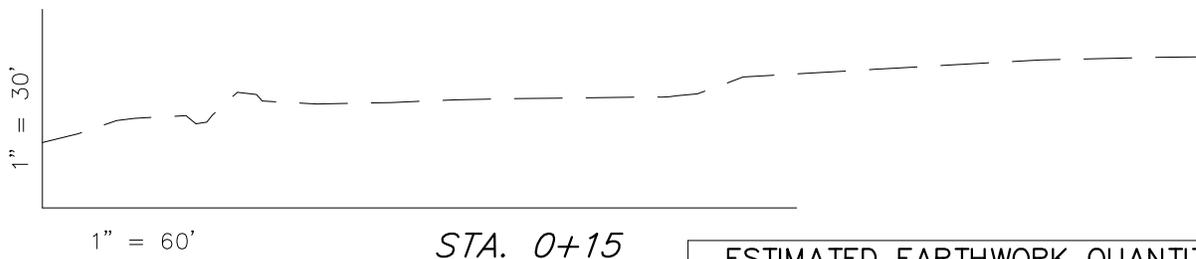
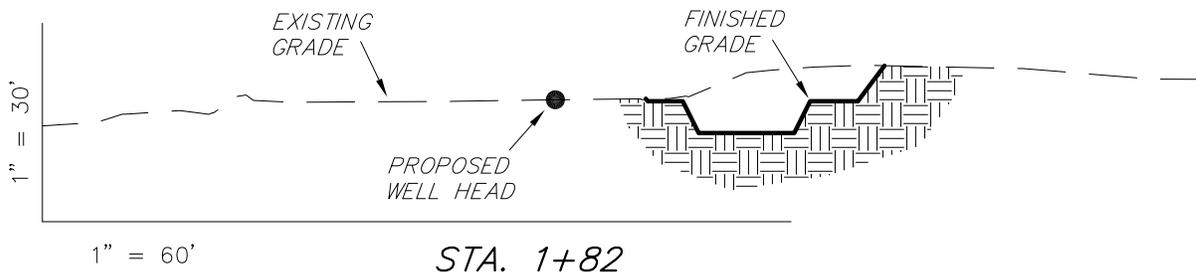
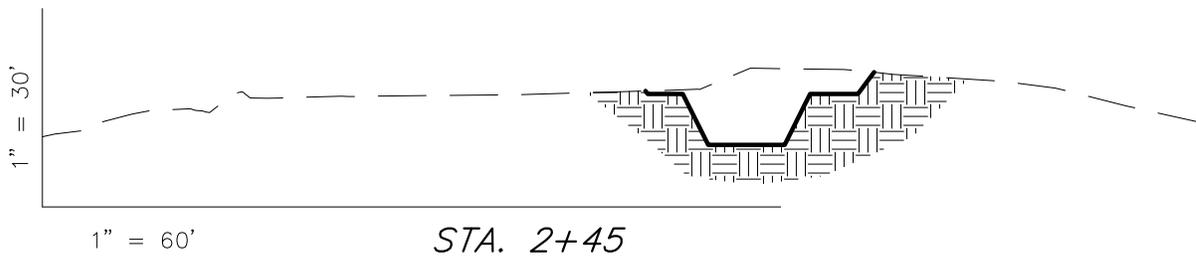
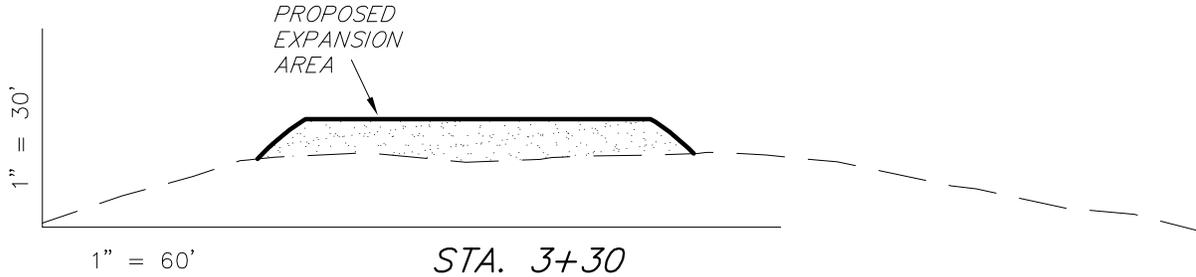
## CROSS SECTIONS

**6-21-9-16 (Existing Well)**

**N-21-9-16 (Proposed Well)**

**M-21-9-16 (Proposed Well)**

*Pad Location: SENW Section 21, 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	870	720	Topsoil is not included in Pad Cut	150
PIT	690	0		690
<b>TOTALS</b>	<b>1,560</b>	<b>720</b>	<b>350</b>	<b>840</b>

SURVEYED BY: S.H.	DATE SURVEYED: 11-29-12	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 12-26-12	V1
SCALE: 1" = 60'	REVISED:	

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



# NEWFIELD EXPLORATION COMPANY

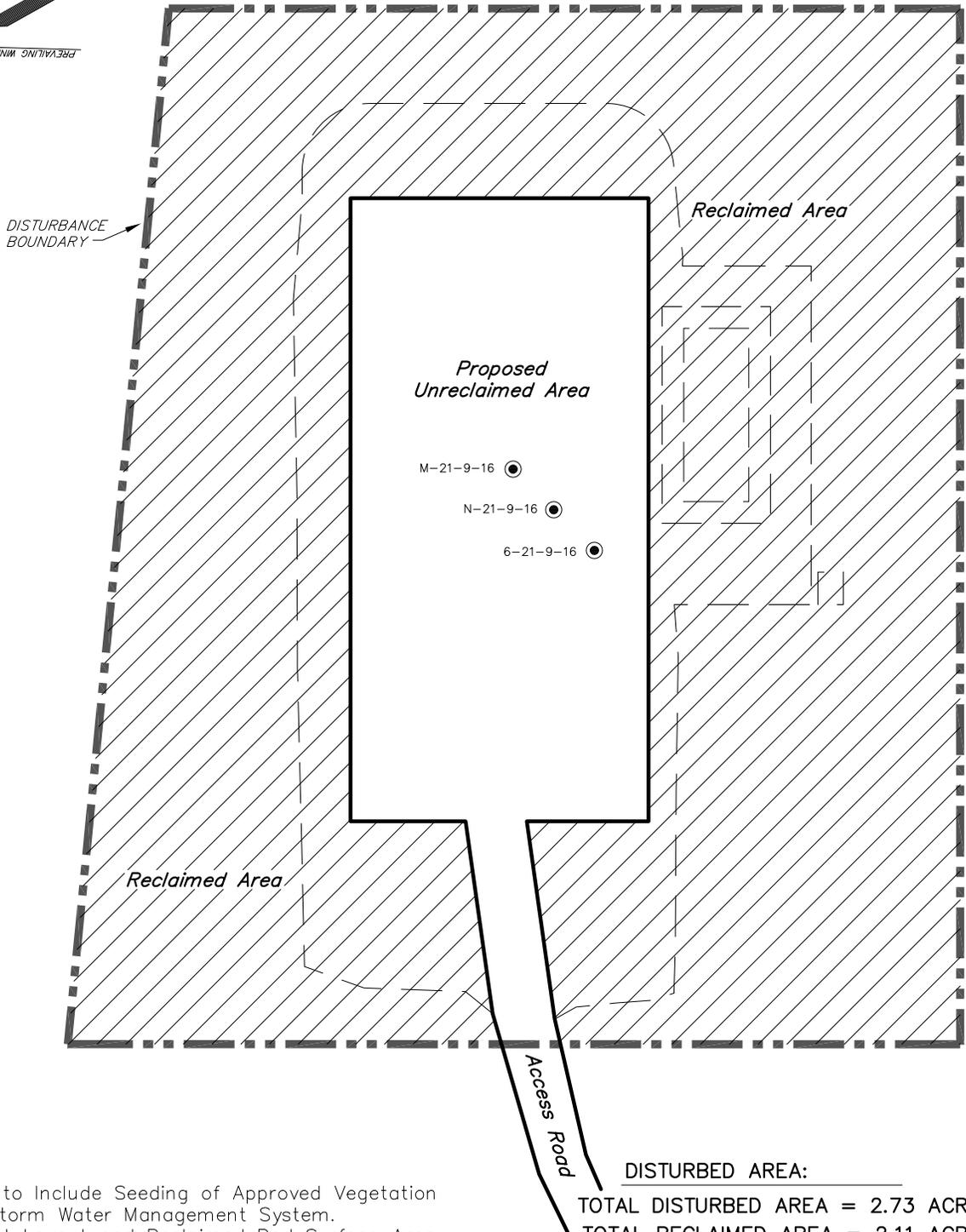
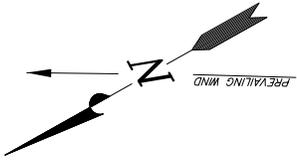
## RECLAMATION LAYOUT

6-21-9-16 (Existing Well)

N-21-9-16 (Proposed Well)

M-21-9-16 (Proposed Well)

Pad Location: SENW Section 21, 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 = 2.73 ACRES  
 TOTAL RECLAIMED AREA = 2.11 ACRES  
 UNRECLAIMED AREA = 0.62 ACRES

SURVEYED BY: S.H.	DATE SURVEYED: 11-29-12	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 12-26-12	V1
SCALE: 1" = 60'	REVISED:	

**Tri State** (435) 781-2501  
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# NEWFIELD EXPLORATION COMPANY

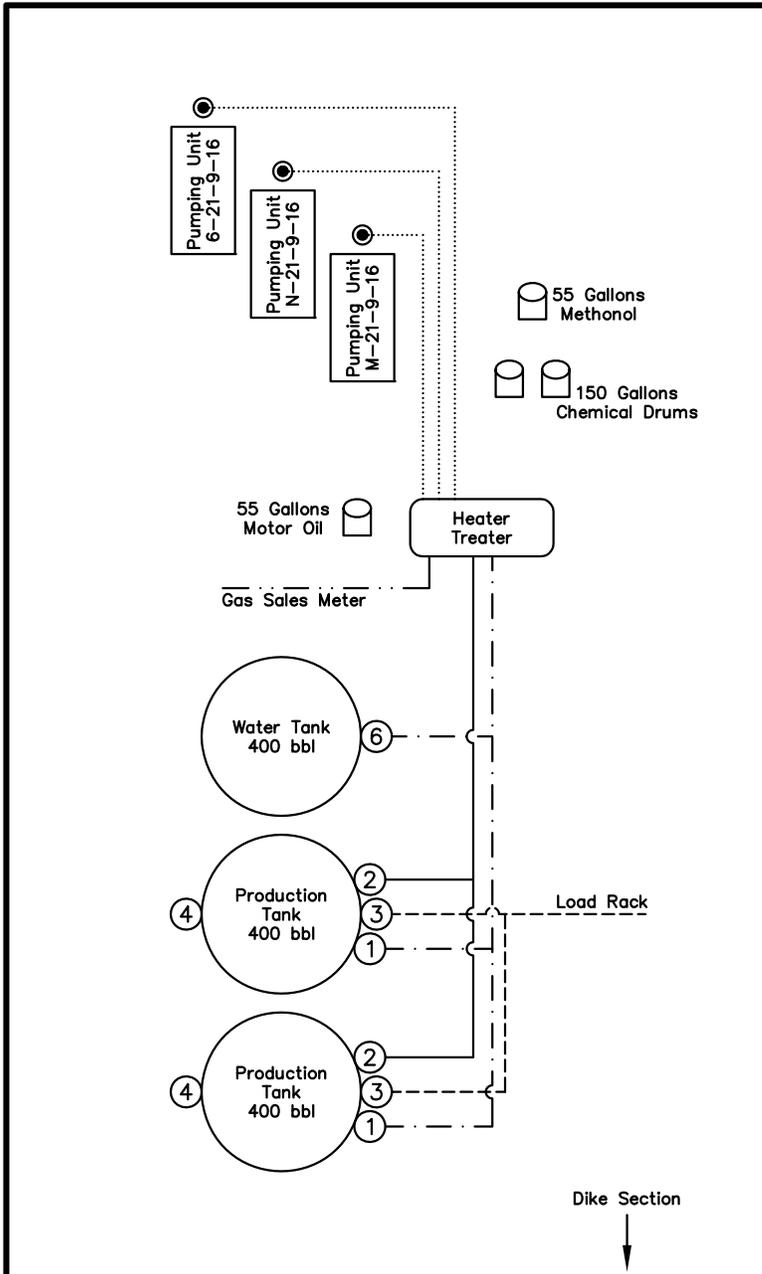
## PROPOSED SITE FACILITY DIAGRAM

6-21-9-16 (Existing Well) UTU-64379

N-21-9-16 (Proposed Well) UTU-64379

M-21-9-16 (Proposed Well) UTU-64379

Pad Location: SENW Section 21, 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: S.H.	DATE SURVEYED: 11-29-12	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 12-26-12	V1
SCALE: NONE	REVISED:	

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



# 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)

August 5, 2013

Memorandum

To: Assistant Field Office Manager Minerals,  
Vernal Field Office

From: Michael Coulthard, Petroleum Engineer

Subject: 2013 Plan of Development Greater Monument  
Butte Unit, Duchesne and Uintah Counties,  
Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2013 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API #	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-047-53920	GMBU M-26-8-17	Sec 26 T08S R17E 1952 FSL 2190 FEL BHL Sec 26 T08S R17E 2491 FNL 2563 FWL
43-047-53921	GMBU S-26-8-17	Sec 26 T08S R17E 1969 FSL 2178 FEL BHL Sec 26 T08S R17E 1158 FSL 1106 FEL
43-013-52334	GMBU X-9-9-16	Sec 16 T09S R16E 0684 FNL 0855 FWL BHL Sec 09 T09S R16E 0282 FSL 1494 FWL
43-013-52335	GMBU R-21-9-16	Sec 21 T09S R16E 0604 FSL 1937 FEL BHL Sec 21 T09S R16E 1585 FSL 2584 FEL
43-013-52337	GMBU Q-21-9-16	Sec 21 T09S R16E 0843 FSL 0716 FWL BHL Sec 21 T09S R16E 1563 FSL 1567 FWL
43-013-52338	GMBU D-28-9-16	Sec 21 T09S R16E 0829 FSL 0700 FWL BHL Sec 28 T09S R16E 0089 FNL 1383 FWL
43-013-52339	GMBU C-28-9-16	Sec 21 T09S R16E 0583 FSL 1936 FEL BHL Sec 28 T09S R16E 0097 FNL 2470 FWL
43-013-52340	GMBU M-21-9-16	Sec 21 T09S R16E 2107 FNL 1926 FWL BHL Sec 21 T09S R16E 2276 FSL 2481 FEL
43-013-52341	GMBU I-21-9-16	Sec 21 T09S R16E 2144 FNL 1963 FEL BHL Sec 21 T09S R16E 1283 FNL 1568 FEL
43-013-52342	GMBU N-21-9-16	Sec 21 T09S R16E 2113 FNL 1906 FWL BHL Sec 21 T09S R16E 2312 FSL 1117 FWL

RECEIVED: August 06, 2013

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: 2013.08.05 14:48:46 -0600

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

MCoulthard:mc:8-5-13

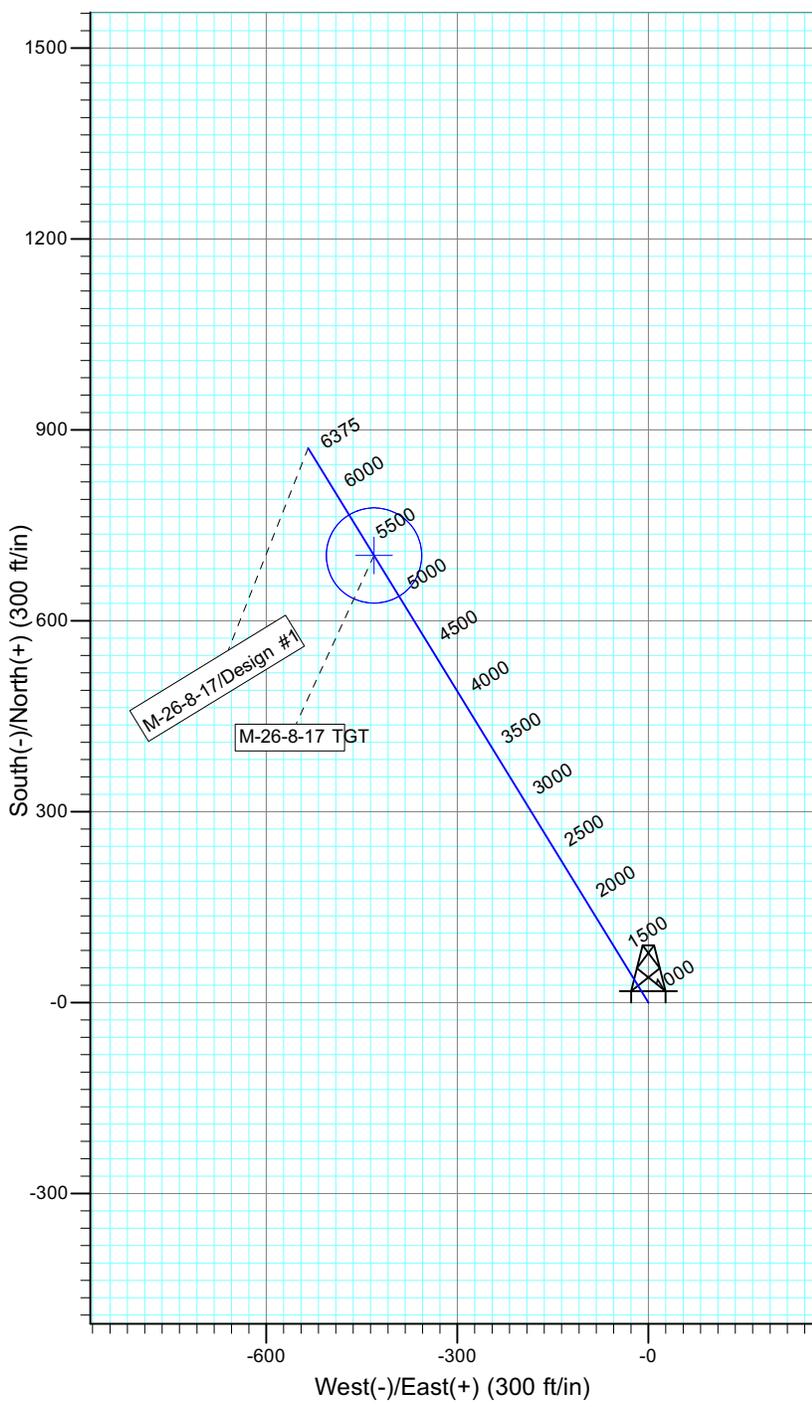
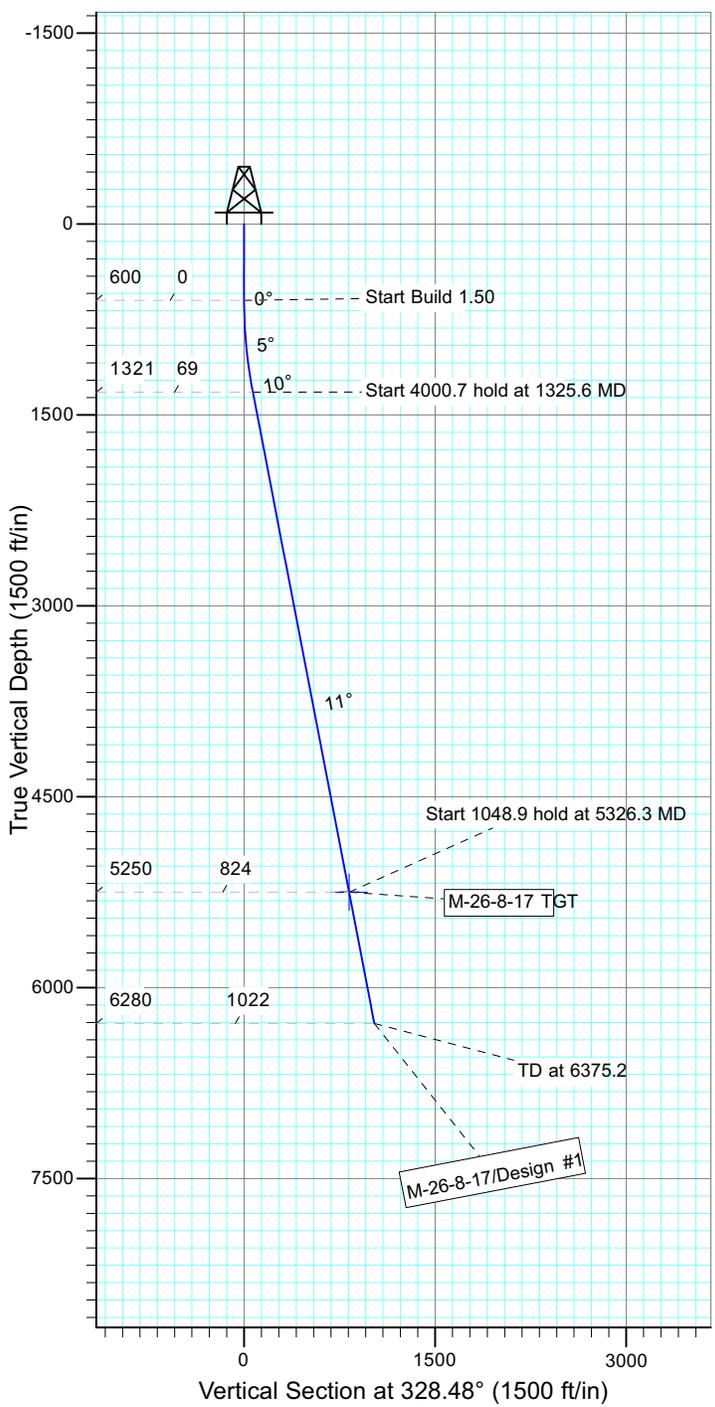


Project: USGS Myton SW (UT)  
 Site: SECTION 26 T8, R17  
 Well: M-26-8-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.03°

Magnetic Field  
 Strength: 52110.5snT  
 Dip Angle: 65.80°  
 Date: 6/14/2013  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
M-26-8-17 TGT	5250.0	702.6	-430.9	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1325.6	10.88	328.48	1321.3	58.6	-35.9	1.50	328.48	68.7	
4	5326.3	10.88	328.48	5250.0	702.6	-430.9	0.00	0.00	824.1	M-26-8-17 TGT
5	6375.2	10.88	328.48	6280.0	871.4	-534.4	0.00	0.00	1022.2	



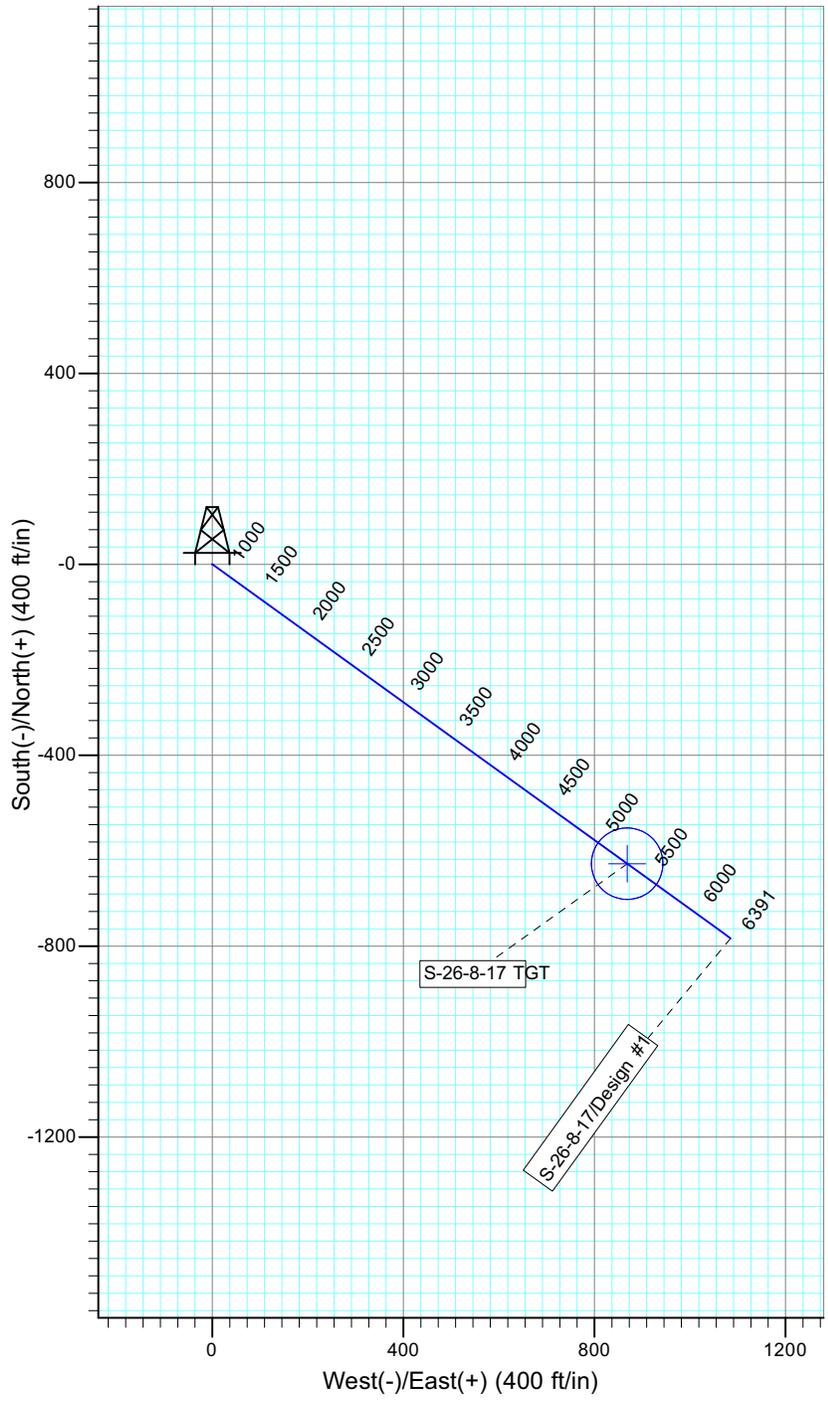
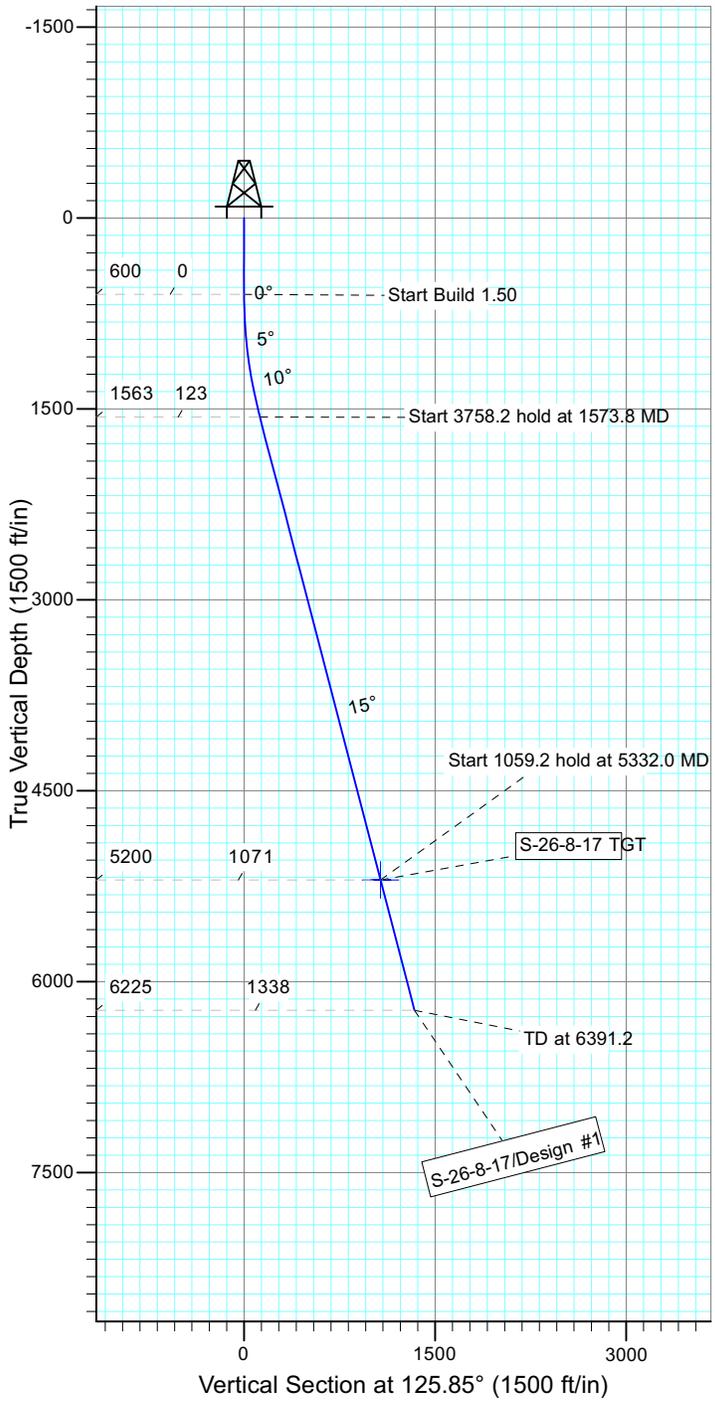


Project: USGS Myton SW (UT)  
 Site: SECTION 26 T8, R17  
 Well: S-26-8-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.03°

Magnetic Field  
 Strength: 52112.7snT  
 Dip Angle: 65.80°  
 Date: 6/12/2013  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
S-26-8-17 TGT	5200.0	-627.4	868.2	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1573.8	14.61	125.85	1563.2	-72.3	100.1	1.50	125.85	123.4	
4	5332.0	14.61	125.85	5200.0	-627.4	868.2	0.00	0.00	1071.2	S-26-8-17 TGT
5	6391.2	14.61	125.85	6225.0	-783.8	1084.8	0.00	0.00	1338.3	



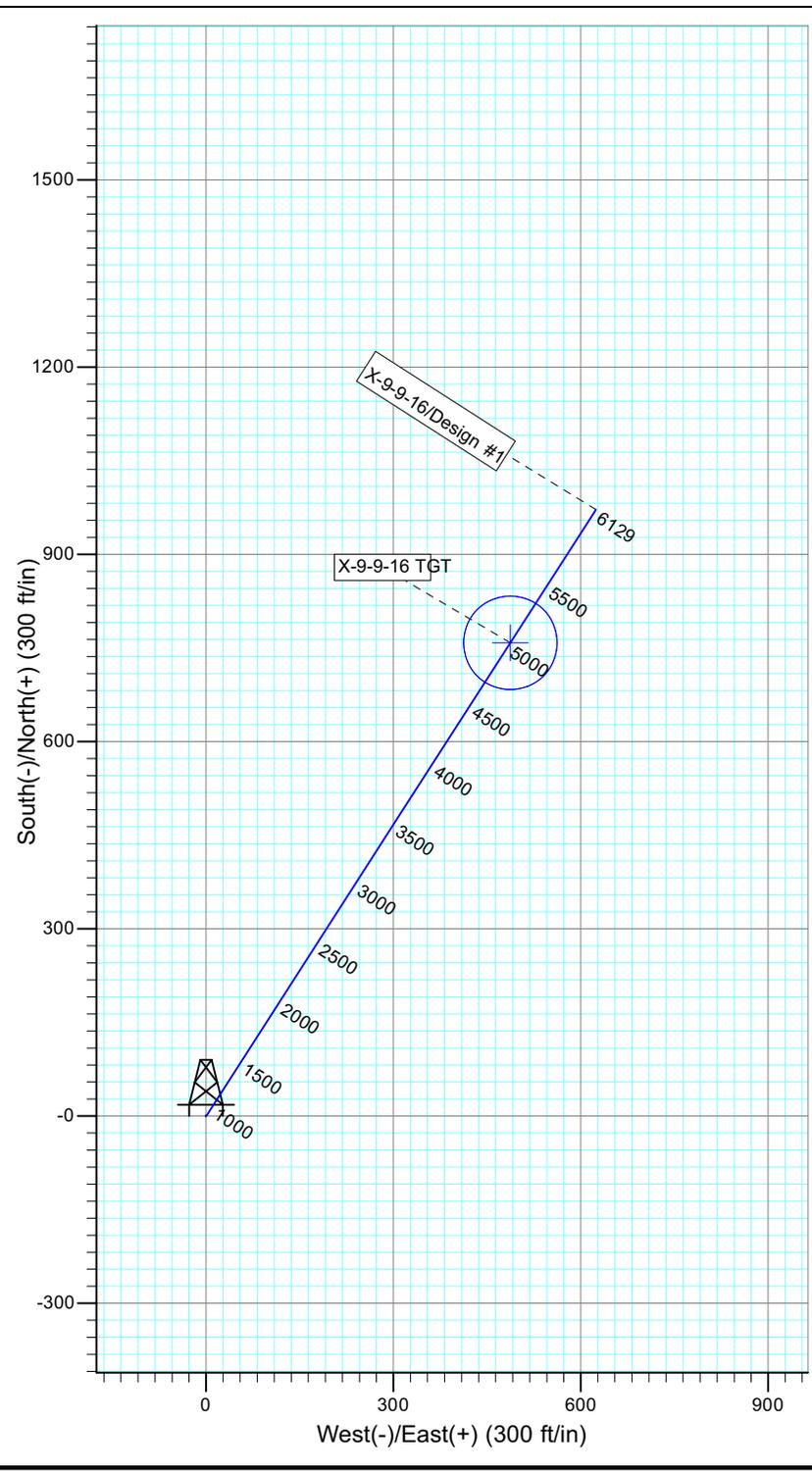
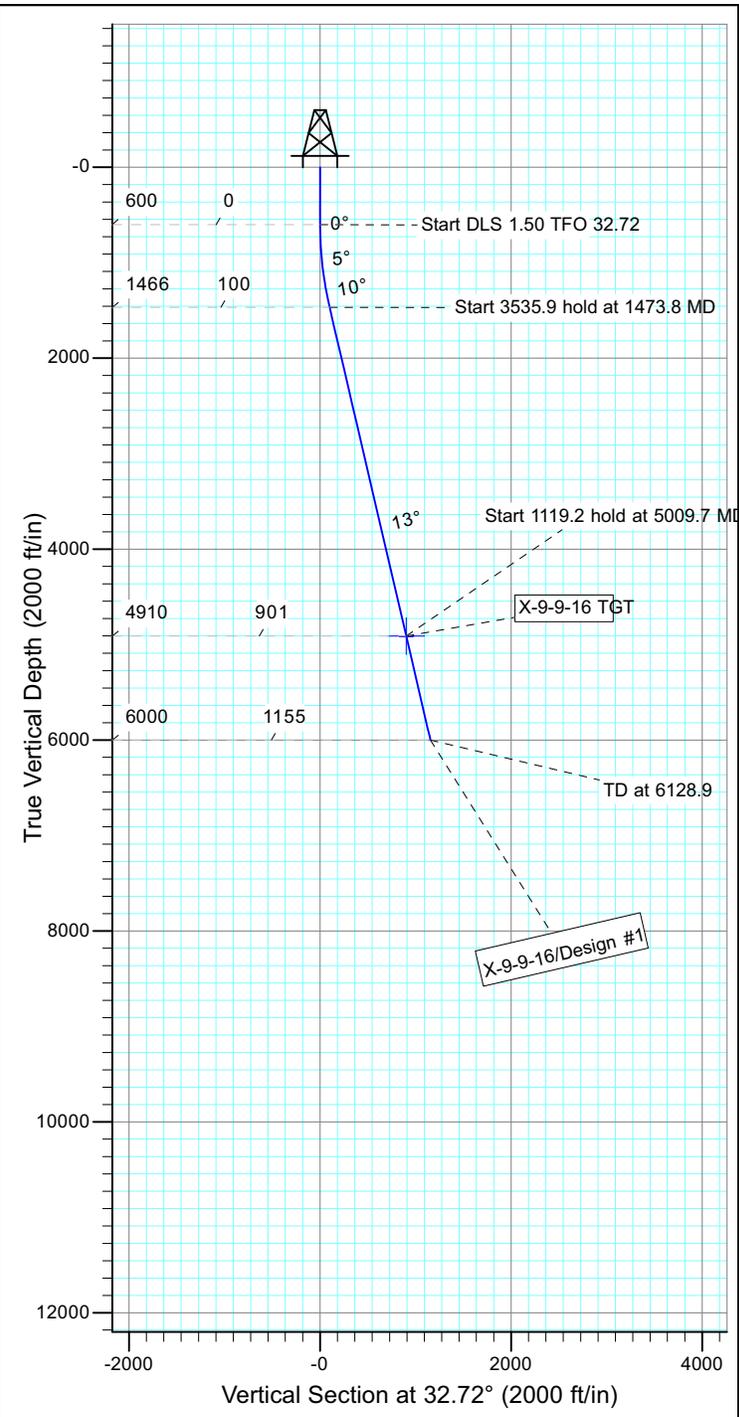


Project: USGS Myton SW (UT)  
 Site: SECTION 16 T9S, R16E  
 Well: X-9-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.15°

Magnetic Field  
 Strength: 52108.8snT  
 Dip Angle: 65.74°  
 Date: 11/30/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
X-9-9-16 TGT	4910.0	758.4	487.2	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1473.8	13.11	32.72	1466.2	83.7	53.8	1.50	32.72	99.5	
4	5009.7	13.11	32.72	4910.0	758.4	487.2	0.00	0.00	901.4	X-9-9-16 TGT
5	6128.9	13.11	32.72	6000.0	971.9	624.3	0.00	0.00	1155.2	



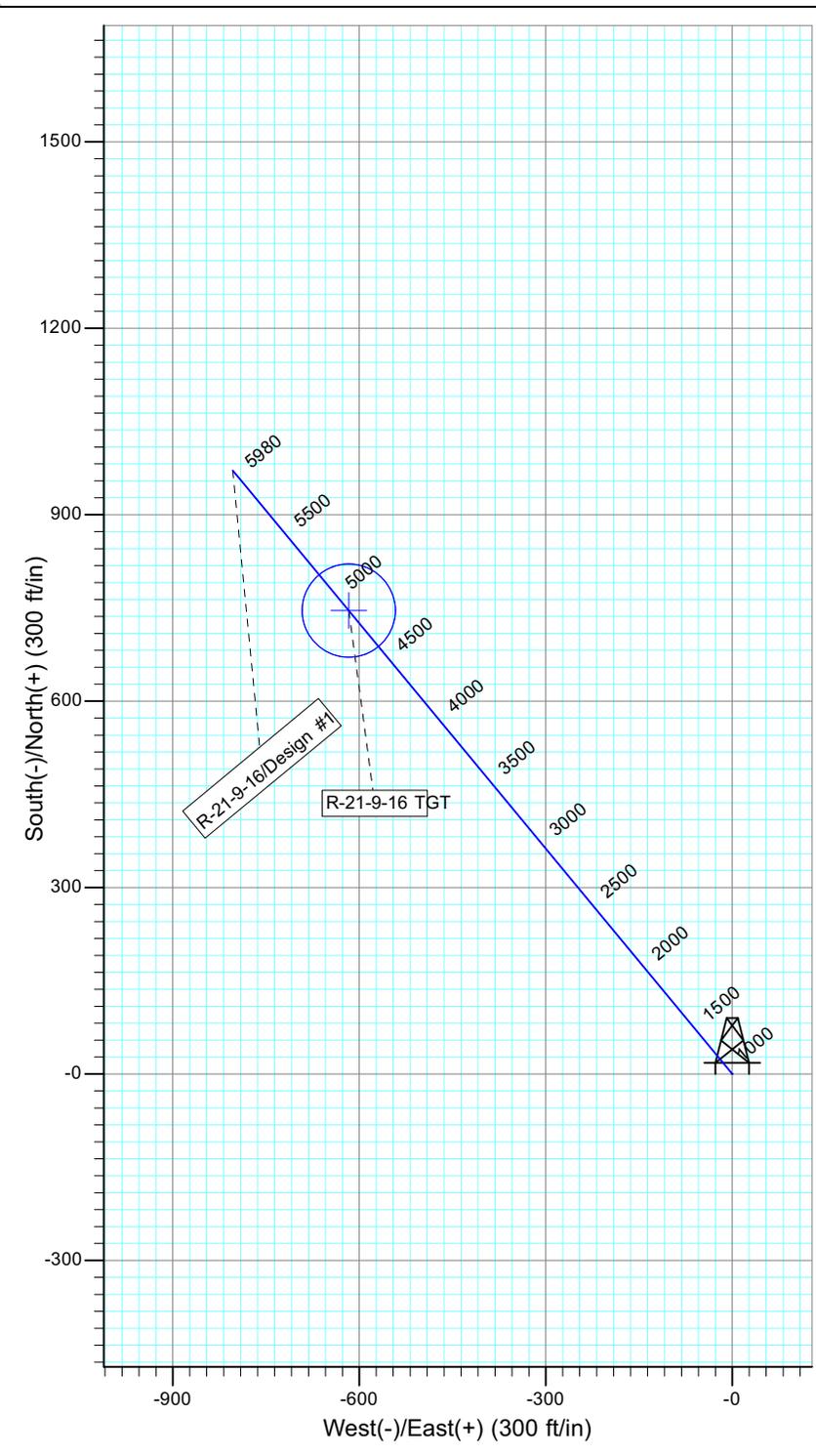
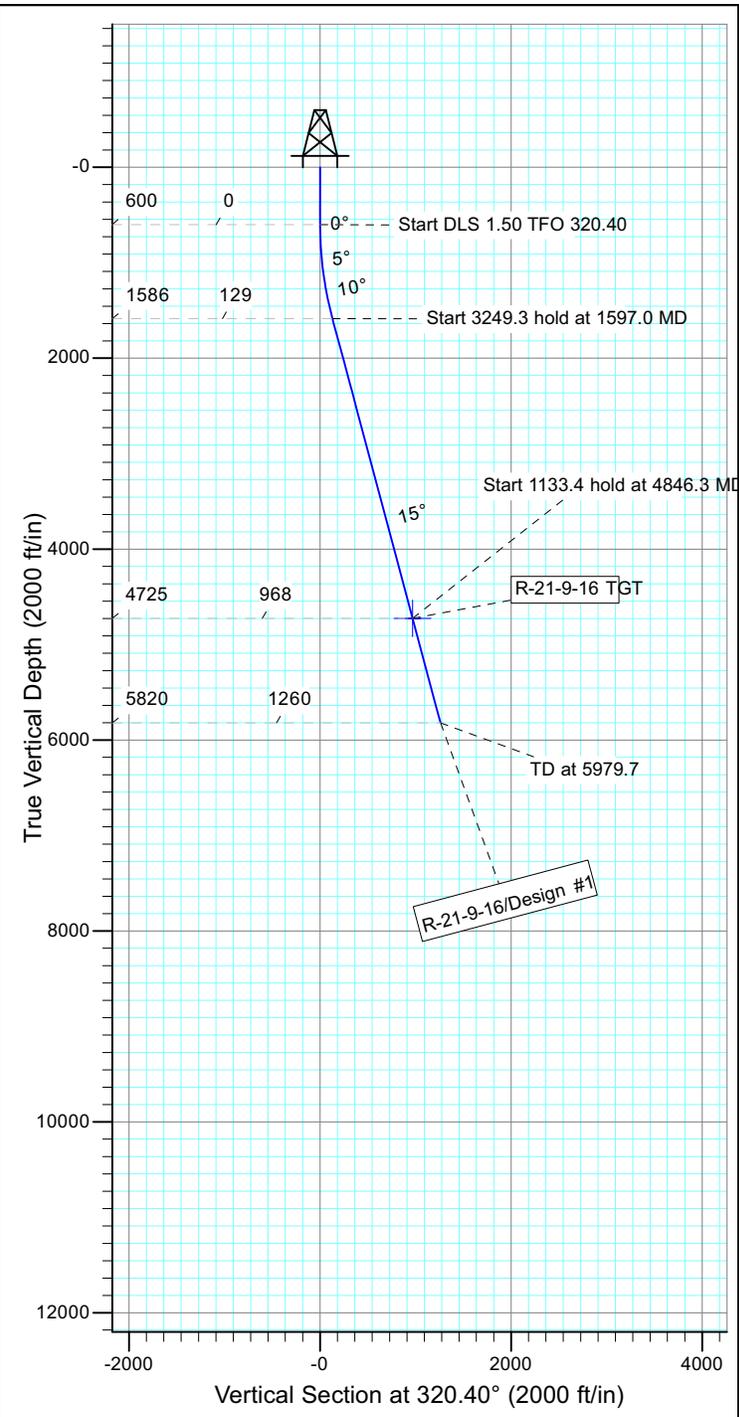


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: R-21-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.14°

Magnetic Field  
 Strength: 52095.2snT  
 Dip Angle: 65.72°  
 Date: 11/29/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
R-21-9-16 TGT	4725.0	745.8	-617.0	Circle (Radius: 75.0)

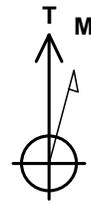
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1597.0	14.96	320.40	1585.7	99.7	-82.5	1.50	320.40	129.4	
4	4846.3	14.96	320.40	4725.0	745.8	-617.0	0.00	0.00	967.9	R-21-9-16 TGT
5	5979.7	14.96	320.40	5820.0	971.2	-803.4	0.00	0.00	1260.4	



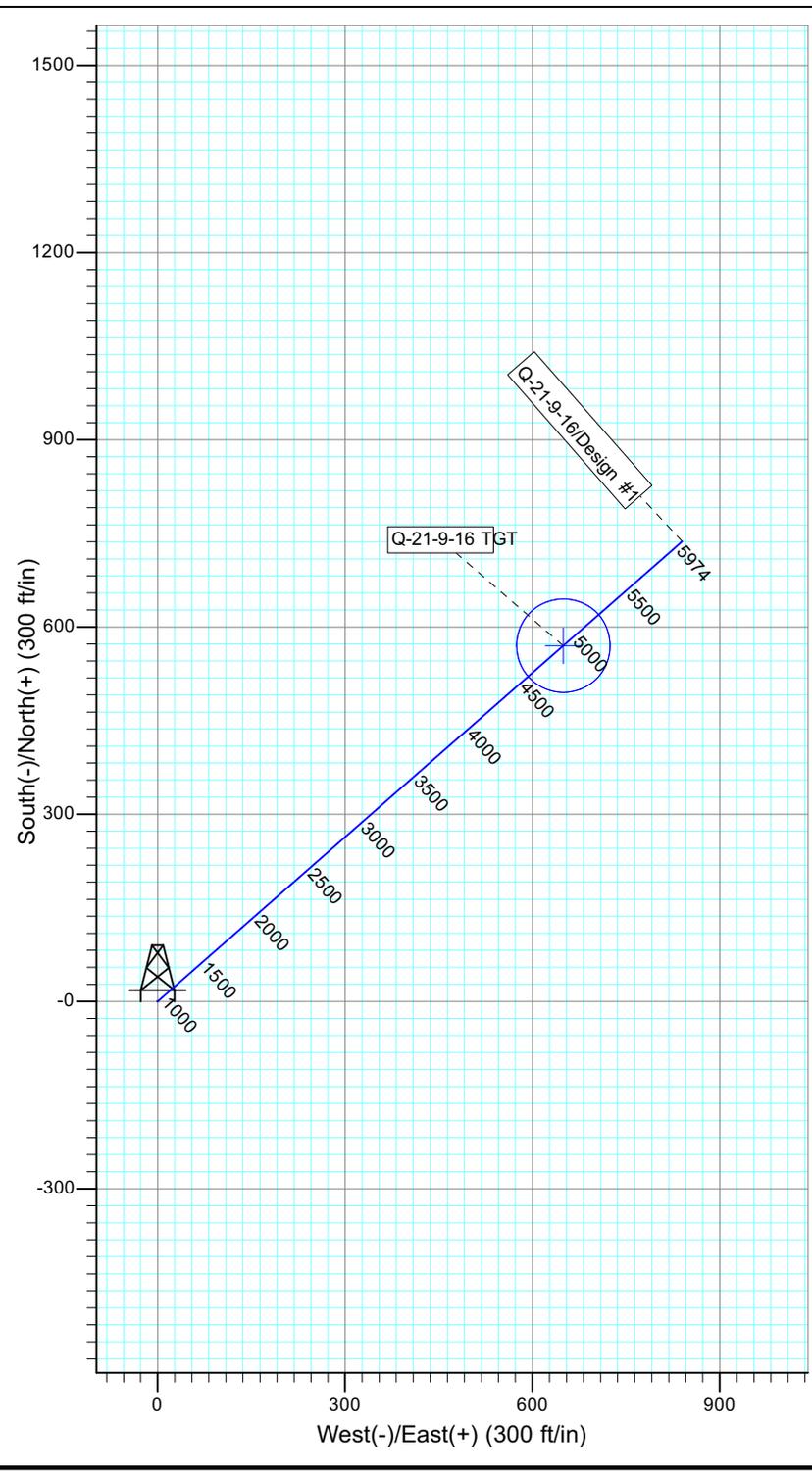
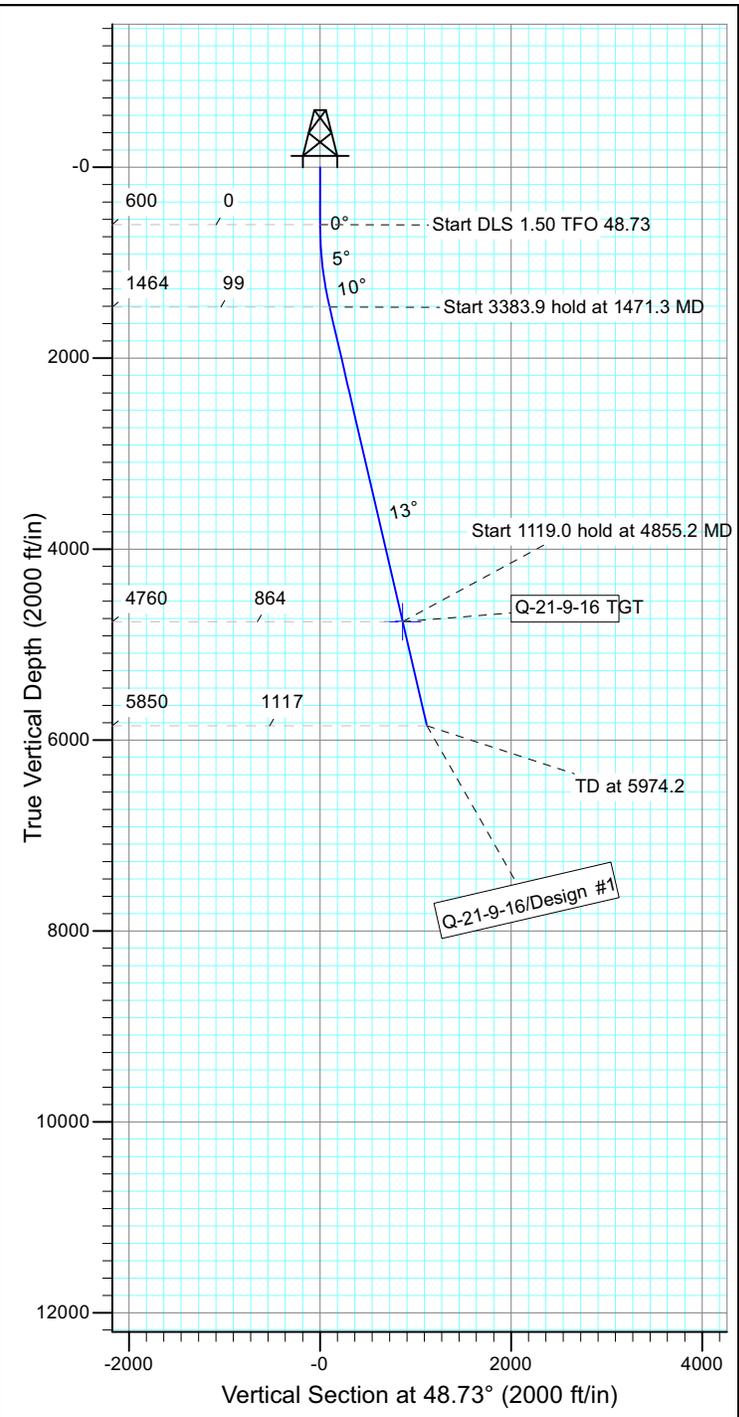


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: Q-21-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.15°

Magnetic Field  
 Strength: 52093.7snT  
 Dip Angle: 65.72°  
 Date: 11/29/2012  
 Model: IGRF2010



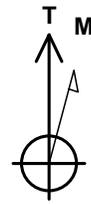
WELLBORE TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Shape
Q-21-9-16 TGT	4760.0	570.1	649.5	Circle (Radius: 75.0)

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1471.3	13.07	48.73	1463.8	65.3	74.4	1.50	48.73	98.9	
4	4855.2	13.07	48.73	4760.0	570.1	649.5	0.00	0.00	864.2	Q-21-9-16 TGT
5	5974.2	13.07	48.73	5850.0	737.0	839.7	0.00	0.00	1117.2	



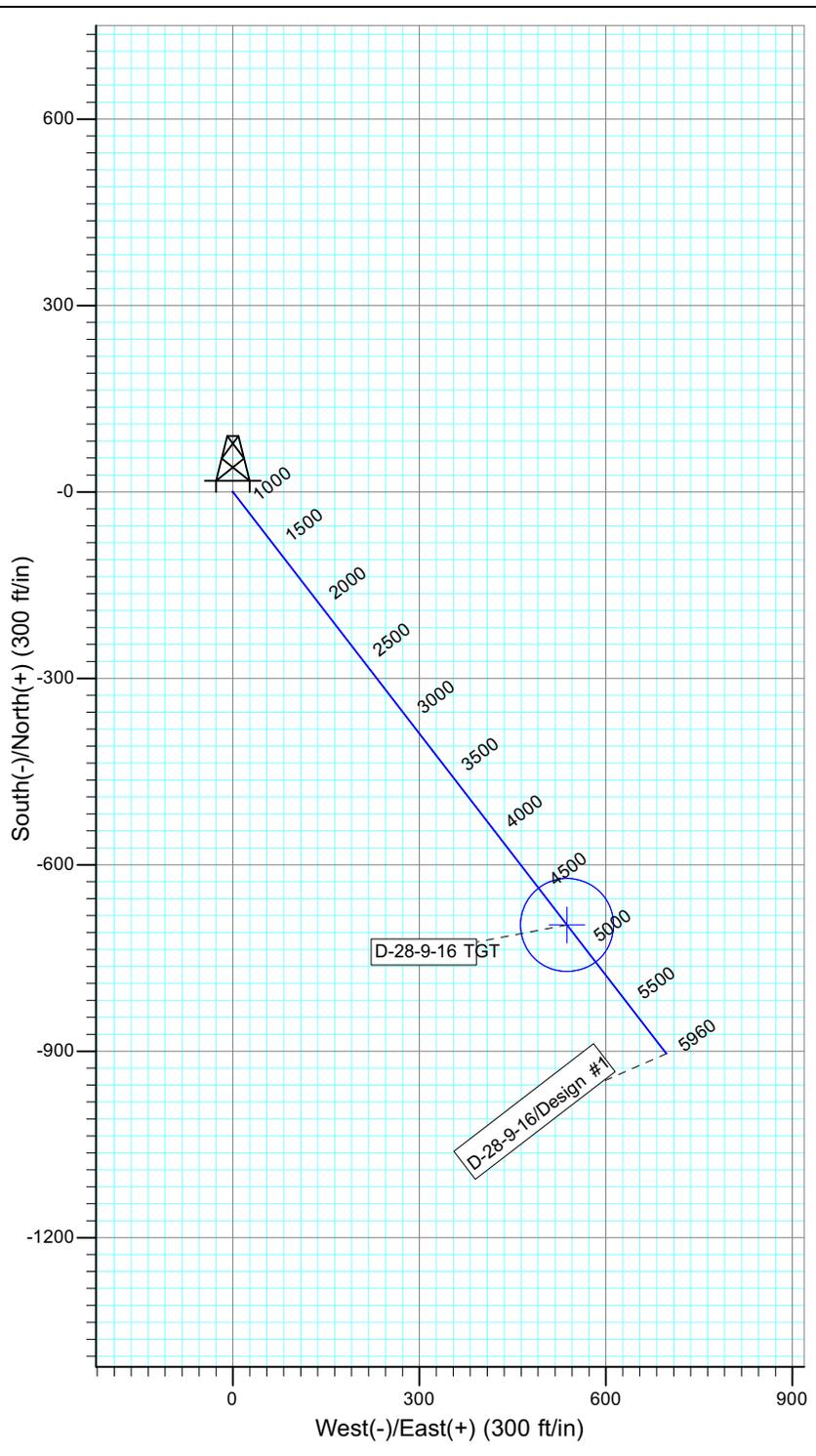
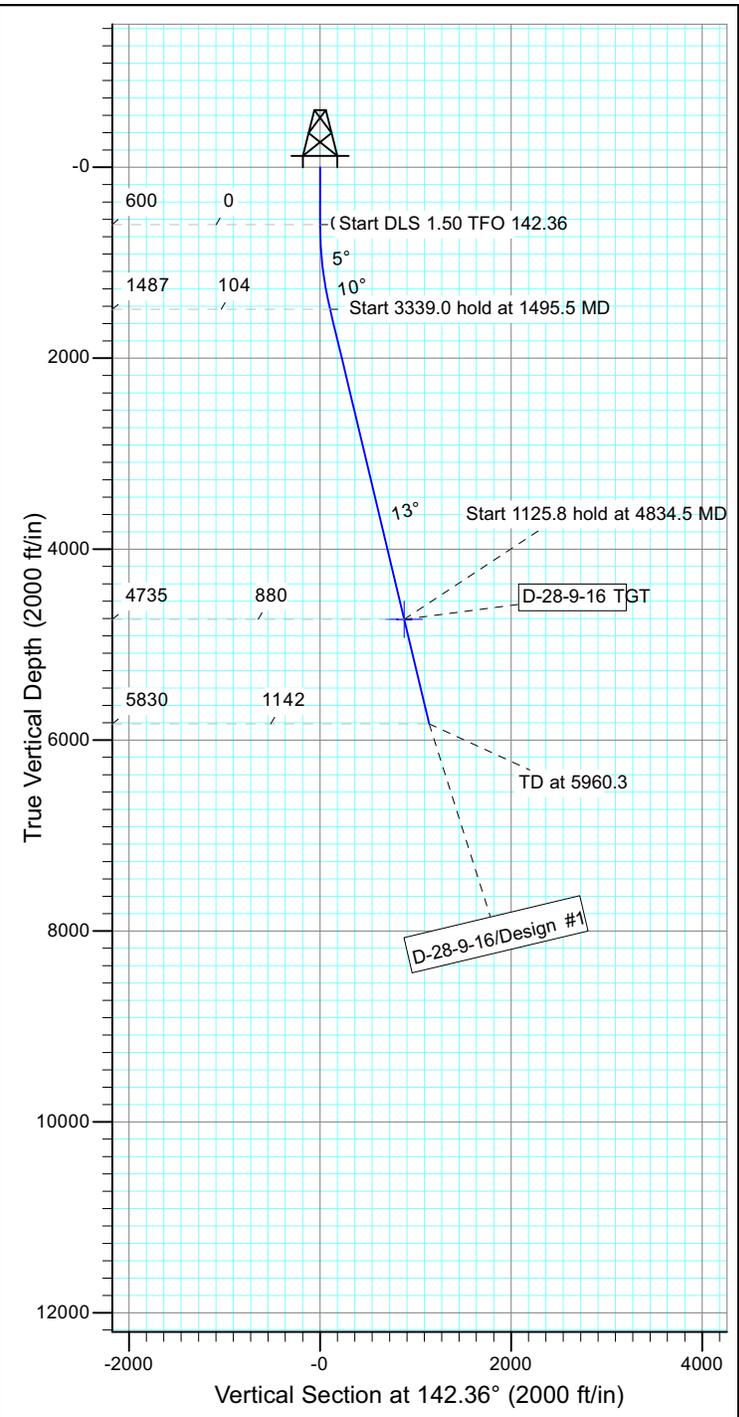


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: D-28-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.15°

Magnetic Field  
 Strength: 52093.7snT  
 Dip Angle: 65.72°  
 Date: 11/29/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
D-28-9-16 TGT	4735.0	-697.0	537.5	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1495.5	13.43	142.36	1487.3	-82.7	63.8	1.50	142.36	104.5	
4	4834.5	13.43	142.36	4735.0	-697.0	537.5	0.00	0.00	880.1	D-28-9-16 TGT
5	5960.3	13.43	142.36	5830.0	-904.0	697.2	0.00	0.00	1141.7	



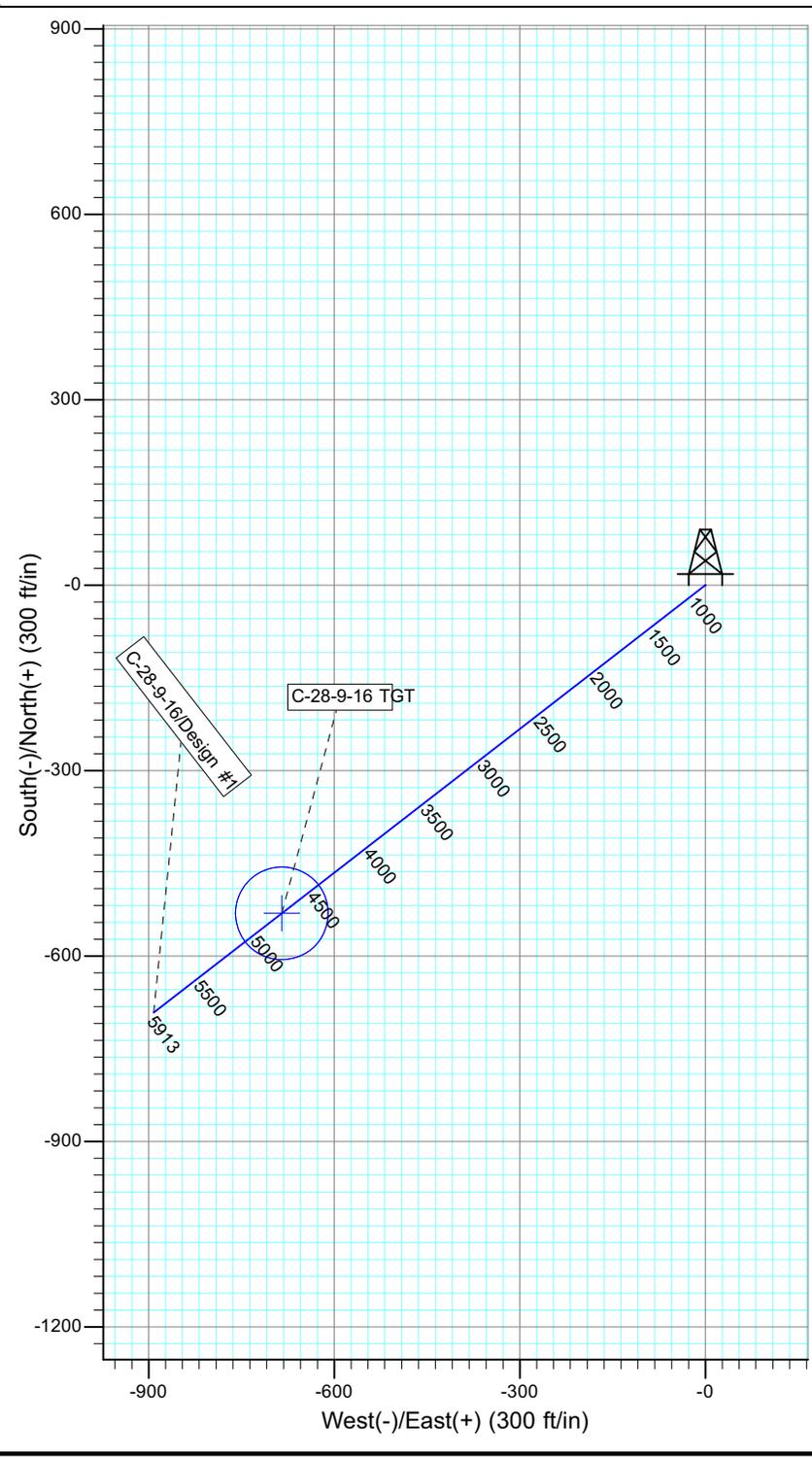
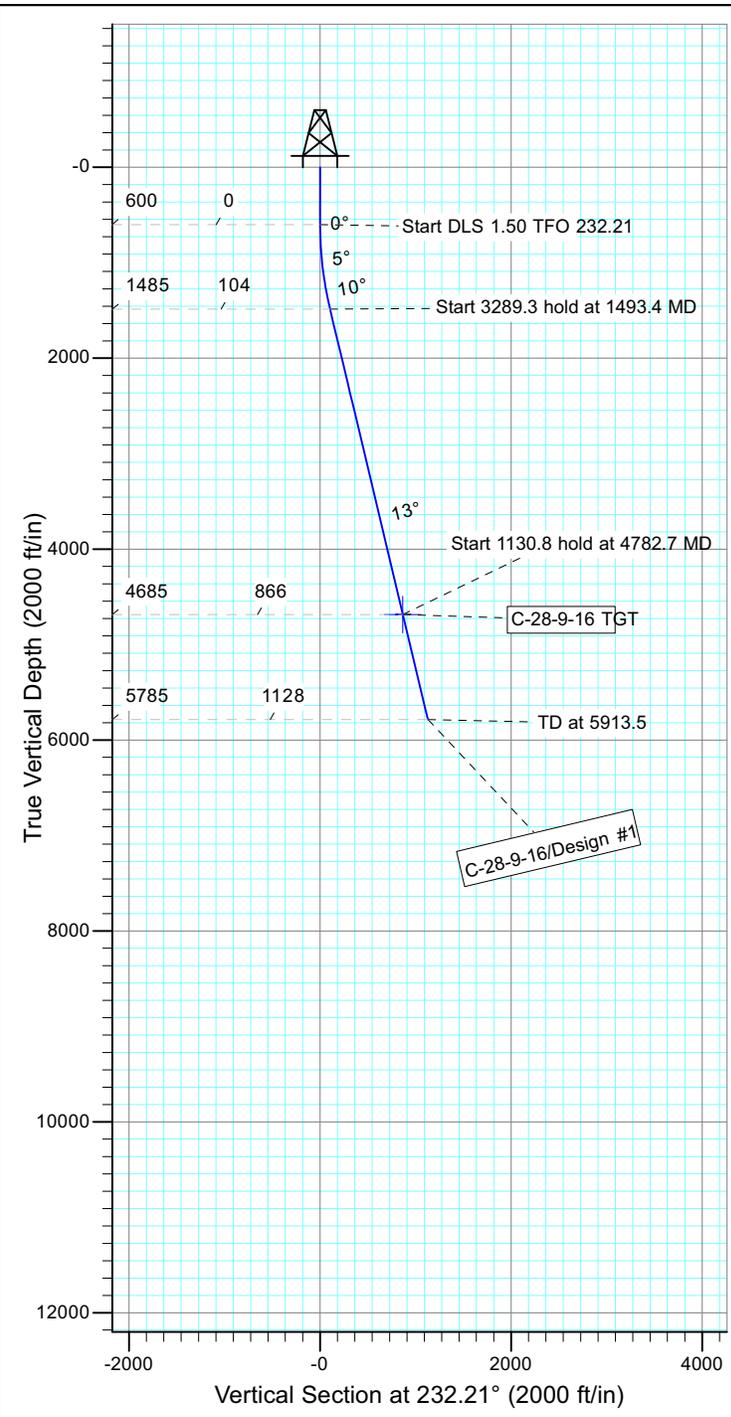


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: C-28-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.14°

Magnetic Field  
 Strength: 52095.2snT  
 Dip Angle: 65.72°  
 Date: 11/29/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
C-28-9-16 TGT	4685.0	-530.9	-684.7	Circle (Radius: 75.0)

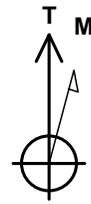
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1493.4	13.40	232.21	1485.3	-63.7	-82.2	1.50	232.21	104.0	
4	4782.7	13.40	232.21	4685.0	-530.9	-684.7	0.00	0.00	866.4	C-28-9-16 TGT
5	5913.5	13.40	232.21	5785.0	-691.5	-891.8	0.00	0.00	1128.5	



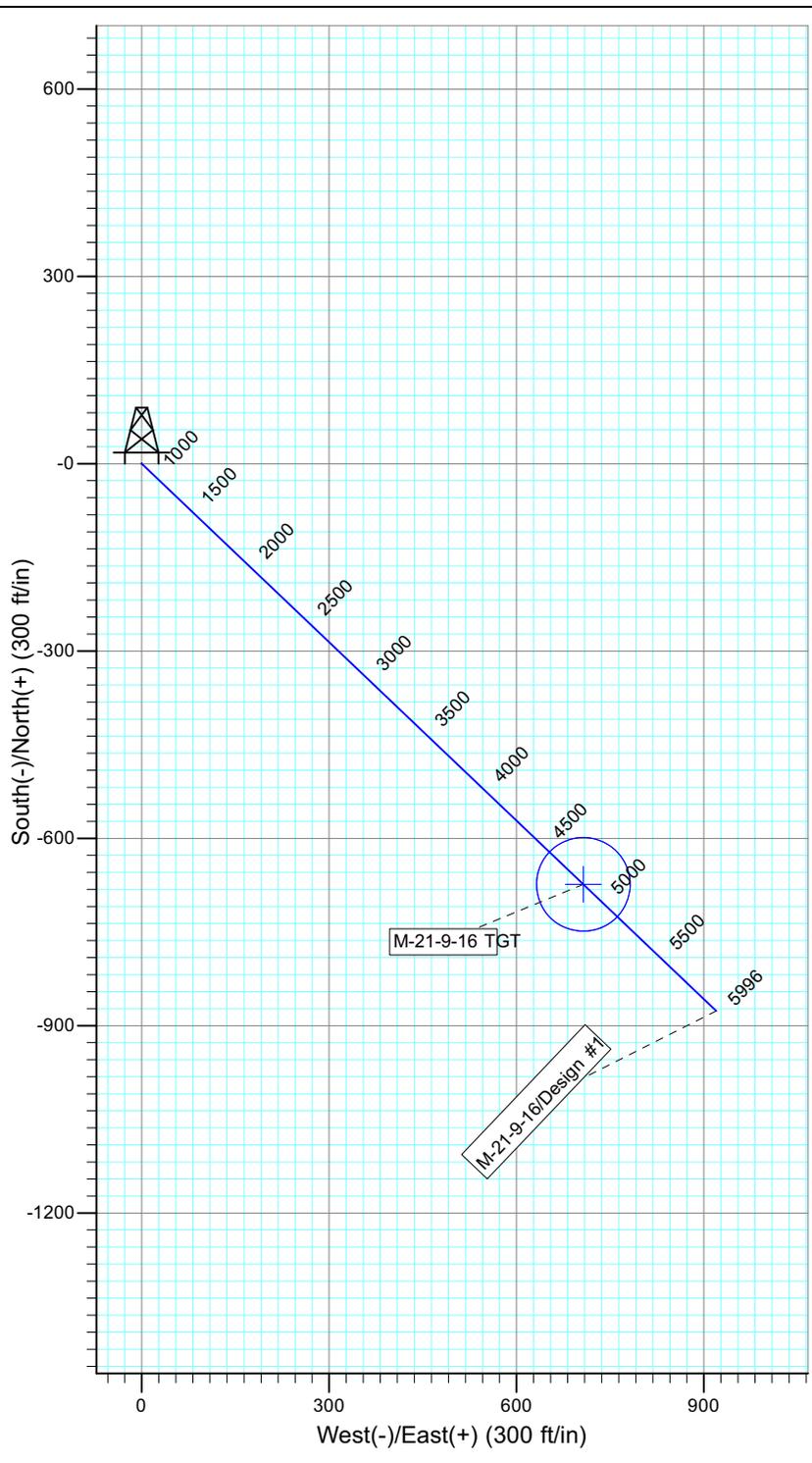
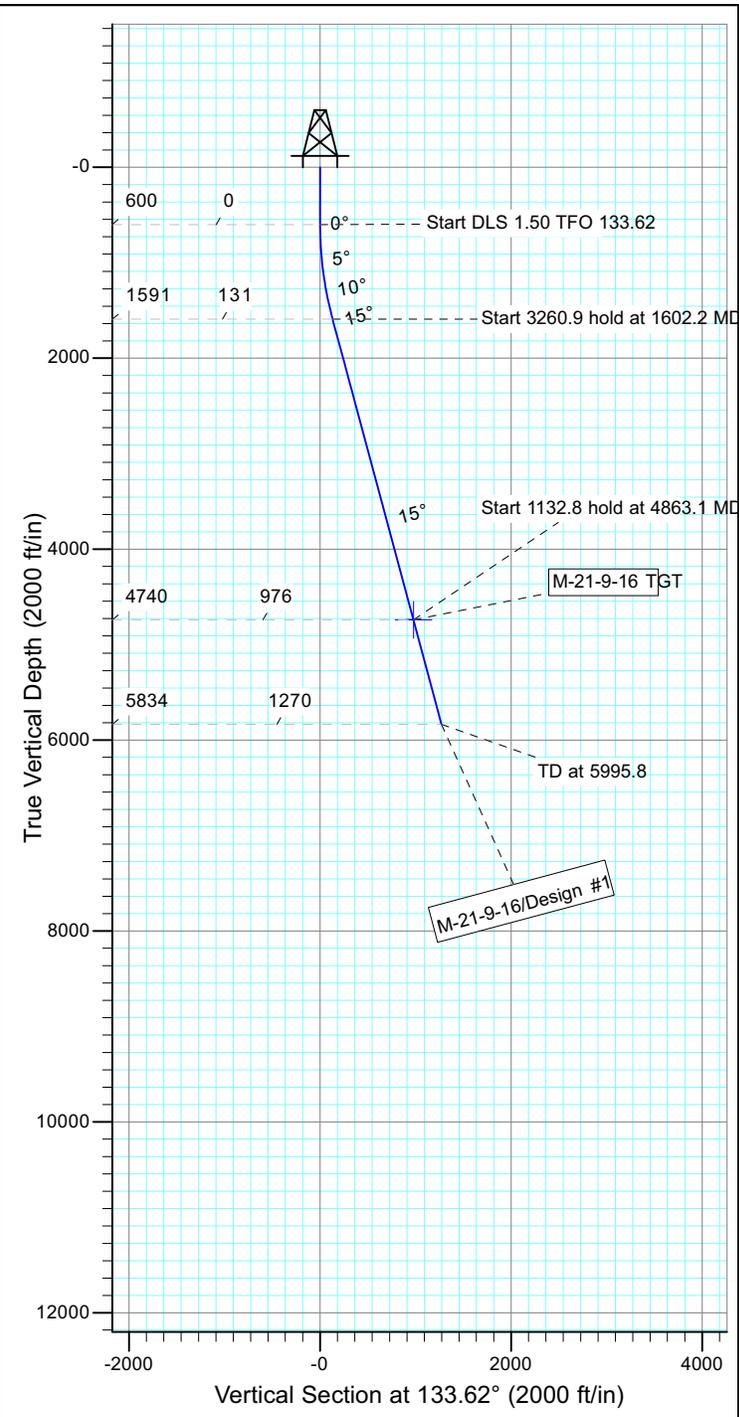


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: M-21-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.15°

Magnetic Field  
 Strength: 52100.9snT  
 Dip Angle: 65.72°  
 Date: 11/20/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
M-21-9-16 TGT	4740.0	-673.7	706.9	Circle (Radius: 75.0)

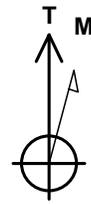
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1602.2	15.03	133.62	1590.7	-90.2	94.6	1.50	133.62	130.7	
4	4863.1	15.03	133.62	4740.0	-673.7	706.9	0.00	0.00	976.5	M-21-9-16 TGT
5	5995.8	15.03	133.62	5834.0	-876.3	919.6	0.00	0.00	1270.3	



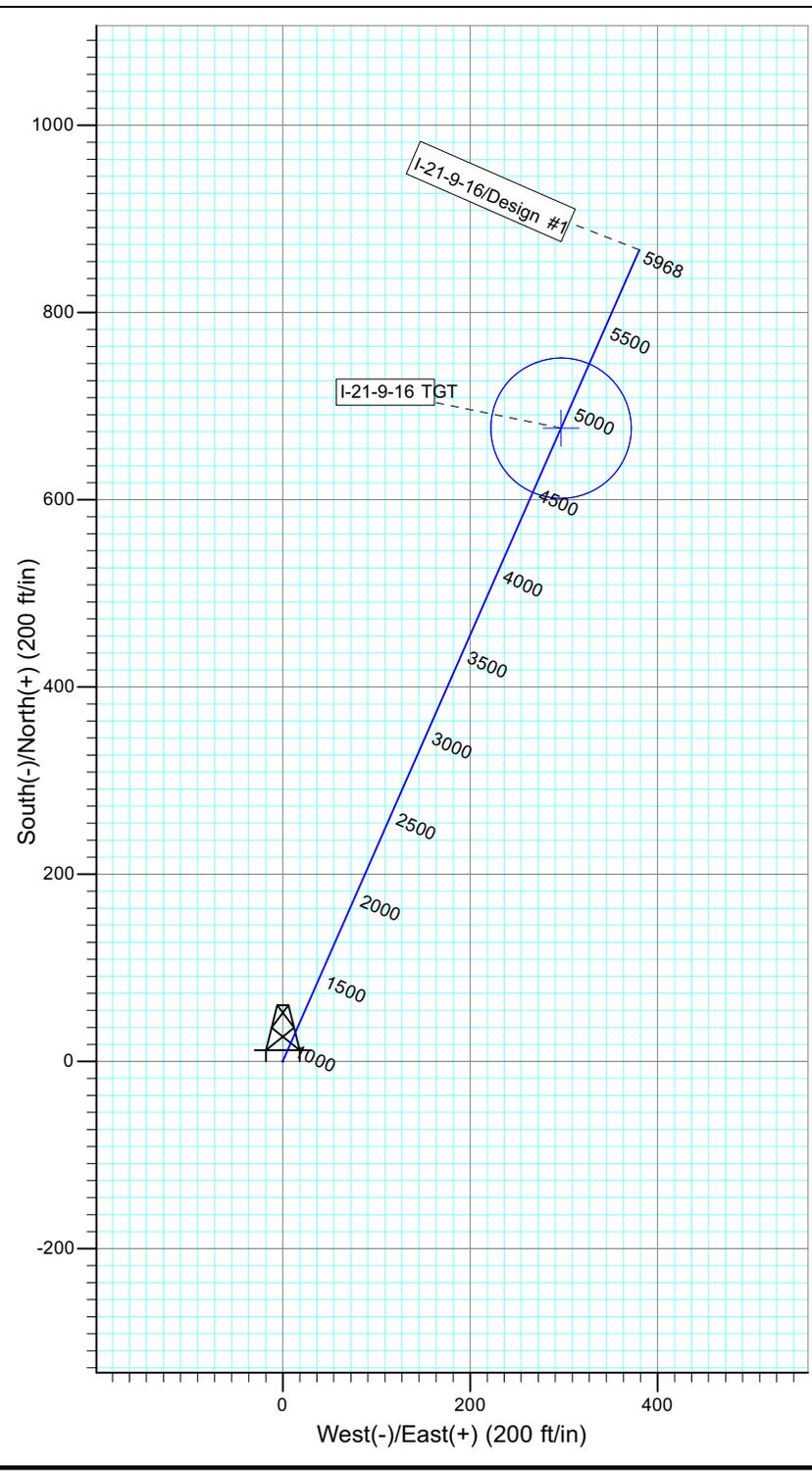
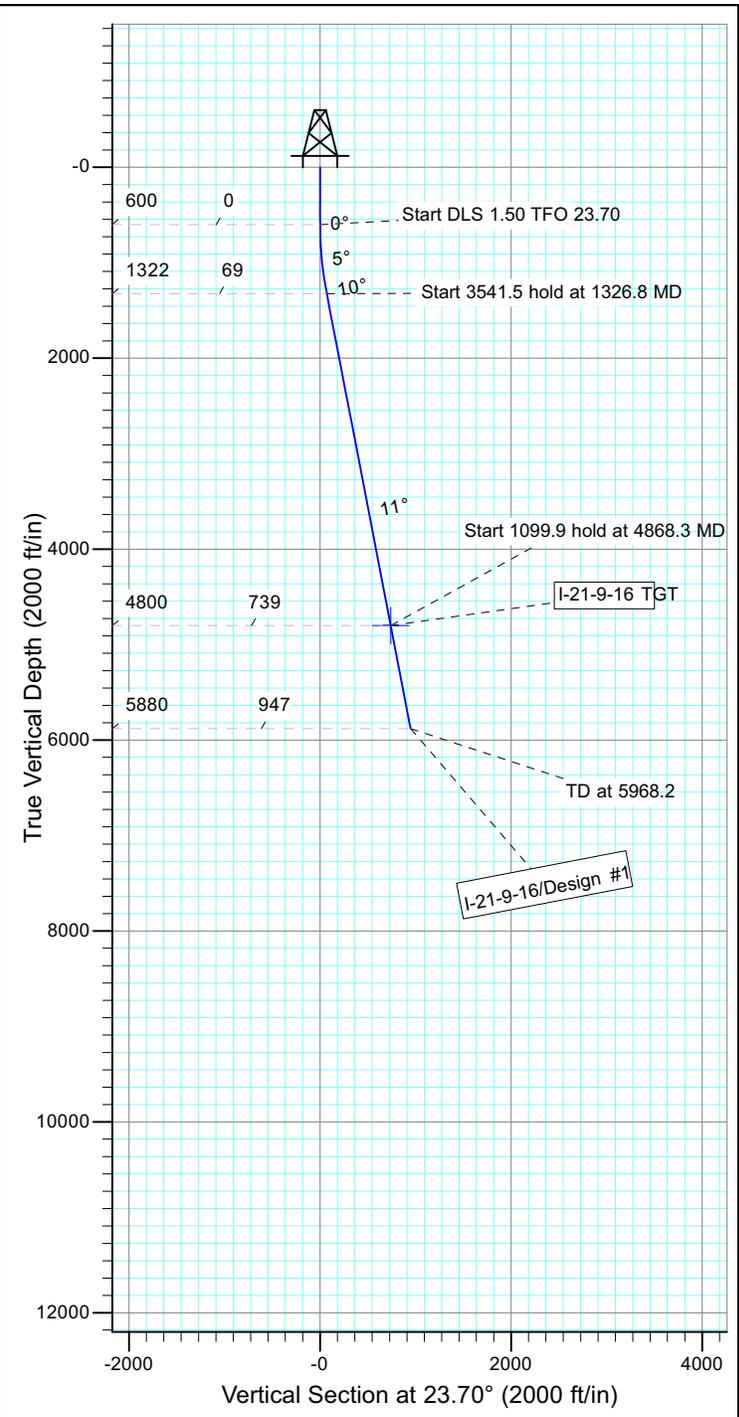


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: I-21-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.15°

Magnetic Field  
 Strength: 52099.3snT  
 Dip Angle: 65.72°  
 Date: 11/29/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS				
Name	TVD	+N/-S	+E/-W	Shape
I-21-9-16 TGT	4800.0	676.5	297.0	Circle (Radius: 75.0)

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1326.8	10.90	23.70	1322.5	63.1	27.7	1.50	23.70	68.9	
4	4868.3	10.90	23.70	4800.0	676.5	297.0	0.00	0.00	738.8	I-21-9-16 TGT
5	5968.2	10.90	23.70	5880.0	866.9	380.6	0.00	0.00	946.8	



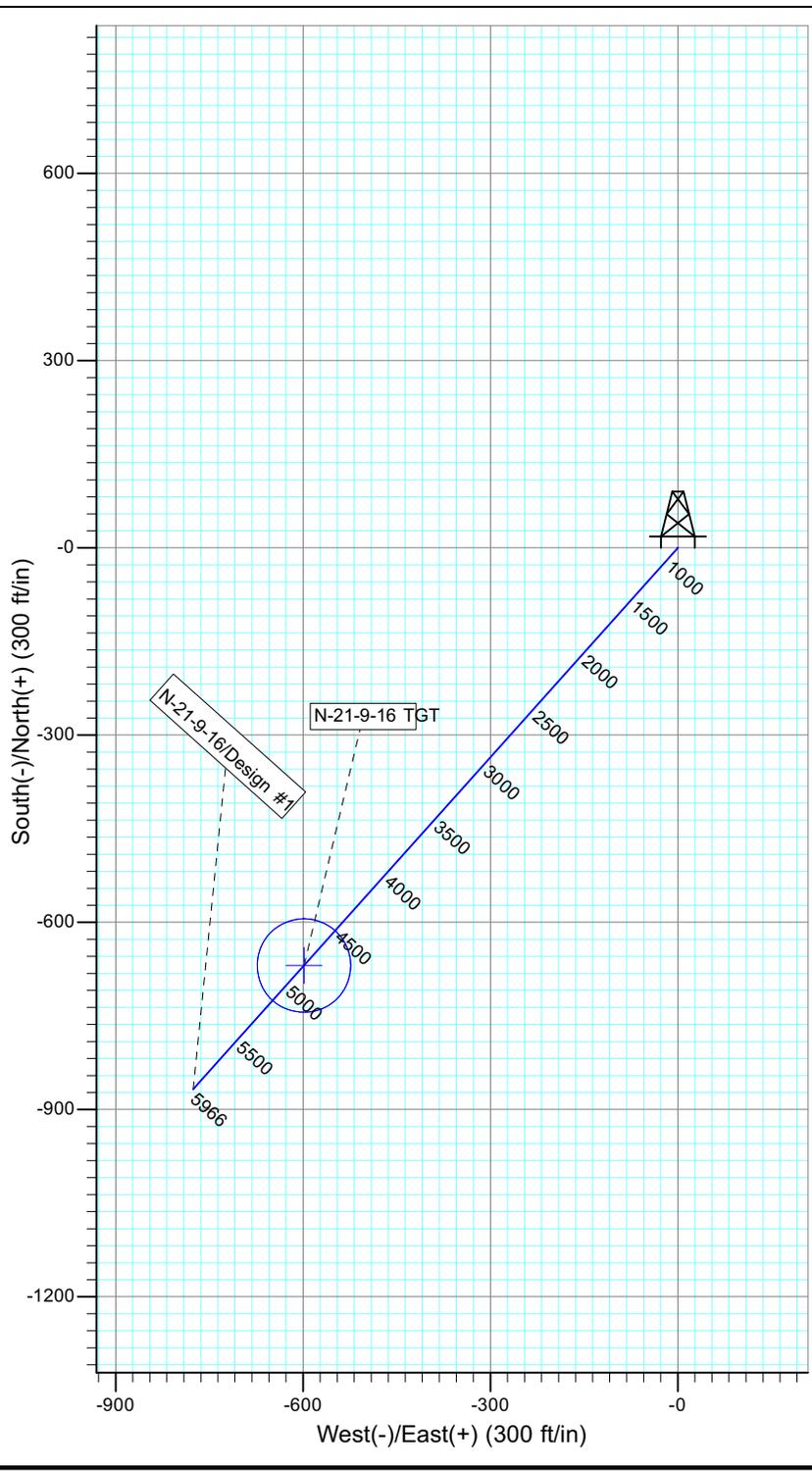
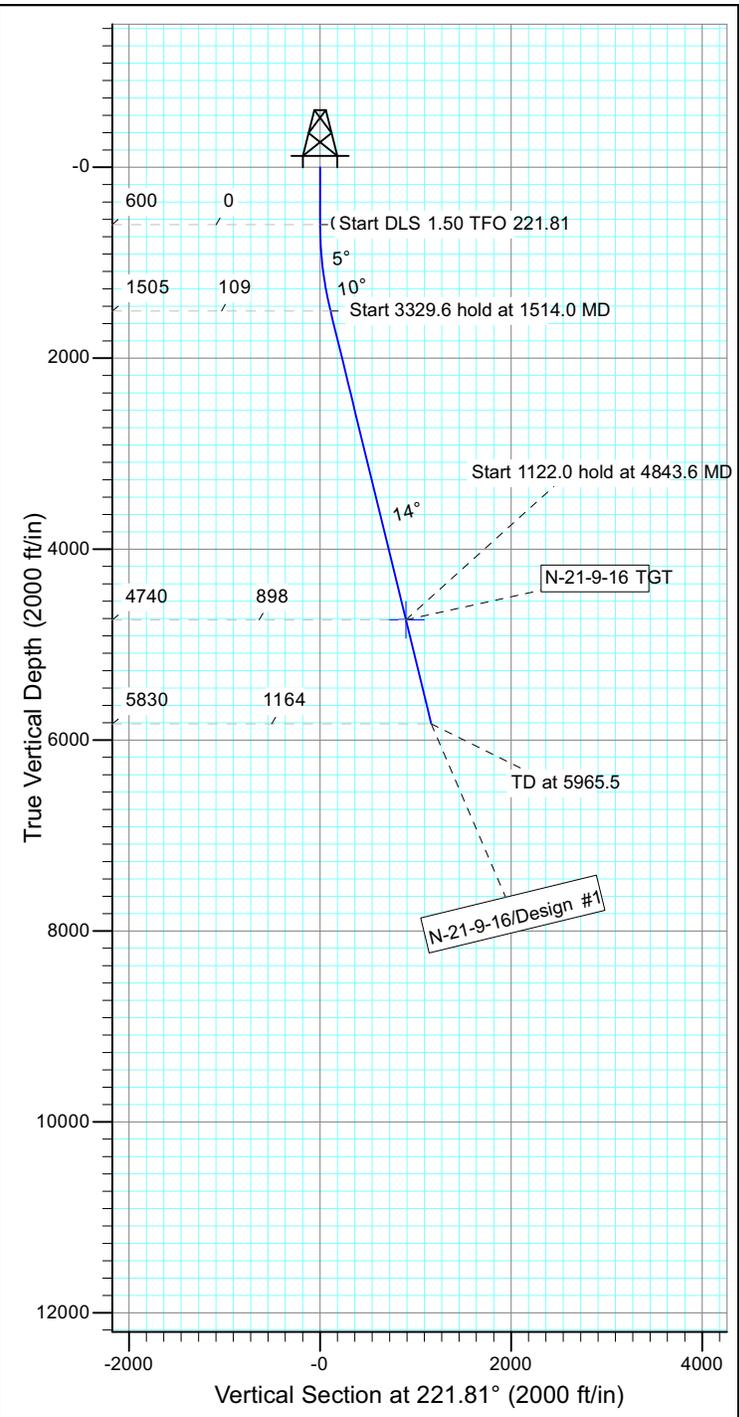


Project: USGS Myton SW (UT)  
 Site: SECTION 21 T9S, R16E  
 Well: N-21-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.15°

Magnetic Field  
 Strength: 52100.9snT  
 Dip Angle: 65.72°  
 Date: 11/20/2012  
 Model: IGRF2010



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
N-21-9-16 TGT	4740.0	-669.3	-598.6	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	1514.0	13.71	221.81	1505.3	-81.1	-72.6	1.50	221.81	108.8	
4	4843.6	13.71	221.81	4740.0	-669.3	-598.6	0.00	0.00	897.9	N-21-9-16 TGT
5	5965.5	13.71	221.81	5830.0	-867.5	-775.9	0.00	0.00	1163.9	



NEWFIELD



VIA ELECTRONIC DELIVERY

**Newfield Exploration Company**

1001 17th Street | Suite 2000

Denver, Colorado 80202

PH 303-893-0102 | FAX 303-893-0103

August 6, 2013

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

RE: Directional Drilling  
**GMBU M-21-9-16**  
Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R16E Section 21: SENW (UTU-64379)  
2107' FNL 1926' FWL

At Target: T9S-R16E Section 21: NWSE (UTU-74392)  
2276' FSL 2481' 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 8/1/2013, 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 303-383-4121 or by email at [lburget@newfield.com](mailto:lburget@newfield.com). Your consideration in this matter is greatly appreciated.

Sincerely,  
Newfield Production Company

Leslie Burget  
Land Associate

Form 3160-3  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU64379
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator NEWFIELD EXPLORATION		7. If Unit or CA Agreement, Name and No. GMBU
Contact: HEATHER CALDER E-Mail: hcalder@newfield.com		8. Lease Name and Well No. GMBU M-21-9-16
3a. Address ROUTE 3 BOX 3630 MYTON, UT 84052	3b. Phone No. (include area code) Ph: 435-646-4936 Fx: 435-646-4936	9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements. *)  At surface <b>SENW 2107FNL 1926FWL</b>  At proposed prod. zone <b>NWSE 2276FSL 2481FEL</b>		10. Field and Pool, or Exploratory <b>MONUMENT BUTTE</b>
14. Distance in miles and direction from nearest town or post office* 18.5 MILES SOUTH OF MYTON, UT		11. Sec., T., R., M., or Blk. and Survey or Area <b>Sec 21 T9S R16E Mer SLB</b>
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2276'	16. No. of Acres in Lease <b>1626.40</b>	12. County or Parish DUCHESNE
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 955'	19. Proposed Depth <b>5996 MD 5834 TVD</b>	13. State UT
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6022 GL	22. Approximate date work will start 09/01/2013	17. Spacing Unit dedicated to this well 20.00
		20. BLM/BIA Bond No. on file <b>WYB000493</b>
		23. Estimated duration 7 DAYS

**24. Attachments**

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Well plat certified by a registered surveyor.</li> <li>2. A Drilling Plan.</li> <li>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).</li> </ol> | <ol style="list-style-type: none"> <li>4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).</li> <li>5. Operator certification</li> <li>6. Such other site specific information and/or plans as may be required by the authorized officer.</li> </ol> |
|--|--|

25. Signature (Electronic Submission)	Name (Printed/Typed) <b>HEATHER CALDER Ph: 435-646-4936</b>	Date <b>08/01/2013</b>
Title <b>PRODUCTION TECHNICIAN</b>		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**Additional Operator Remarks (see next page)**

**Electronic Submission #215590 verified by the BLM Well Information System  
For NEWFIELD EXPLORATION, sent to the Vernal**

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

API Well Number: 43013523400000

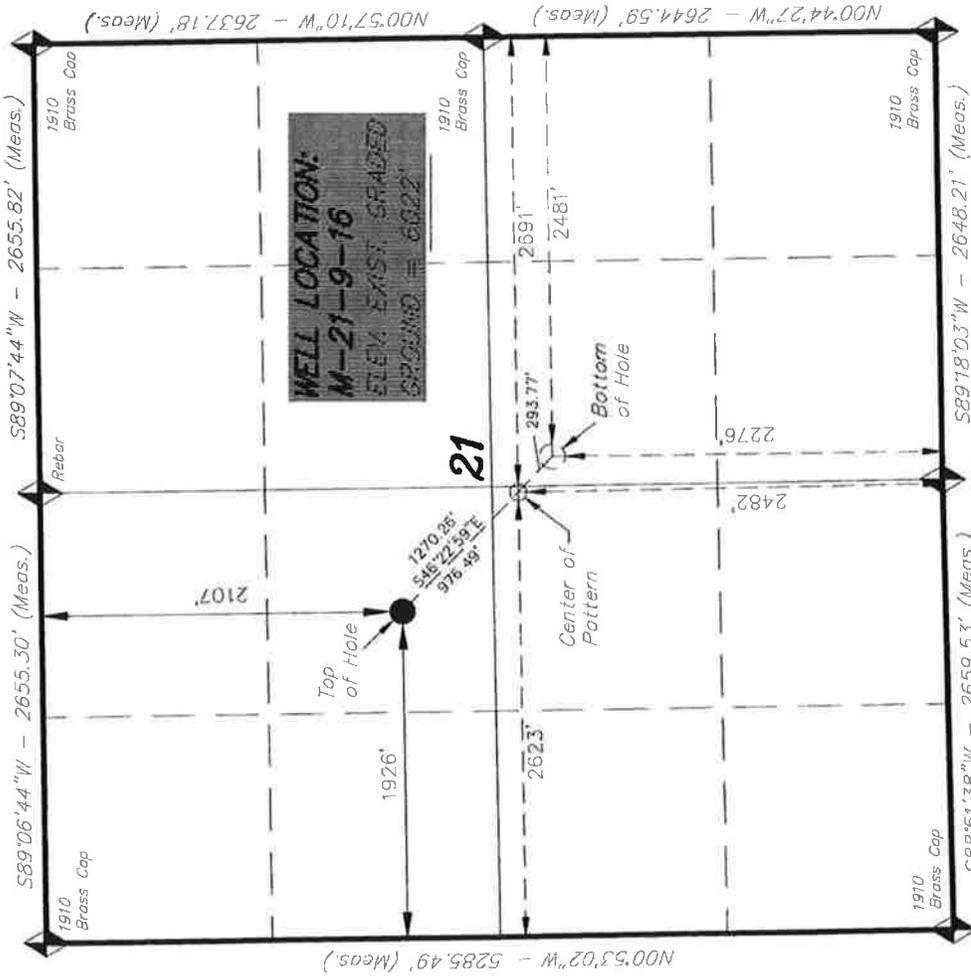
**Additional Operator Remarks:**

---

SURFACE HOLE LEASE:UTU64379  
BOTTOM HOLE LEASE:UTU74392

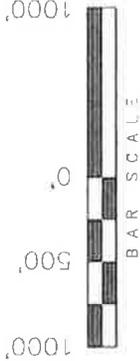
# T9S, R16E, S.L.B.&M.

## NEWFIELD EXPLORATION COMPANY



WELL LOCATION, M-21-9-16, LOCATED AS SHOWN IN THE SE 1/4 NW 1/4 OF SECTION 21, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, M-21-9-16, LOCATED AS SHOWN IN THE NW 1/4 SE 1/4 OF SECTION 21, 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 WAS PREPARED FROM FIELD SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

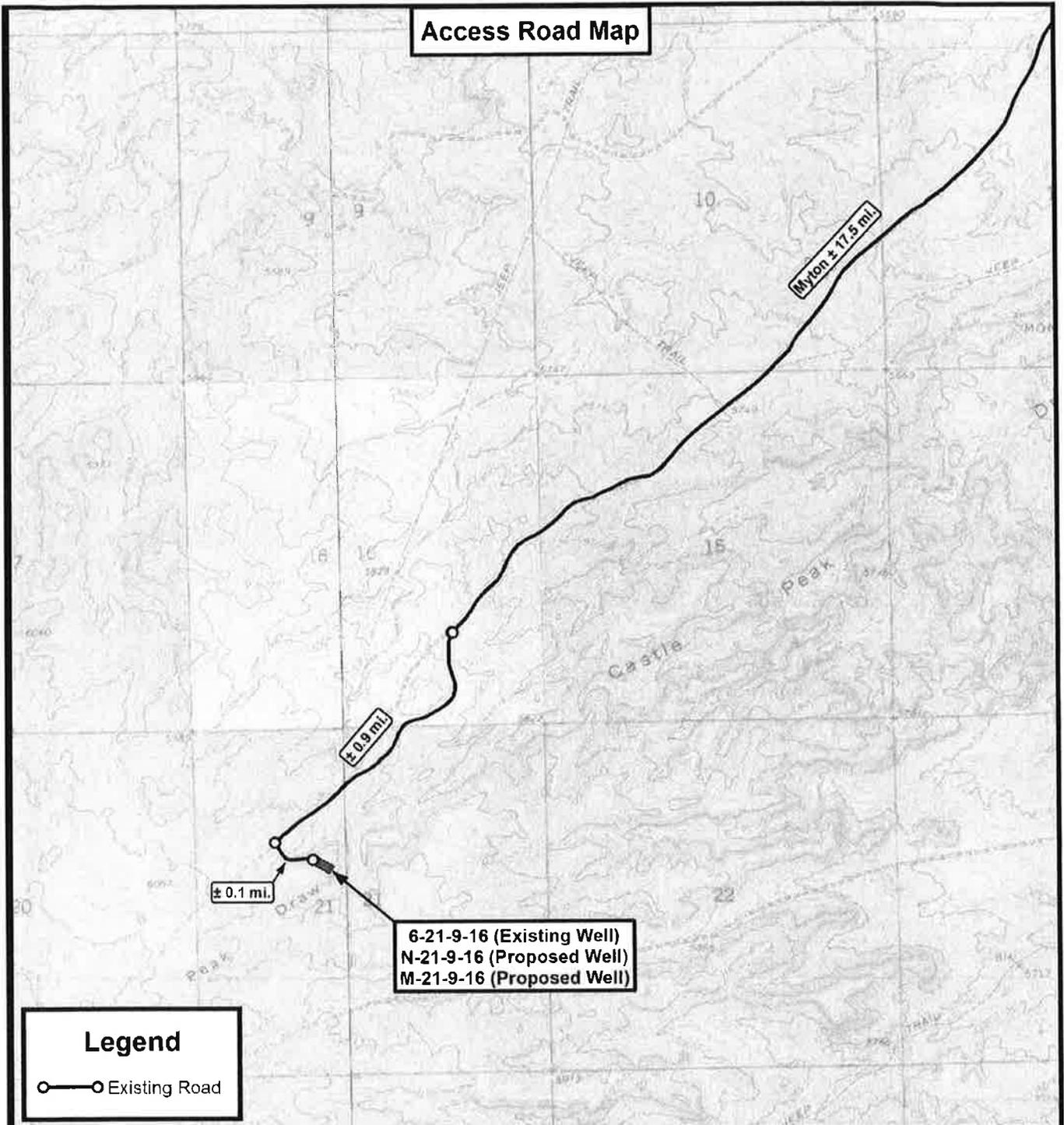
REGISTERED LAND SURVEYOR  
STATE OF UTAH  
REGISTRATION NO. 11937  
STACY W.  
12-26-12  
189377

<b>NAD 83 (SURFACE LOCATION)</b>	LATITUDE = 40°01'04.20"
	LONGITUDE = 110°02'36.75"
<b>NAD 27 (SURFACE LOCATION)</b>	LATITUDE = 40°01'04.33"
	LONGITUDE = 110°02'34.25"
<b>NAD 83 (CENTER OF PATTERN)</b>	LATITUDE = 40°00'57.44"
	LONGITUDE = 110°02'27.84"
<b>NAD 27 (CENTER OF PATTERN)</b>	LATITUDE = 40°00'57.57"
	LONGITUDE = 110°02'25.30"
<b>NAD 83 (BOTTOM HOLE LOCATION)</b>	LATITUDE = 40°00'55.40"
	LONGITUDE = 110°02'25.15"
<b>NAD 27 (BOTTOM HOLE LOCATION)</b>	LATITUDE = 40°00'55.54"
	LONGITUDE = 110°02'22.61"

◆ = SECTION CORNERS LOCATED

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

<b>TRI STATE LAND SURVEYING &amp; CONSULTING</b>	
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501	
DATE SURVEYED: 11-29-12	SURVEYED BY: S.H.
DATE DRAWN: 12-26-12	DRAWN BY: V.H.
REVISIONS:	SCALE: 1" = 1000'
VERSION: <b>V1</b>	



6-21-9-16 (Existing Well)  
 N-21-9-16 (Proposed Well)  
 M-21-9-16 (Proposed Well)

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



**NEWFIELD EXPLORATION COMPANY**

6-21-9-16 (Existing Well)  
 N-21-9-16 (Proposed Well)  
 M-21-9-16 (Proposed Well)  
 SEC. 21, T9S, R16E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	A.P.C.	REVISED:	VERSION:
DATE:	01-08-2013		V1
SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET  
**B**

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 7/31/2013

API NO. ASSIGNED: 43013523400000

WELL NAME: GMBU M-21-9-16

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 646-4936

CONTACT: Heather Calder

PROPOSED LOCATION: SENW 21 090S 160E

Permit Tech Review: 

SURFACE: 2107 FNL 1926 FWL

Engineering Review: 

BOTTOM: 2276 FSL 2481 FEL

Geology Review: 

COUNTY: DUCHESNE

LATITUDE: 40.01775

LONGITUDE: -110.12691

UTM SURF EASTINGS: 574508.00

NORTHINGS: 4430092.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-64379

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

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

Commingle Approved

## LOCATION AND SITING:

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

Comments: Presite Completed

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



GARY R. HERBERT  
Governor

GREGORY S. BELL  
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 M-21-9-16  
**API Well Number:** 4301352340000  
**Lease Number:** UTU-64379  
**Surface Owner:** FEDERAL  
**Approval Date:** 8/7/2013

### Issued to:

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

### Authority:

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

### Duration:

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

### General:

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

### Conditions of Approval:

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

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

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

### Notification Requirements:

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

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

(please leave a voicemail message if not available)

OR

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

**Reporting Requirements:**

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

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

**Approved By:**

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

For John Rogers  
Associate Director, Oil & Gas

# RECEIVED

AUG 06 2013

Form 3160-3  
(August 2007)

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## BLM Vernal UT

### APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU64379	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator NEWFIELD EXPLORATION Contact: HEATHER CALDER E-Mail: hcalder@newfield.com		7. If Unit or CA Agreement, Name and No. GMBU	
3a. Address ROUTE 3 BOX 3630 MYTON, UT 84052		8. Lease Name and Well No. GMBU M-21-9-16	
3b. Phone No. (include area code) Ph: 435-646-4936 Fx: 435-646-4936		9. API Well No. 4301352340	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SENW 2107FNL 1926FWL At proposed prod. zone NWSE 2276FSL 2481FEL		10. Field and Pool, or Exploratory MONUMENT BUTTE	
14. Distance in miles and direction from nearest town or post office* 18.5 MILES SOUTH OF MYTON, UT		11. Sec., T., R., M., or Blk. and Survey or Area Sec 21 T9S R16E Mer SLB	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 2276'		12. County or Parish DUCHESNE	
16. No. of Acres in Lease 1626.40		13. State UT	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 955'		17. Spacing Unit dedicated to this well 20.00	
19. Proposed Depth 5996 MD 5834 TVD		20. BLM/BIA Bond No. on file WYB000493	
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6022 GL		22. Approximate date work will start 09/01/2013	
		23. Estimated duration 7 DAYS	

#### 24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) HEATHER CALDER Ph: 435-646-4936	Date 08/01/2013
Title PRODUCTION TECHNICIAN		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date DEC 09 2013
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

### CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

#### Additional Operator Remarks (see next page)

Electronic Submission #215590 verified by the BLM Well Information System  
For NEWFIELD EXPLORATION, sent to the Vernal  
Committed to AFMSS for processing by LESLIE BUHLER on 08/09/2013

## NOTICE OF APPROVAL

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Newfield Production Company  
Well No: GMBU M-21-9-16  
API No: 43-013-52340

Location: SENW, Sec. 21, T9S, R16E  
Lease No: UTU-64379  
Agreement:

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	- Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	- Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:blm_ut_vn_opreport@blm.gov">blm ut vn opreport@blm.gov</a>
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

### ***SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)***

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

#### **Green River District Reclamation Guidelines**

The Operator will comply with the requirements of the ***Green River District (GRD) Reclamation Guidelines*** formalized by Green River District Instructional Memo UTG000-2011-003 on March 28, 2011. Documentation of the compliance will be as follows:

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3 growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the GRD Reclamation Guidelines have been met (30% or greater basal cover).
- Prior to beginning new surface disturbance, the operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) providing the results of the noxious weed inventory described in the GRD Reclamation Guidelines (2011). If weeds are found the report shall include 1) A GPS location recorded in North American Datum 1983; 2) species; 3) canopy cover or number of plants; 4) and size of infestation (estimate square feet or acres. Information shall be also documented in the reclamation report.

#### **CONDITIONS OF APPROVAL**

##### **Wildlife**

**In accordance with the Record of Decision for the Castle Peak and Eightmile Flat Oil and Gas Expansion Project, Newfield Rocky Mountains Inc., the following COA's are required:**

- WFM-1 On level or gently sloping ground (5 percent slope or less) Newfield will elevate surface pipelines (4 inches or greater in diameter) a minimum of 6 inches above the ground to allow

passage of small animals beneath the pipe. This ground clearance will be achieved by placing the pipeline on blocks at intervals of 150 to 200 feet.

- WFM-4 Newfield will install noise reduction devices on all pump jacks to reduce intermittent noise to 45 dBA at 660 feet from the source.

#### **COA's derived from mitigating measures in the EA:**

##### **For protection of T&E Fish if drawing water from the Green River**

- For areas of fresh water collection, an infiltration gallery will be constructed in a Service approved location. An infiltration gallery is basically a pit or trench dug within the floodplain to a depth below the water table. Water is drawn from the pit rather than from the river directly. If this is not possible, limit pumping within the river to off-channel locations that do not connect to the river during high spring flows.
- If water cannot be drawn using the measures above and the pump head will be located in the river channel where larval fish are known to occur, the following measures apply:
  - Avoid pumping from low-flow or no-flow areas as these habitats tend to concentrate larval fish
  - Avoid pumping to the greatest extent possible, during that period of the year when larval fish may be present (see previous bullet); and
  - Avoid pumping, to the greatest extent possible, during the midnight hours (10:00 p.m. to 2:00 a.m.) as larval drift studies indicate that this is a period of greatest daily activity. Dusk is the preferred pumping time, as larval drift abundance is lowest during this time.
  - Screen all pump intakes with 3/32-inch mesh material.
- Report any fish impinged on the intake screen to the FWS office (801.975.3330) and the:  
Utah Division of Wildlife Resources  
Northeastern Region  
152 East 100 North  
Vernal, UT 84078  
(435) 781-9453

#### **Air Quality**

- All internal combustion equipment will be kept in good working order.
- Water or other approved dust suppressants will be used at construction sites and along roads, as determined appropriate by the Authorized Officer. Dust suppressant such as magnesium chloride or fresh water may be used, as needed, during the drilling phase.
- Open burning of garbage or refuse will not occur at well sites or other facilities.
- Drill rigs will be equipped with Tier II or better diesel engines.
- Low bleed pneumatics will be installed on separator dump valves and other controllers.
- During completion, no venting will occur, and flaring will be limited as much as possible. Production equipment and gathering lines will be installed as soon as possible.
- Telemetry will be installed to remotely monitor and control production.
- When feasible, two or more rigs (including drilling and completion rigs) will not be run simultaneously within 200 meters of each other. If two or more rigs must be run simultaneously within 200 meters of each other, then effective public health buffer zones out to 200 meters (m) from the nearest emission source will be implemented. Examples of an effective public health protection buffer zone include the demarcation of a public access exclusion zone by signage at

intervals of every 250 feet that is visible from a distance of 125 feet during daylight hours, and a physical buffer such as active surveillance to ensure the property is not accessible by the public during drilling operations. Alternatively, the proponent may demonstrate compliance with the 1-hour NO<sub>2</sub> National Ambient Air Quality Standards (NAAQS) with appropriate and accepted near-field modeling. As part of this demonstration, the proponent may propose alternative mitigation that could include but is not limited to natural gas-fired drill rigs, installation of NO<sub>x</sub> controls, time/use restrictions, and/or drill rig spacing.

- Green completions will be used for all well completion activities where technically feasible.
- Employ enhanced VOC emission controls with 95% control efficiency on production equipment having a potential to emit greater than 5 tons per year.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- Newfield Production Co. shall comply with all applicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", Feb 16, 2012).
- The operator shall also comply with applicable laws and regulations; with lease terms Onshore Oil and Gas Orders, NTL's and with other orders and instructions of the authorized officer.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB

or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location ( $\frac{1}{4}$  Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross 29 Submitted By  
Branden Arnold Phone Number 435-401-0223  
Well Name/Number GMBU M-21-9-16  
Qtr/Qtr SE/NW Section 21 Township 9S Range 16E  
Lease Serial Number UTU-64379  
API Number 43-013-52340

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 1/10/14 7:00 AM  PM

Casing – Please report time casing run starts, not cementing times.

- Surface Casing
- Intermediate Casing
- Production Casing
- Liner
- Other

Date/Time 1/10/14 3:00 AM  PM

BOPE

- Initial BOPE test at surface casing point
- BOPE test at intermediate casing point
- 30 day BOPE test
- Other

Date/Time \_\_\_\_\_ AM  PM

Remarks \_\_\_\_\_

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<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  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.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU-64379
		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>1. TYPE OF WELL</b> Oil Well		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY		<b>8. WELL NAME and NUMBER:</b> GMBU M-21-9-16
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. API NUMBER:</b> 43013523400000
<b>PHONE NUMBER:</b> 435 646-4825 Ext		<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 2107 FNL 1926 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: SENW Section: 21 Township: 09.0S Range: 16.0E Meridian: S		<b>COUNTY:</b> DUCHESNE
		<b>STATE:</b> UTAH

11.

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<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 checked="" type="checkbox"/> SPUD REPORT Date of Spud: 1/9/2014	<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 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.

On 1/9/14 Drill and set 5' of 14" conductor. Drill f/5' to 331' KB of 12 1/4 hole. P/U and run 7 joints of 8 5/8 casing set depth 326' KB. On 1/13/14 Cement w/200 sx of G Neat cement returned 10 bbls back to pit and bumped plug to 250 psi

**Accepted by the  
Utah Division of  
Oil, Gas and Mining  
FOR RECORD ONLY  
January 21, 2014**

<b>NAME (PLEASE PRINT)</b> Cherei Neilson	<b>PHONE NUMBER</b> 435 646-4883	<b>TITLE</b> Drilling Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 1/21/2014	

## NEWFIELD

## Casing

## Conductor



Legal Well Name GMBU M-21-9-16		Wellbore Name Original Hole		
API/UWI 4301352340000	Surface Legal Location SENW 2107 FNL 1926 FWL Sec 21 T9S R16E Mer SLB	Field Name GMBU CTB6	Well Type Development	Well Configuration Type Slant
Well RC 500346524	County Duchesne	State/Province Utah	Spud Date 1/9/2014 08:30	Final Rig Release Date

<b>Wellbore</b>					
Wellbore Name Original Hole			Kick Off Depth (ftKB)		
Section Des	Size (in)	Actual Top Depth (MD) (ftKB)	Actual Bottom Depth (MD) (ftKB)	Start Date	End Date

<b>Wellhead</b>				
Type	Install Date	Service	Comment	

<b>Wellhead Components</b>				
Des	Make	Model	SN	WP Top (psi)

<b>Casing</b>				
Casing Description Conductor	Set Depth (ftKB) 15	Run Date 1/9/2014	Set Tension (kips)	
Centralizers	Scratchers			

<b>Casing Components</b>												
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)	Mk-up Tq (ft-lb)	Class	Max OD (in)
Conductor	14	13.500	36.75	H-40		1	5.00	10.0	15.0			

<b>Jewelry Details</b>									
<b>External Casing Packer</b>									
Type	Setting Requirement	Release Requirements			Inflation Method	Vol Inflation (gal)	Equiv Hole Sz (in)		
Inflation Fluid Type	Infl FI Dens (lb/gal)	P AV Set (psi)	AV Acting Pressure (psi)	P ICV Set (psi)	P ICV Act (psi)	ECP Load (1000lbf)	Seal Load (1000lbf)		

<b>Slotted Liner</b>							
% Open Area (%)	Perforation Min Dimension (in)	Perforation Max Dimension (in)	Axial Perf Spacing (ft)	Perf Rows	Blank Top Length (ft)	Blank Bottom Length (ft)	
Slot Description	Slot Pattern			Slot Length (in)	Slot Width (in)	Slot Frequency	Screen Gauge (ga)

<b>Liner Hanger</b>						
Retrievable?	Elastomer Type	Element Center Depth (ft)		Polish Bore Size (in)	Polish Bore Length (ft)	
Slip Description				Set Mechanics		
Setting Procedure						
Unsetting Procedure						

## NEWFIELD

## Casing

Surface

Legal Well Name GMBU M-21-9-16		Wellbore Name Original Hole	
API/UWI 4301352340000	Surface Legal Location SENW 2107 FNL 1926 FWL Sec 21 T9S R16E Mer SLB	Field Name GMBU CTB6	Well Type Development
Well RC 500346524	County Duchesne	State/Province Utah	Spud Date 1/9/2014 08:30
		Well Configuration Type Slant	
Final Rig Release Date			

Wellbore					
Wellbore Name Original Hole					Kick Off Depth (ftKB)
Section Des	Size (in)	Actual Top Depth (MD) (ftKB)	Actual Bottom Depth (MD) (ftKB)	Start Date	End Date
Conductor	14	10	15	1/9/2014	1/9/2014
Vertical	12 1/4	15	331	1/9/2014	1/9/2014

Wellhead				
Type	Install Date	Service	Comment	

Wellhead Components				
Des	Make	Model	SN	WP Top (psi)

Casing			
Casing Description	Set Depth (ftKB)	Run Date	Set Tension (kips)
Surface	326	1/9/2014	
Centralizers 3	Scratchers		

Casing Components												
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Jts	Len (ft)	Top (ftKB)	Btm (ftKB)	Mk-up Tq (ft-lb)	Class	Max OD (in)
Wellhead	8 5/8	8.097	24.00	J-55	ST&C	1	1.65	9.9	11.6			
Cut Off	8 5/8	8.097	24.00	J-55	ST&C	1	42.83	11.6	54.4			
Casing Joints	8 5/8	8.097	24.00	J-55	ST&C	5	223.72	54.4	278.1			
Float Collar	8 5/8	8.097	24.00	J-55	ST&C	1	1.50	278.1	279.6			
Shoe Joint	8 5/8	8.097	24.00	J-55	ST&C	1	44.86	279.6	324.5			
Guide Shoe	8 5/8	8.097	24.00	J-55	ST&C	1	1.50	324.5	326.0			

Jewelry Details							
External Casing Packer							
Type	Setting Requirement	Release Requirements	Inflation Method	Vol Inflation (gal)	Equiv Hole Sz (in)		
Inflation Fluid Type	Infl Fl Dens (lb/gal)	P AV Set (psi)	AV Acting Pressure (psi)	P ICV Set (psi)	P ICV Act (psi)	ECP Load (1000lbf)	Seal Load (1000lbf)

Slotted Liner							
% Open Area (%)	Perforation Min Dimension (in)	Perforation Max Dimension (in)	Axial Perf Spacing (ft)	Perf Rows	Blank Top Length (ft)	Blank Bottom Length (ft)	
Slot Description	Slot Pattern			Slot Length (in)	Slot Width (in)	Slot Frequency	Screen Gauge (ga)

Liner Hanger				
Retrievable?	Elastomer Type	Element Center Depth (ft)	Polish Bore Size (in)	Polish Bore Length (ft)
Slip Description			Set Mechanics	
Setting Procedure				
Unsetting Procedure				