

**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> Monument Butte State G-2-9-16	
<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 <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						<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> ML-21839			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" 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"/>	
<b>20. LOCATION OF WELL</b>	<b>FOOTAGES</b>	<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>	
<b>LOCATION AT SURFACE</b>	564 FNL 658 FWL	NWNW	2	9.0 S	16.0 E	S	
<b>Top of Uppermost Producing Zone</b>	1035 FNL 1132 FWL	NWNW	2	9.0 S	16.0 E	S	
<b>At Total Depth</b>	1355 FNL 1430 FWL	SENW	2	9.0 S	16.0 E	S	
<b>21. COUNTY</b> DUCHESNE			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1355			<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> 1241			<b>26. PROPOSED DEPTH</b> MD: 6544 TVD: 6544	
<b>27. ELEVATION - GROUND LEVEL</b> 5579			<b>28. BOND NUMBER</b> B001834			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 43-7478	
<b>ATTACHMENTS</b>							
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>							
<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> Mandie Crozier			<b>TITLE</b> Regulatory Tech			<b>PHONE</b> 435 646-4825	
<b>SIGNATURE</b>			<b>DATE</b> 08/18/2009			<b>EMAIL</b> mcrozier@newfield.com	
<b>API NUMBER ASSIGNED</b> 43013501150000			<b>APPROVAL</b>   Permit Manager				

**Proposed Hole, Casing, and Cement**

<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Prod	7.875	5.5	0	6544		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade J-55 LT&C	6544	15.5			

**Proposed Hole, Casing, and Cement**

<b>String</b>	<b>Hole Size</b>	<b>Casing Size</b>	<b>Top (MD)</b>	<b>Bottom (MD)</b>		
Surf	12.25	8.625	0	1100		
<b>Pipe</b>	<b>Grade</b>	<b>Length</b>	<b>Weight</b>			
	Grade J-55 ST&C	1100	24.0			



NEWFIELD PRODUCTION COMPANY  
MONUMENT BUTTE STATE G-2-9-16  
AT SURFACE: NW/NW SECTION 2, 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 – 1650'
Green River	1650'
Wasatch	6544'

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

Green River Formation 1650' – 6544' – Oil

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 1,100'. 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: Monument Butte State G-2-9-16**

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	1,100'	24.0	J-55	STC	2,950	1,370	244,000
						4.78	3.91	9.24
Prod casing 5-1/2"	0'	6,544'	15.5	J-55	LTC	4,810	4,040	217,000
						2.31	1.94	2.14

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: Monument Butte State G-2-9-16**

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
			ft <sup>3</sup>			
Surface casing	1,100'	Class G w/ 2% CaCl	504	30%	15.8	1.17
			590			
Prod casing Lead	4,544'	Prem Lite II w/ 10% gel + 3% KCl	314	30%	11.0	3.26
			1024			
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.

Waiting On Cement: A minimum of four (4) hours shall elapse prior to attempting any pressure testing of the BOP equipment which would subject the surface casing cement to pressure, and a minimum of six (6) hours shall elapse before drilling out of the wiper plug, cement, or shoe is begun. WOC time shall be recorded in the Driller's Log. Compressive Strength shall be a minimum of 500 psi prior to drilling out.

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.

The production casing cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals.

As a minimum, usable water zones shall be isolated and/or protected by having a cement top for the production casing at least 200 feet above the base of the usable water. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc., shall be utilized to help isolate the cement from contamination by the mud being displaced ahead of the cement slurry.

All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or to 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. If pressure declines more than 10% in 30 minutes, corrective action shall be taken.

Setting of each string of casing showing the size, grade, weight of casing set, depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of the cementing tools used, casing test method and results, and the date of the work done. Spud date will be shown on the first reports submitted.

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 ±1100 feet will be drilled with an air/mist system. From about 1100 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 @ 1100' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +/- . A cement bond log will be run from PBD 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 2009, and take approximately seven (7) days from spud to rig release.

## 2-M SYSTEM

Blowout Prevention Equipment Systems

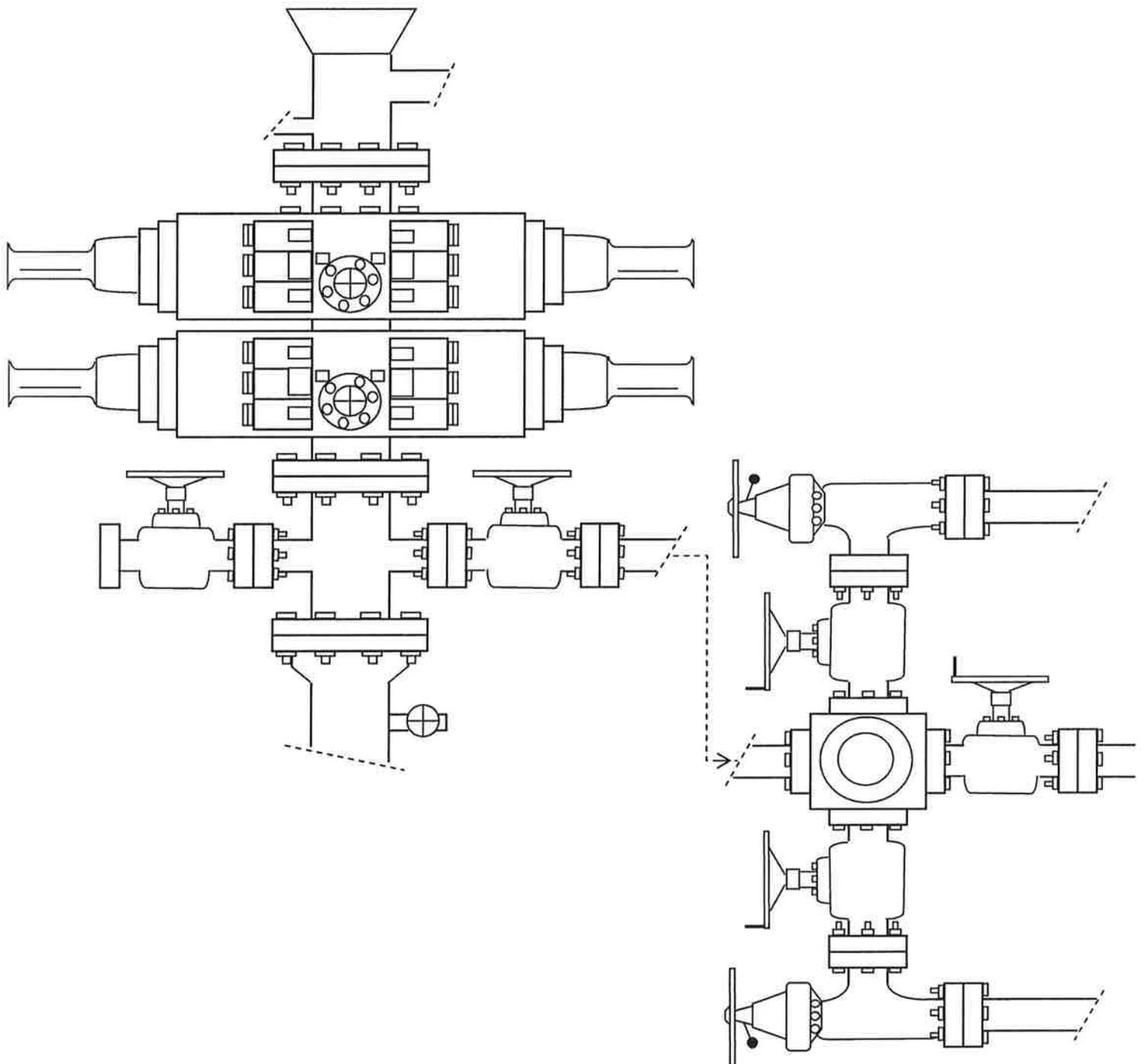


EXHIBIT C



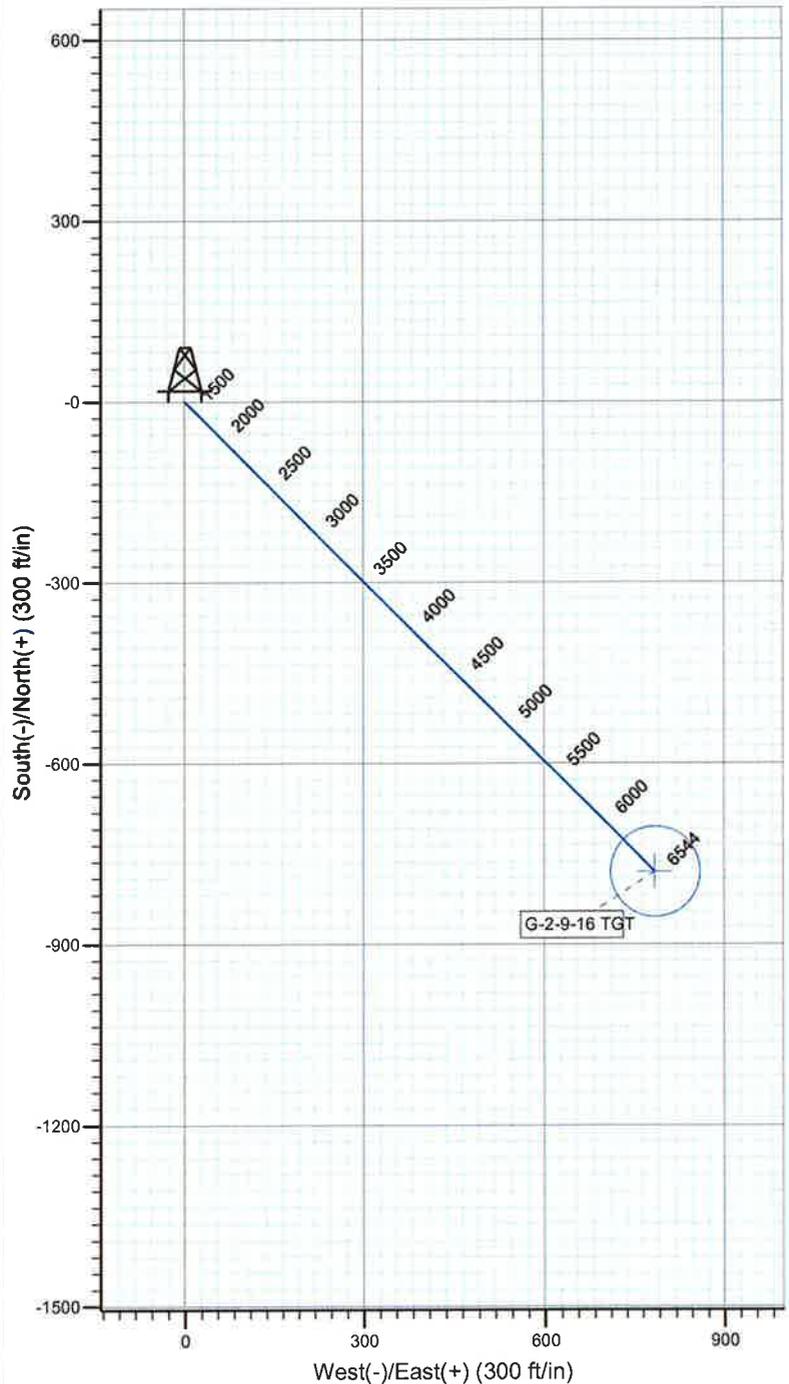
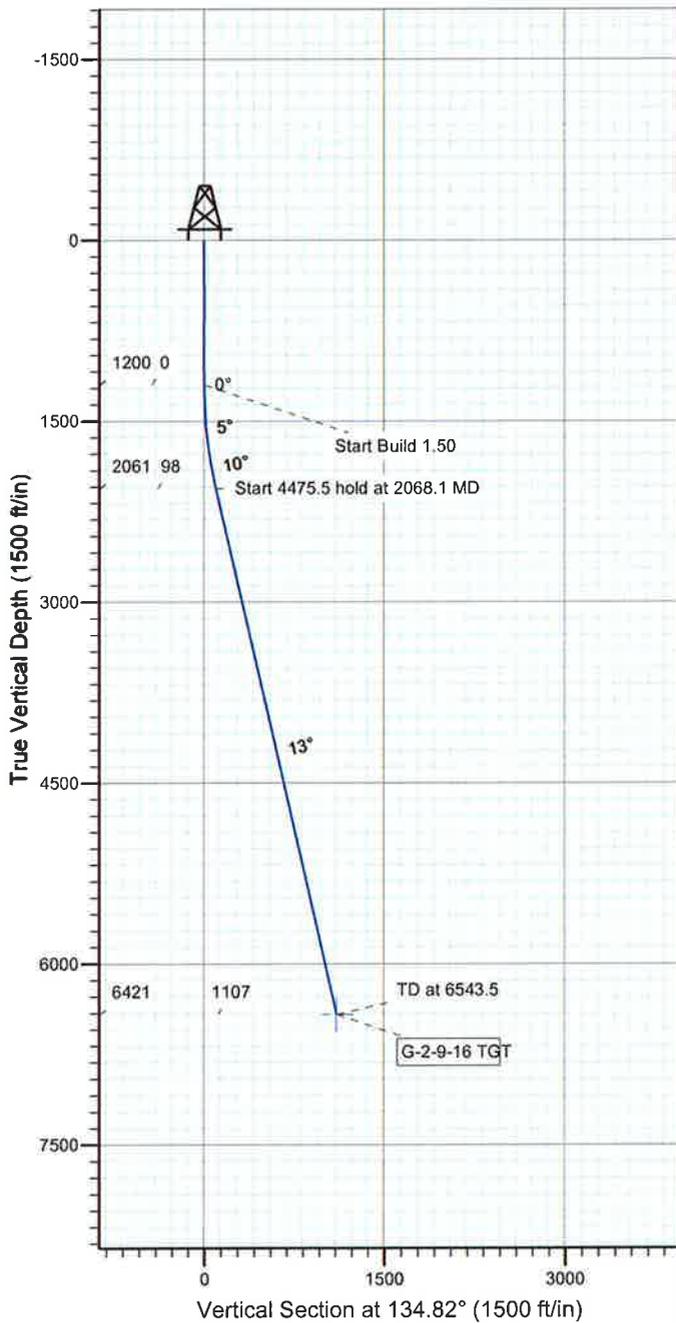
Project: USGS Myton SW (UT)  
 Site: SECTION 2 9S 16E  
 Well: G-2-9-16  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.56°

Magnetic Field  
 Strength: 52495.8snT  
 Dip Angle: 65.86°  
 Date: 7/15/2009  
 Model: IGRF200510

KOP @ 1200'  
 DOGLEG RATE 1.5 DEG/100  
 TARGET RADIUS IS 75'



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
G-2-9-16 TGT	6421.0	-780.0	784.9	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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2068.1	13.02	134.82	2060.6	-69.2	69.7	1.50	134.82	98.2	
4	6543.5	13.02	134.82	6421.0	-780.0	784.9	0.00	0.00	1106.6	G-2-9-16 TGT

**NEWFIELD**



# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)**

**SECTION 2 9S 16E**

**G-2-9-16**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**25 February, 2010**



## HATHAWAYBURNHAM

### Planning Report

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well G-2-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	G-2-9-16 @ 5591.0ft (EST KB)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	G-2-9-16 @ 5591.0ft (EST KB)
<b>Site:</b>	SECTION 2 9S 16E	<b>North Reference:</b>	True
<b>Well:</b>	G-2-9-16	<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		Using geodetic scale factor

<b>Site</b> SECTION 2 9S 16E, SEC 2 9S 16E			
<b>Site Position:</b>		<b>Northing:</b>	7,193,600.00ft
<b>From:</b>	Map	<b>Easting:</b>	2,036,100.00ft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40° 3' 34.952 N
		<b>Longitude:</b>	110° 5' 10.480 W
		<b>Grid Convergence:</b>	0.91 °

<b>Well</b> G-2-9-16, SHL LAT:40 03 56.18, LONG: -110 05 37.47			
<b>Well Position</b>	+N/-S 2,148.0 ft	<b>Northing:</b>	7,195,714.53 ft
	+E/-W -2,098.6 ft	<b>Easting:</b>	2,033,968.07 ft
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b>	ft
		<b>Latitude:</b>	40° 3' 56.180 N
		<b>Longitude:</b>	110° 5' 37.470 W
		<b>Ground Level:</b>	0.0 ft

<b>Wellbore</b> Wellbore #1					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	7/15/2009	11.56	65.86	52,496

<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	134.82	

<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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,068.1	13.02	134.82	2,060.6	-69.2	69.7	1.50	1.50	0.00	134.82	
6,543.5	13.02	134.82	6,421.0	-780.0	784.9	0.00	0.00	0.00	0.00	G-2-9-16 TGT



# HATHAWAYBURNHAM

## Planning Report

<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well G-2-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	G-2-9-16 @ 5591.0ft (EST KB)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	G-2-9-16 @ 5591.0ft (EST KB)
<b>Site:</b>	SECTION 2 9S 16E	<b>North Reference:</b>	True
<b>Well:</b>	G-2-9-16	<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	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	1.50	134.82	1,300.0	-0.9	0.9	1.3	1.50	1.50	0.00
1,400.0	3.00	134.82	1,399.9	-3.7	3.7	5.2	1.50	1.50	0.00
1,500.0	4.50	134.82	1,499.7	-8.3	8.4	11.8	1.50	1.50	0.00
1,600.0	6.00	134.82	1,599.3	-14.7	14.8	20.9	1.50	1.50	0.00
1,700.0	7.50	134.82	1,698.6	-23.0	23.2	32.7	1.50	1.50	0.00
1,800.0	9.00	134.82	1,797.5	-33.1	33.4	47.0	1.50	1.50	0.00
1,900.0	10.50	134.82	1,896.1	-45.1	45.4	64.0	1.50	1.50	0.00
2,000.0	12.00	134.82	1,994.2	-58.8	59.2	83.5	1.50	1.50	0.00
2,068.1	13.02	134.82	2,060.6	-69.2	69.7	98.2	1.50	1.50	0.00
2,100.0	13.02	134.82	2,091.7	-74.3	74.8	105.4	0.00	0.00	0.00
2,200.0	13.02	134.82	2,189.2	-90.2	90.8	127.9	0.00	0.00	0.00
2,300.0	13.02	134.82	2,286.6	-106.1	106.7	150.5	0.00	0.00	0.00
2,400.0	13.02	134.82	2,384.0	-121.9	122.7	173.0	0.00	0.00	0.00
2,500.0	13.02	134.82	2,481.4	-137.8	138.7	195.5	0.00	0.00	0.00
2,600.0	13.02	134.82	2,578.9	-153.7	154.7	218.1	0.00	0.00	0.00
2,700.0	13.02	134.82	2,676.3	-169.6	170.7	240.6	0.00	0.00	0.00
2,800.0	13.02	134.82	2,773.7	-185.5	186.6	263.1	0.00	0.00	0.00
2,900.0	13.02	134.82	2,871.2	-201.4	202.6	285.7	0.00	0.00	0.00
3,000.0	13.02	134.82	2,968.6	-217.2	218.6	308.2	0.00	0.00	0.00
3,100.0	13.02	134.82	3,066.0	-233.1	234.6	330.7	0.00	0.00	0.00
3,200.0	13.02	134.82	3,163.4	-249.0	250.6	353.2	0.00	0.00	0.00
3,300.0	13.02	134.82	3,260.9	-264.9	266.5	375.8	0.00	0.00	0.00
3,400.0	13.02	134.82	3,358.3	-280.8	282.5	398.3	0.00	0.00	0.00
3,500.0	13.02	134.82	3,455.7	-296.6	298.5	420.8	0.00	0.00	0.00
3,600.0	13.02	134.82	3,553.2	-312.5	314.5	443.4	0.00	0.00	0.00
3,700.0	13.02	134.82	3,650.6	-328.4	330.5	465.9	0.00	0.00	0.00
3,800.0	13.02	134.82	3,748.0	-344.3	346.5	488.4	0.00	0.00	0.00
3,900.0	13.02	134.82	3,845.4	-360.2	362.4	511.0	0.00	0.00	0.00
4,000.0	13.02	134.82	3,942.9	-376.0	378.4	533.5	0.00	0.00	0.00
4,100.0	13.02	134.82	4,040.3	-391.9	394.4	556.0	0.00	0.00	0.00
4,200.0	13.02	134.82	4,137.7	-407.8	410.4	578.6	0.00	0.00	0.00
4,300.0	13.02	134.82	4,235.2	-423.7	426.4	601.1	0.00	0.00	0.00
4,400.0	13.02	134.82	4,332.6	-439.6	442.3	623.6	0.00	0.00	0.00
4,500.0	13.02	134.82	4,430.0	-455.5	458.3	646.1	0.00	0.00	0.00
4,600.0	13.02	134.82	4,527.4	-471.3	474.3	668.7	0.00	0.00	0.00
4,700.0	13.02	134.82	4,624.9	-487.2	490.3	691.2	0.00	0.00	0.00
4,800.0	13.02	134.82	4,722.3	-503.1	506.3	713.7	0.00	0.00	0.00
4,900.0	13.02	134.82	4,819.7	-519.0	522.3	736.3	0.00	0.00	0.00
5,000.0	13.02	134.82	4,917.2	-534.9	538.2	758.8	0.00	0.00	0.00
5,100.0	13.02	134.82	5,014.6	-550.7	554.2	781.3	0.00	0.00	0.00
5,200.0	13.02	134.82	5,112.0	-566.6	570.2	803.9	0.00	0.00	0.00



## HATHAWAYBURNHAM

### Planning Report

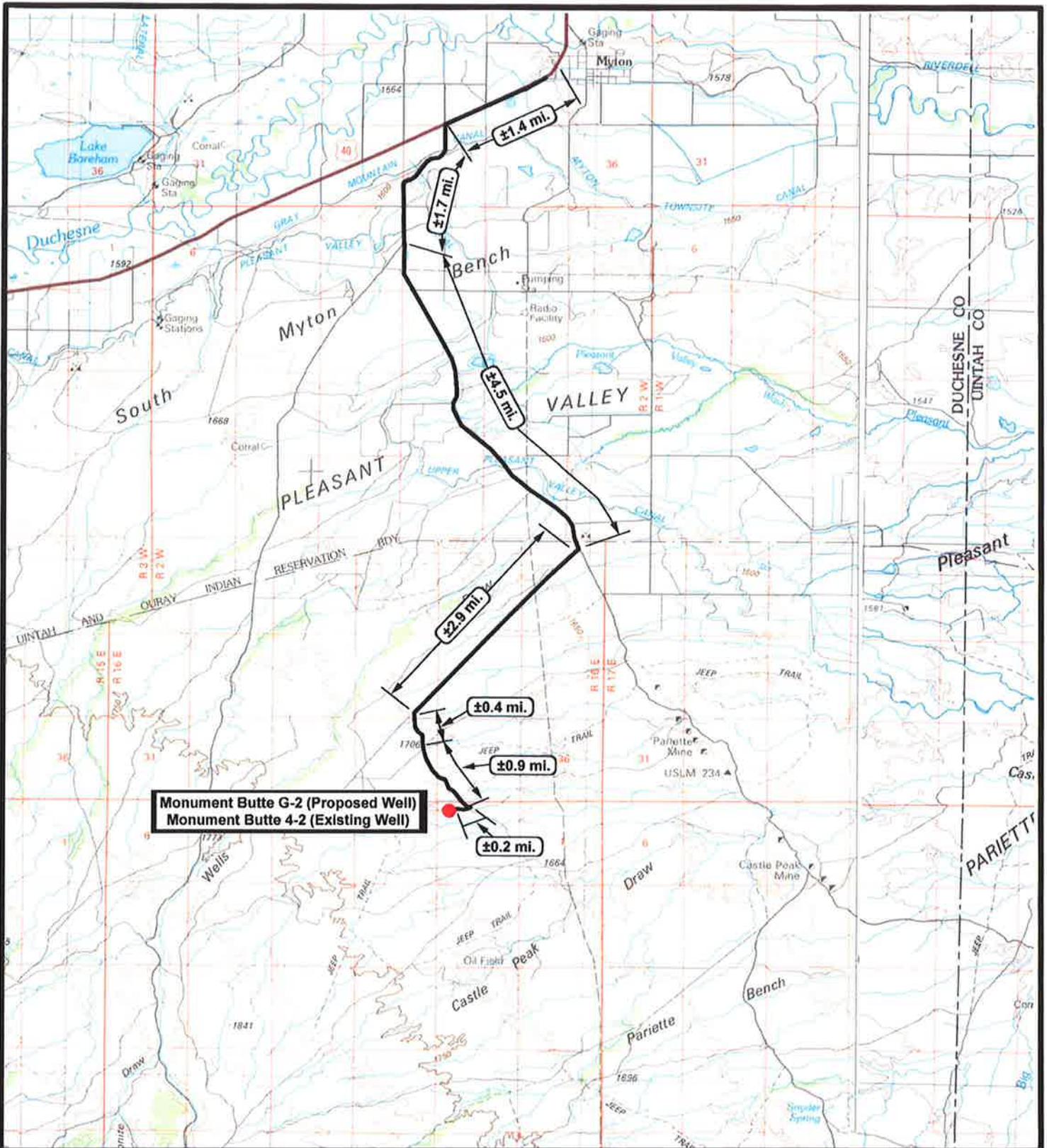
<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well G-2-9-16
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	G-2-9-16 @ 5591.0ft (EST KB)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	G-2-9-16 @ 5591.0ft (EST KB)
<b>Site:</b>	SECTION 2 9S 16E	<b>North Reference:</b>	True
<b>Well:</b>	G-2-9-16	<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	13.02	134.82	5,209.4	-582.5	586.2	826.4	0.00	0.00	0.00
5,400.0	13.02	134.82	5,306.9	-598.4	602.2	848.9	0.00	0.00	0.00
5,500.0	13.02	134.82	5,404.3	-614.3	618.1	871.5	0.00	0.00	0.00
5,600.0	13.02	134.82	5,501.7	-630.2	634.1	894.0	0.00	0.00	0.00
5,700.0	13.02	134.82	5,599.2	-646.0	650.1	916.5	0.00	0.00	0.00
5,800.0	13.02	134.82	5,696.6	-661.9	666.1	939.0	0.00	0.00	0.00
5,900.0	13.02	134.82	5,794.0	-677.8	682.1	961.6	0.00	0.00	0.00
6,000.0	13.02	134.82	5,891.4	-693.7	698.1	984.1	0.00	0.00	0.00
6,100.0	13.02	134.82	5,988.9	-709.6	714.0	1,006.6	0.00	0.00	0.00
6,200.0	13.02	134.82	6,086.3	-725.4	730.0	1,029.2	0.00	0.00	0.00
6,300.0	13.02	134.82	6,183.7	-741.3	746.0	1,051.7	0.00	0.00	0.00
6,400.0	13.02	134.82	6,281.2	-757.2	762.0	1,074.2	0.00	0.00	0.00
6,500.0	13.02	134.82	6,378.6	-773.1	778.0	1,096.8	0.00	0.00	0.00
6,543.5	13.02	134.82	6,421.0	-780.0	784.9	1,106.6	0.00	0.00	0.00

#### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
G-2-9-16 TGT - hit/miss target - Shape	0.00	0.00	6,421.0	-780.0	784.9	7,194,947.04	2,034,765.08	40° 3' 48.472 N	110° 5' 27.375 W
- plan hits target									
- Circle (radius 75.0)									



**Monument Butte G-2 (Proposed Well)**  
**Monument Butte 4-2 (Existing Well)**

 **NEWFIELD**  
 Exploration Company

---

**Monument Butte G-2-9-16 (Proposed Well)**  
**Monument Butte 4-2-9-16 (Existing Well)**  
 Pad Location NWNW SEC. 2, T9S, R16E, S.L.B.&M.



 **Tri-State**  
 Land Surveying Inc.  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

---

SCALE: 1 = 100,000  
 DRAWN BY: JAS  
 DATE: 06-25-2006

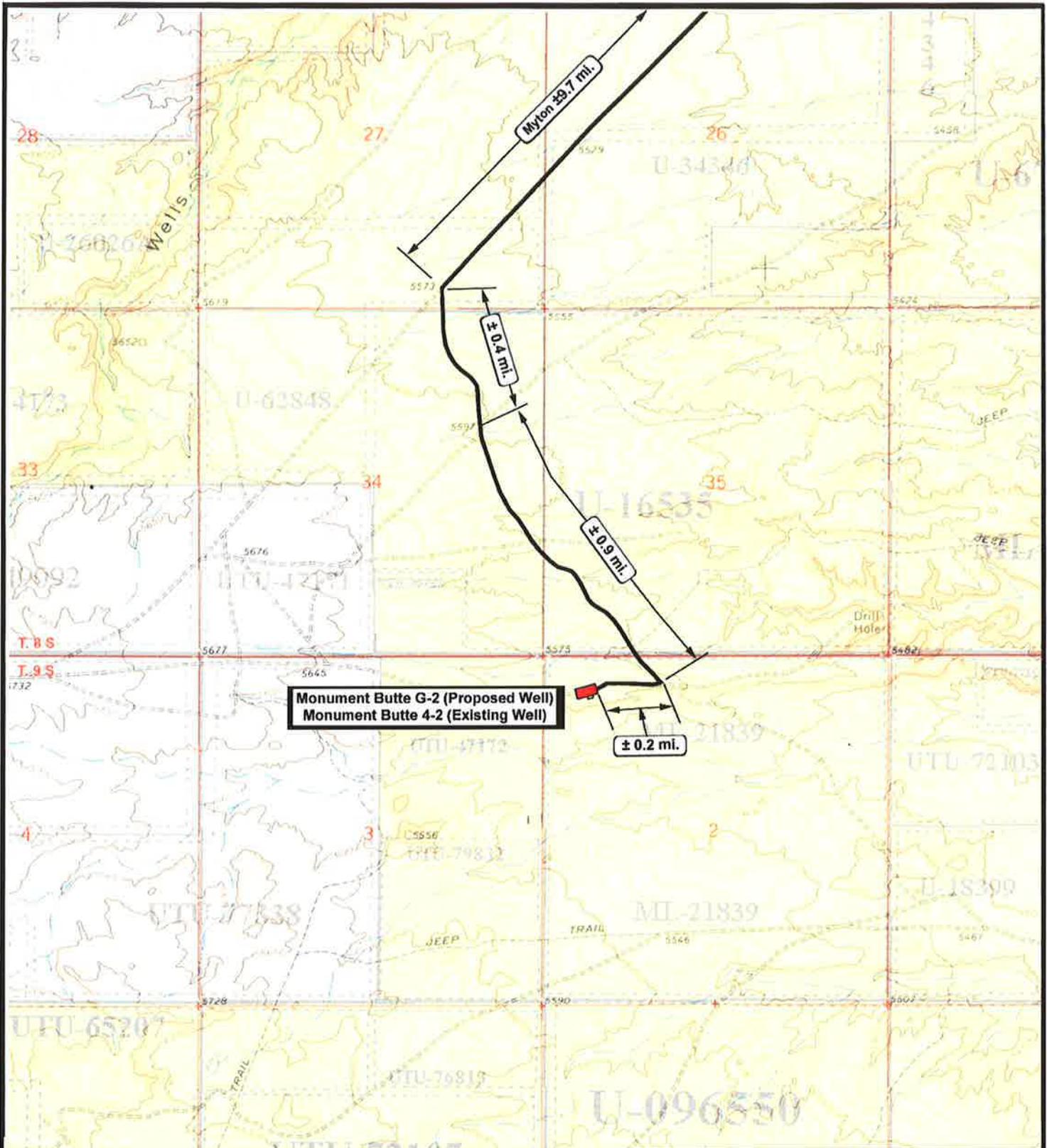
**Legend**

 Existing Road

---

**TOPOGRAPHIC MAP**

**"A"**



**Monument Butte G-2 (Proposed Well)**  
**Monument Butte 4-2 (Existing Well)**

**NEWFIELD**  
Exploration Company

**Monument Butte G-2-9-16 (Proposed Well)**  
**Monument Butte 4-2-9-16 (Existing Well)**  
 Pad Location NWNW SEC. 2, T9S, R16E, S.L.B.&M.



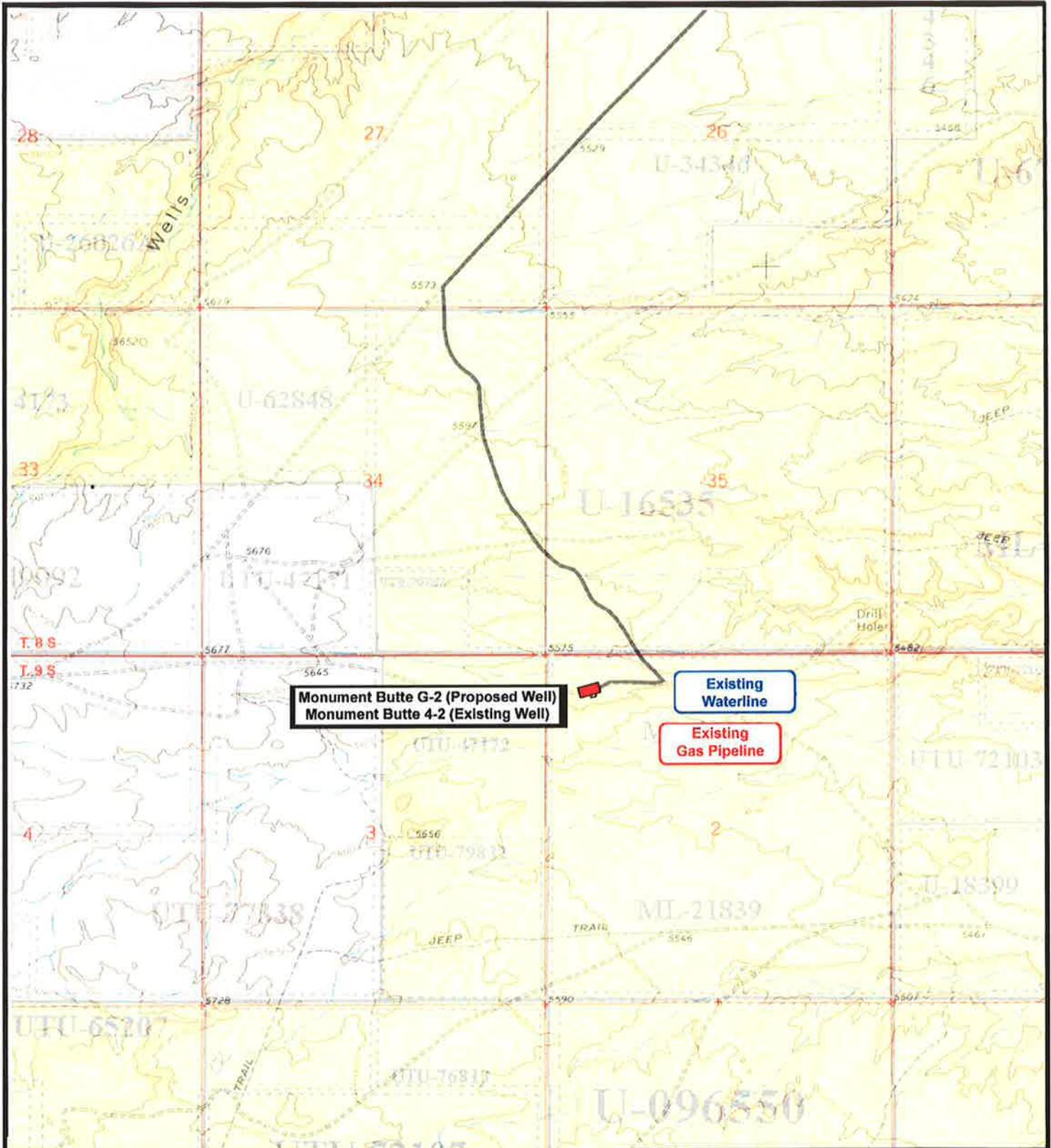
**Tri-State**  
Land Surveying Inc.  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

**SCALE: 1" = 2,000'**  
**DRAWN BY: JAS**  
**DATE: 06-25-2009**

**Legend**

Existing Road

**TOPOGRAPHIC MAP**  
**"B"**



**Monument Butte G-2-9-16 (Proposed Well)**  
**Monument Butte 4-2-9-16 (Existing Well)**  
 Pad Location NWNW SEC. 2, T9S, R16E, S.L.B.&M.



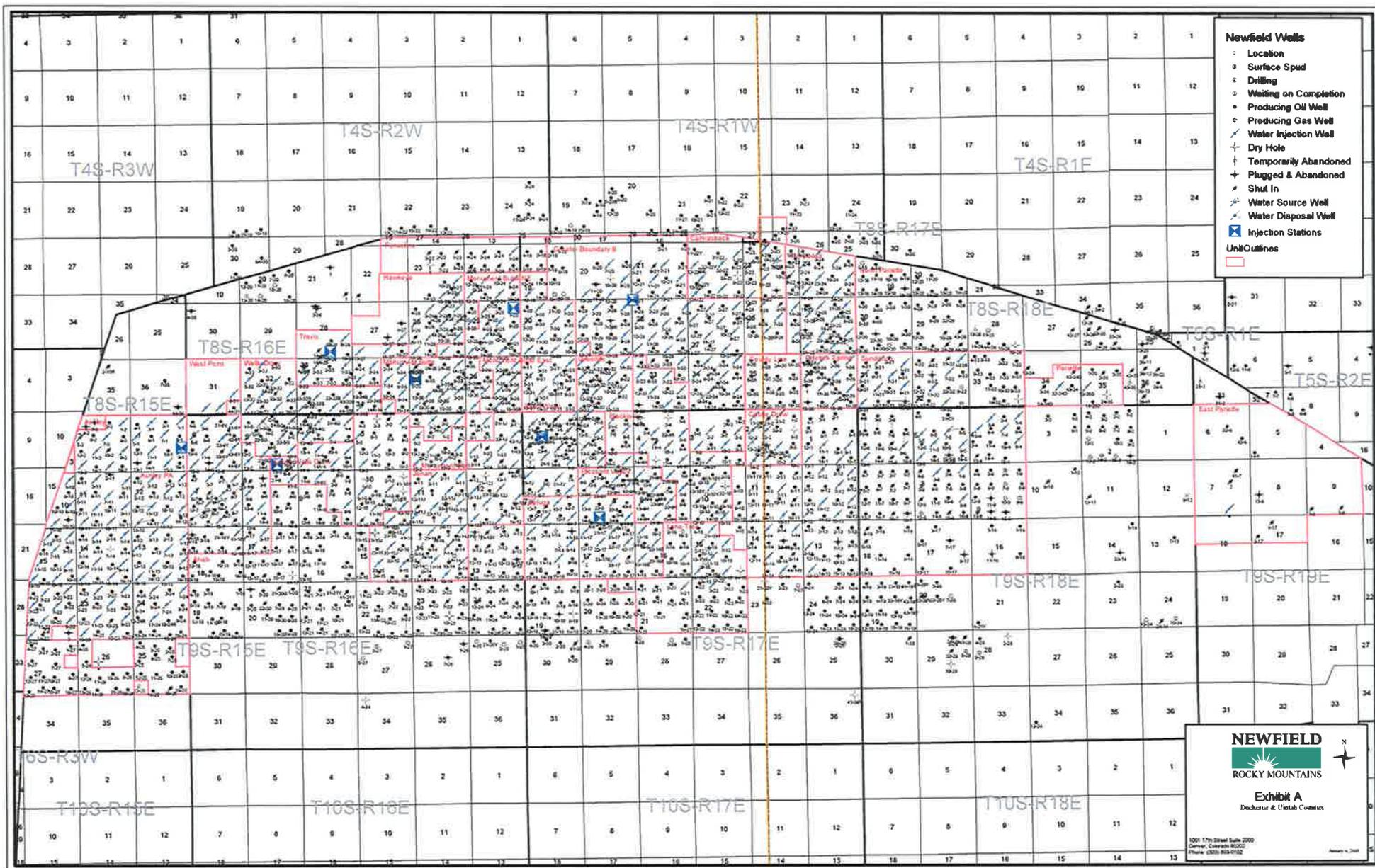
**Tri-State Land Surveying Inc.**  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

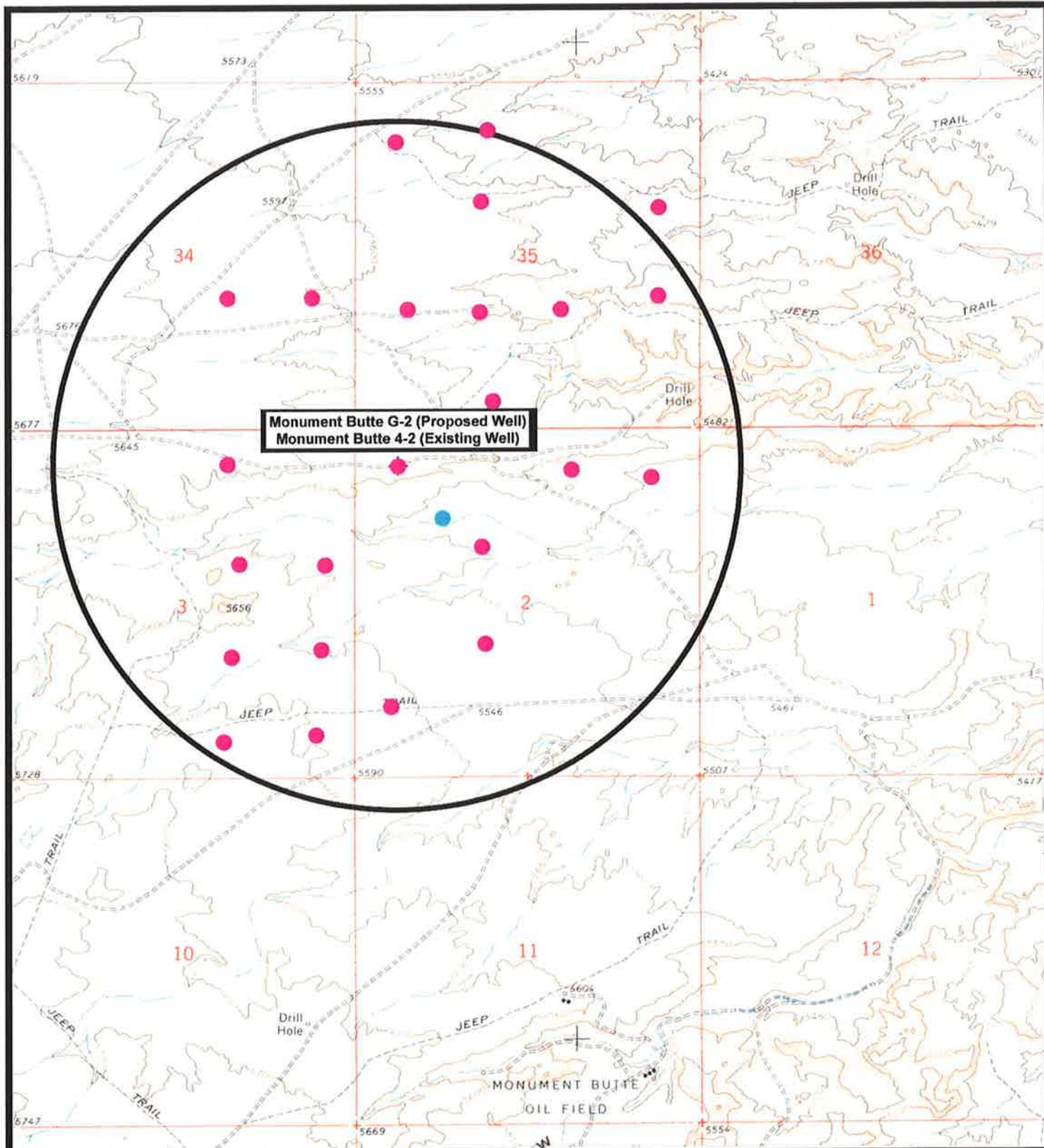
SCALE: 1" = 2,000'  
 DRAWN BY: JAS  
 DATE: 06-25-2009

**Legend**

— Roads

TOPOGRAPHIC MAP  
**"C"**





**Monument Butte G-2 (Proposed Well)**  
**Monument Butte 4-2 (Existing Well)**



**NEWFIELD**  
Exploration Company

**Monument Butte G-2-9-16 (Proposed Well)**  
**Monument Butte 4-2-9-16 (Existing Well)**  
 Pad Location NWNW SEC. 2, T9S, R16E, S.L.B.&M.




*Tri-State*  
Land Surveying Inc.  
 (435) 781-2501  
 180 North Vernal Ave. Vernal, Utah 84078

**SCALE: 1" = 2,000'**  
**DRAWN BY: JAS**  
**DATE: 06-25-2009**

**Legend**

- Pad Location
- Bottom Hole Location
- One-Mile Radius

**Exhibit "B"**

NEWFIELD PRODUCTION COMPANY  
MONUMENT BUTTE STATE G-2-9-16  
AT SURFACE: NW/NW SECTION 2, T9S, R16E  
DUCHESNE COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. EXISTING ROADS

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site Monument Butte State G-2-9-16 located in the NW ¼ NW ¼ Section 2, T9S, R16E, S.L.B. & M., Duchesne County, Utah:

Proceed in a southwesterly direction out of Myton, Utah along Highway 40 approximately 1.4 ± miles to the junction of this highway and Utah State Highway 53; proceed southeasterly approximately 6.2 miles ± to its junction with an existing road to the southwest; proceed southwesterly approximately 2.9 miles ± to its junction with an existing road to the south; proceed southeasterly approximately 1.3 miles ± to its junction with an existing road to the west; proceed westerly approximately 0.2 miles ± to the existing 4-2-9-16 well location.

The highways mentioned in the foregoing paragraph are bituminous surfaced roads to the point where Highway 216 exists to the South, thereafter the roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County crews.

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.

2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled off of the existing 4-2-9-16 well pad. See attached **Topographic Map "B"**.

There will be no new gates or cattle guards required.

3. LOCATION OF EXISTING WELLS

Refer to **EXHIBIT B**.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

The proposed well will be drilled directionally off of the existing 4-2-9-16 well pad. There will be a pumping unit and a short flow line added to the existing tank battery for the proposed G-2-9-16.

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 Carlsbad Canyon. All facilities will be painted within six months of installation.

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

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District  
Water Right: 43-7478

Neil Moon Pond  
Water Right: 43-11787

Maurice Harvey Pond  
Water Right: 47-1358

Newfield Collector Well  
Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

The proposed Monument Butte State G-2-9-16 will be drilled off of the existing 4-2-9-16 well pad. No additional surface disturbance will be 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.

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, 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, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

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**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) 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.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

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.

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:** State of Utah

12. **OTHER ADDITIONAL INFORMATION:**

- a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.
- b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.
- c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial 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 Monument Butte State G-2-9-16, 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 Monument Butte State G-2-9-16 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.

The State office shall be notified upon site completion prior to moving on the drilling rig.

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

Representative

Ten Point Well Program &  
Thirteen Point Well Program  
Page 8 of 8

Name: Tim Eaton  
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 #G-2-9-16, NW/NW Section 2, T9S, R16E, LEASE #ML-21839, 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 Bond #B001834.

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

8/18/09  
Date

  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

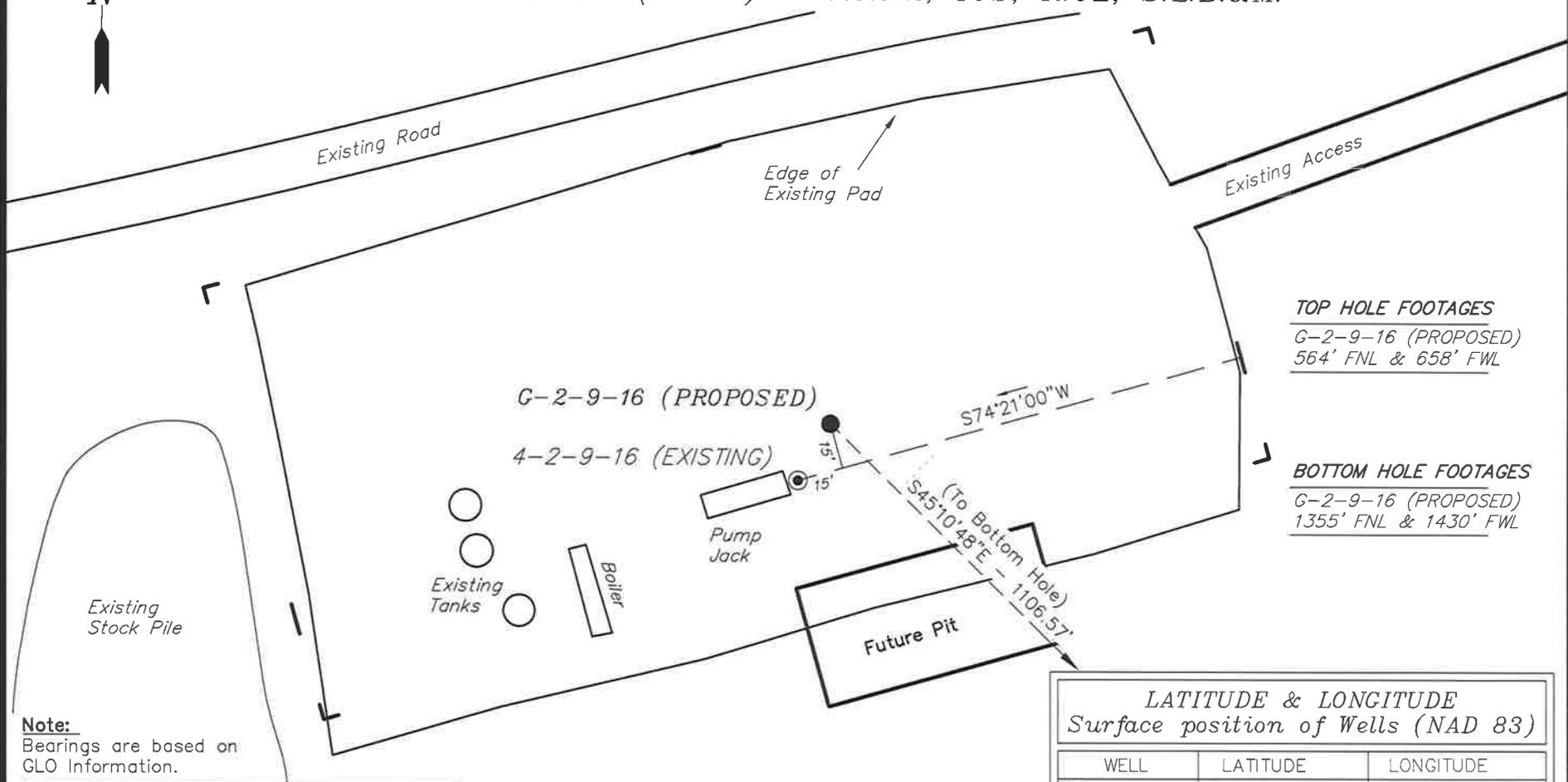
# NEWFIELD PRODUCTION COMPANY

## WELL PAD INTERFERENCE PLAT

**MONUMENT BUTTE G-2-9-16 (Proposed Well)**

**MONUMENT BUTTE 4-2-9-16 (Existing Well)**

Pad Location: NWNW (LOT 4) Section 2, T9S, R16E, S.L.B.&M.



**TOP HOLE FOOTAGES**  
 G-2-9-16 (PROPOSED)  
 564' FNL & 658' FWL

**BOTTOM HOLE FOOTAGES**  
 G-2-9-16 (PROPOSED)  
 1355' FNL & 1430' FWL

LATITUDE & LONGITUDE		
Surface position of Wells (NAD 83)		
WELL	LATITUDE	LONGITUDE
G-2-9-16	40° 03' 56.18"	110° 05' 37.47"
4-2-9-16	40° 03' 56.00"	110° 05' 37.61"

**Note:**  
 Bearings are based on  
 GLO Information.

RELATIVE COORDINATES		
From top hole to bottom hole		
WELL	NORTH	EAST
G-2-9-16	-780'	785'

SURVEYED BY: T.H.	DATE SURVEYED: 06-19-09
DRAWN BY: F.T.M.	DATE DRAWN: 06-29-09
SCALE: 1" = 50'	REVISED:

**Tri State**  
 Land Surveying, Inc.

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

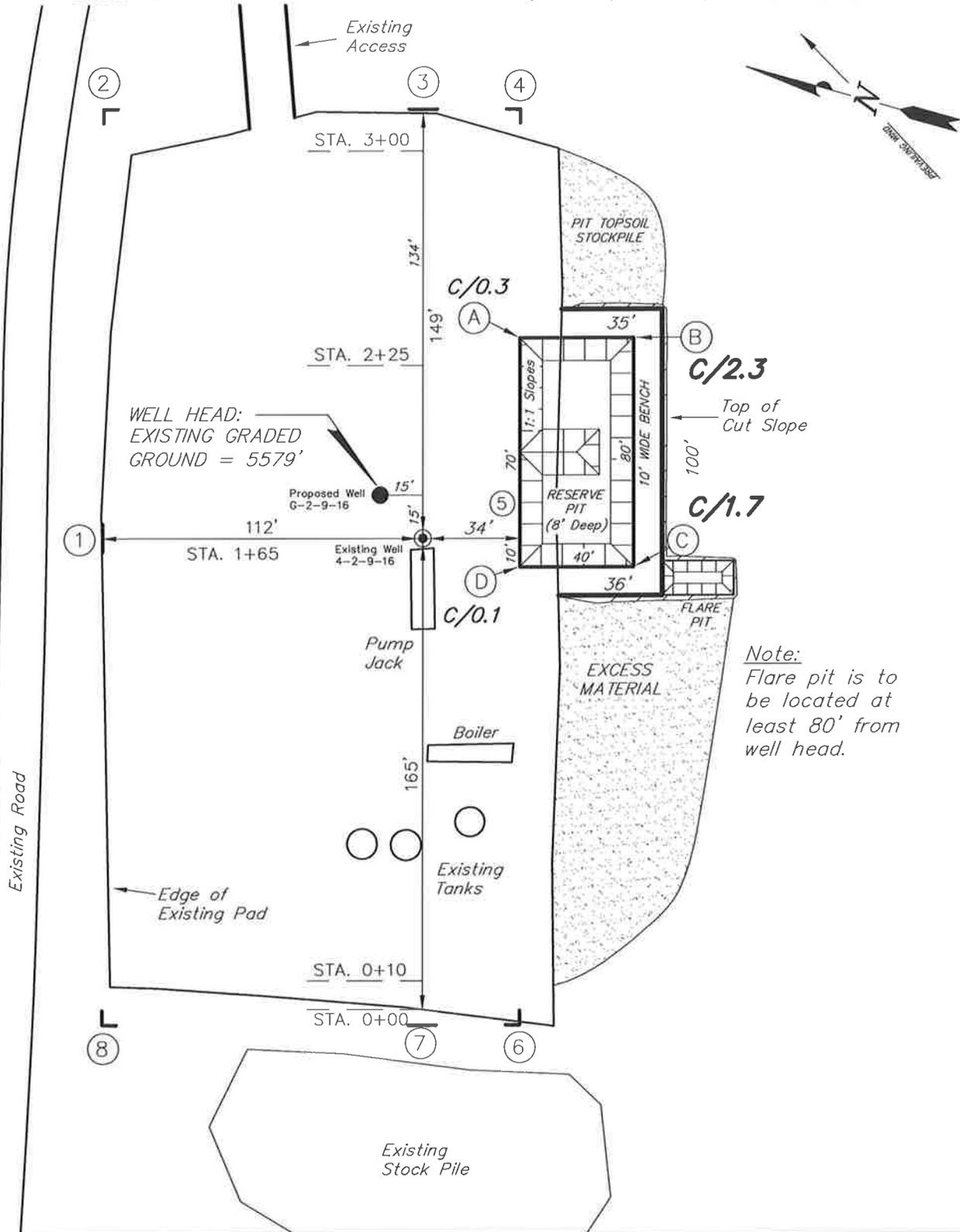
(435) 781-2501

# NEWFIELD PRODUCTION COMPANY

MONUMENT BUTTE G-2-9-16 (Proposed Well)

MONUMENT BUTTE 4-2-9-16 (Existing Well)

Pad Location: NWNW Section 2, T9S, R16E, S.L.B.&M.



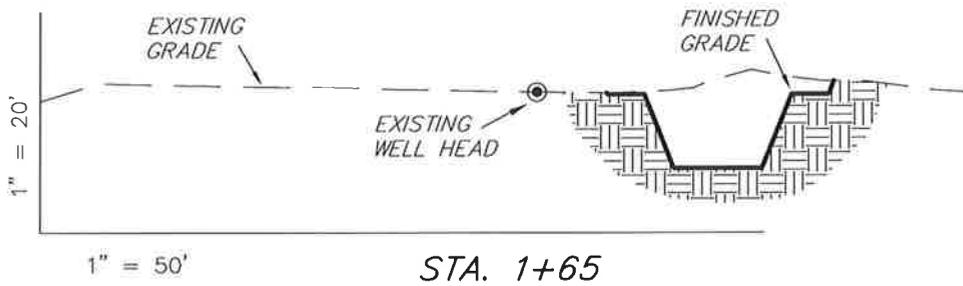
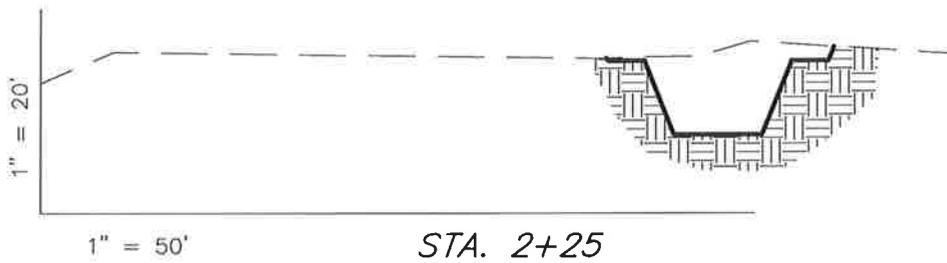
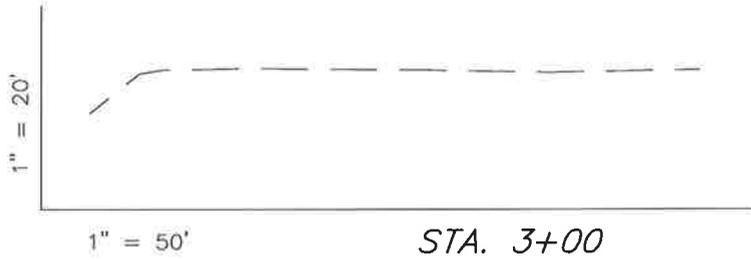
Note:  
Flare pit is to be located at least 80' from well head.

SURVEYED BY: T.H.	DATE SURVEYED: 06-19-09	<p>Tri State Land Surveying, Inc. 180 NORTH VERNAL AVE. VERNAL, UTAH 84078</p>	(435) 781-2501
DRAWN BY: F.T.M.	DATE DRAWN: 06-24-09		
SCALE: 1" = 50'	REVISED:		

# NEWFIELD PRODUCTION COMPANY

## CROSS SECTIONS

*MONUMENT BUTTE G-2-9-16 (Proposed Well)*  
*MONUMENT BUTTE 4-2-9-16 (Existing Well)*



NOTE:  
UNLESS OTHERWISE NOTED  
CUT SLOPES ARE AT 1:1  
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	180	0	Topsoil is not included in Pad Cut	180
PIT	640	0		640
<b>TOTALS</b>	<b>820</b>	<b>0</b>	<b>120</b>	<b>820</b>

SURVEYED BY: T.H.	DATE SURVEYED: 06-19-09	
DRAWN BY: F.T.M.	DATE DRAWN: 06-24-09	
SCALE: 1" = 50'	REVISED:	

(435) 781-2501

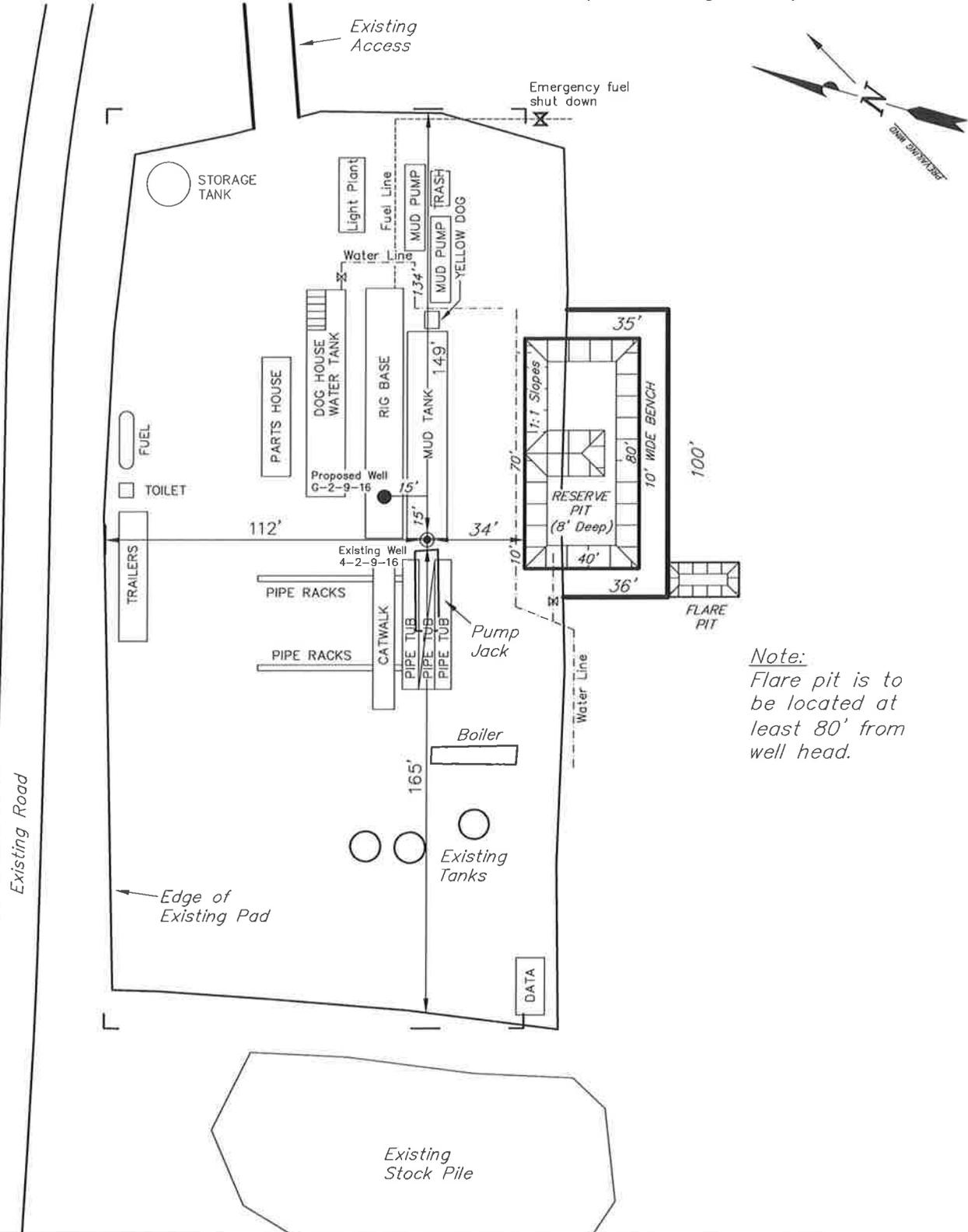
**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

MONUMENT BUTTE G-2-9-16 (Proposed Well)

MONUMENT BUTTE 4-2-9-16 (Existing Well)



*Note:*  
Flare pit is to be located at least 80' from well head.

SURVEYED BY: T.H.	DATE SURVEYED: 06-19-09
DRAWN BY: F.T.M.	DATE DRAWN: 06-24-09
SCALE: 1" = 50'	REVISED:

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

# Newfield Production Company Proposed Site Facility Diagram

Monument Butte State G-2-9-16

From the 4-2-9-16 Location

NW/NW Sec. 2, T9S, R16E

Duchesne County, Utah

ML-21839

Site Security Plan is held at the Pleasant Valley  
Office, Duchesne County Utah

**Production Phase:**

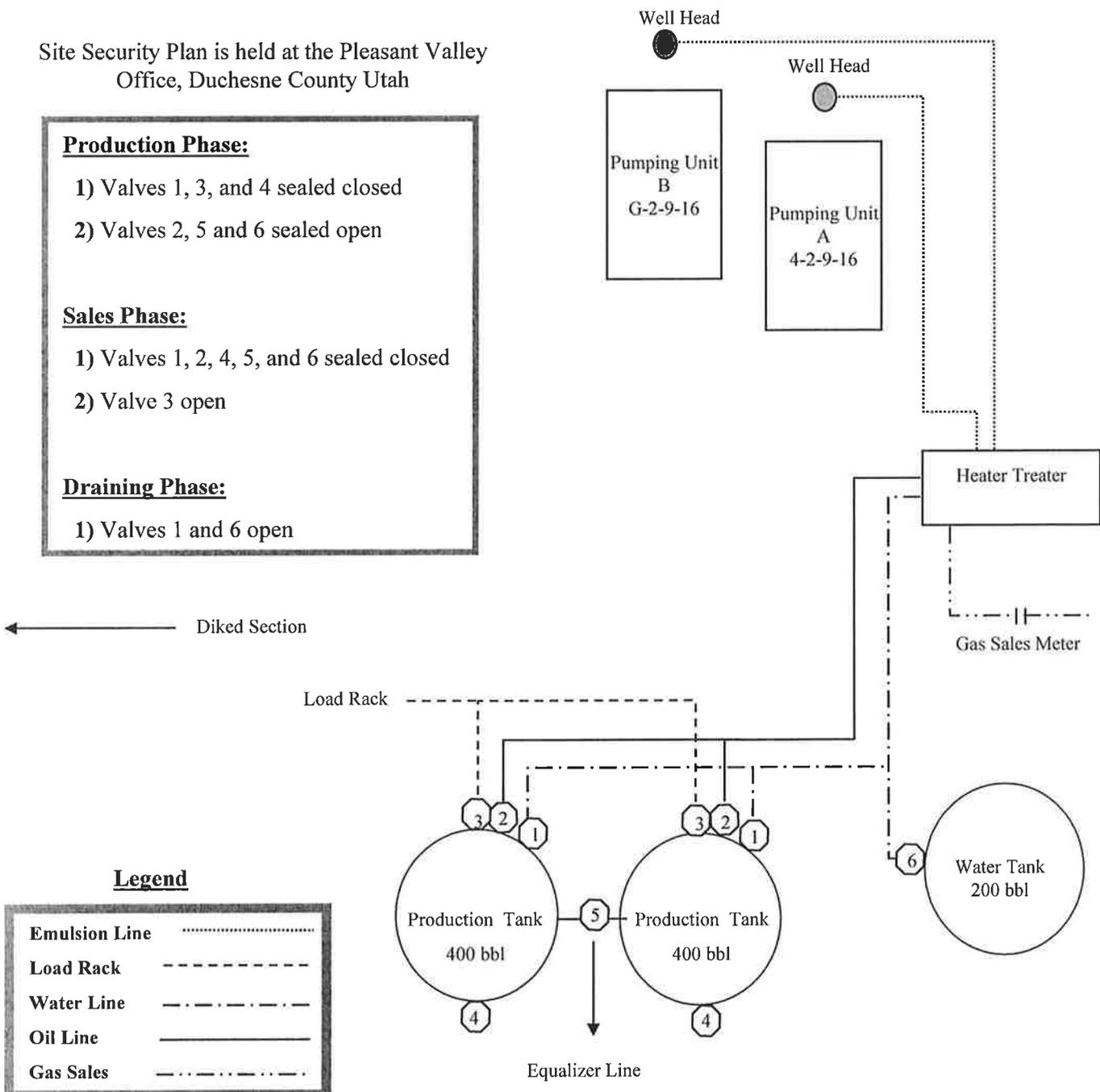
- 1) Valves 1, 3, and 4 sealed closed
- 2) Valves 2, 5 and 6 sealed open

**Sales Phase:**

- 1) Valves 1, 2, 4, 5, and 6 sealed closed
- 2) Valve 3 open

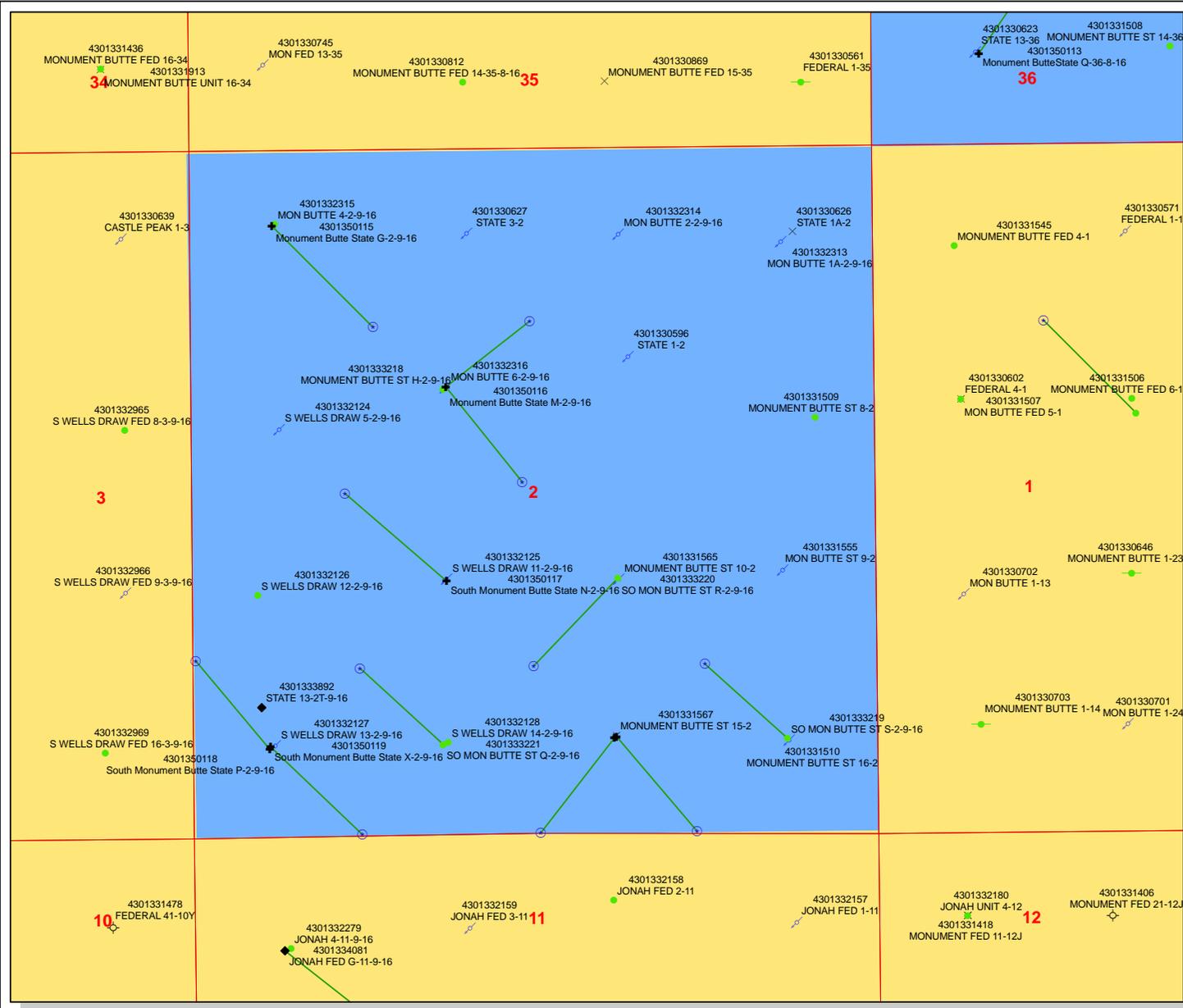
**Draining Phase:**

- 1) Valves 1 and 6 open



**Legend**

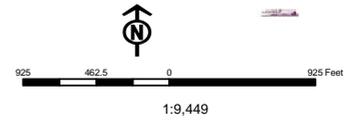
Emulsion Line	.....
Load Rack	-----
Water Line	- . - . - .
Oil Line	—————
Gas Sales	- . - . - .



**API Number: 4301350115**  
**Well Name: Monument Butte State G-2-9-16**  
**Township 09.0 S Range 16.0 E Section 2**  
**Meridian: SLBM**  
 Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:  
 Map Produced by Diana Mason

- Sections Wells Query Events
- <all other values>
- GIS\_STAT\_TYPE
- <Null>
- APD
- DRL
- GI
- GS
- LA
- NEW
- OPS
- PA
- PGW
- POW
- RET
- SGW
- SOW
- TA
- TW
- WD
- WI
- WS



**From:** Jim Davis  
**To:** Bonner, Ed; Mason, Diana  
**Date:** 8/31/2009 9:01 AM  
**Subject:** SITLA well approvals (Newfield 16)

**CC:** Garrison, LaVonne  
The following wells have been approved by SITLA including arch and paleo clearance.

Monument Butte East State A-36-8-16 [API #4301350105],

Monument Butte East State J-36-8-16 [API #4301350106],

Monument Butte East State B-36-8-16 [API #4301350107],

Monument Butte East State C-36-8-16 [API #4301350108],

Monument Butte East State G-36-8-16 [API #4301350109],

Monument Butte East State M-36-8-16 [API #4301350110],

Monument Butte East State H-36-8-16 [API #4301350111],

Monument Butte State Q-36-8-16 [API #4301350113],

Monument Butte East State R-36-8-16 [API #4301350114],

Monument Butte State G-2-9-16 [API #4301350115],

South Monument Butte State M-2-9-16 [API #4301350116],

South Monument Butte State N-2-9-16 [API #4301350117],

South Monument Butte State P-2-9-16 [API #4301350118],

South Monument Butte State X-2-9-16 [API #4301350119],

South Monument Butte State V-2-9-16 [API #4301350120],

South Monument Butte State W-2-9-16 [API #4301350121]

These wells are still waiting for approvals of one kind or another:

Monument Butte East Federal V-35-8-16, Host well 2-2-9-16, no new disturbance (State surface, Federal mineral)  
Monument Butte East Federal W-35-8-16, Host well 2-2-9-16, no new disturbance (State surface, Federal mineral)  
Monument Butte East State K-36-8-16 [API #4301350112], Host well 9-36-8-16, new disturbance

-Jim

Jim Davis  
Utah Trust Lands Administration  
jimdavis1@utah.gov  
Phone: (801) 538-5156

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Utah State Office  
P.O. Box 45155  
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:  
3160  
(UT-922)

August 28, 2009

Memorandum

To: Assistant District Manager Minerals, Vernal District  
From: Michael Coulthard, Petroleum Engineer  
Subject: 2009 Plan of Development Monument Butte Unit, Duchesne County, 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 2009 within the Monument Butte Unit, Duchesne County, Utah.

API#	WELL NAME	LOCATION
43-013-50115	Monument Butte G-02-9-16	Sec 02 T09S R16E 0564 FNL 0658 FWL BHL Sec 02 T09S R16E 1355 FNL 1430 FWL
43-013-50116	Monument Butte M-02-9-16	Sec 02 T09S R16E 1819 FNL 1990 FWL BHL Sec 02 T09S R16E 2560 FNL 2572 FWL
43-013-50124	Monument Butte V-35-8-16	Sec 02 T09S R16E 0628 FNL 1956 FEL BHL Sec 35 T08S R16E 0040 FSL 1204 FEL
43-013-50125	Monument Butte W-35-8-16	Sec 02 T09S R16E 0642 FNL 1972 FEL BHL Sec 35 T08S R16E 0040 FSL 2611 FWL

This office has no objection to permitting the Monument Butte V-35-8-16 and the Monument Butte W-35-8-16 at this time. The other two wells should be deferred until the approval of the Greater Monument Butte Unit.

/s/ Michael L. Coulthard

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

Fluid Chron

MCoulthard:mc:8-28-09



December 2, 2009

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

1909

RE: Directional Drilling  
**Monument Butte State G-2-9-16**  
Greater Monument Butte (Green River) Unit  
ML-21839  
Surface Hole: T9S-R16E Section 2: NWNW  
564' FNL 658' FWL  
  
At Target: T9S-R16E Section 2: SENW  
1355' FNL 1430' FWL

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 8/18/09, 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 303-383-4197 or by email at [sgillespie@newfield.com](mailto:sgillespie@newfield.com). Your consideration in this matter is greatly appreciated.

Sincerely,  
Newfield Production Company

A handwritten signature in blue ink that reads "Shane Gillespie".

Shane Gillespie  
Land Associate

RECEIVED  
DEC 07 2009  
DIV. OF OIL, GAS & MINING

Well Name	NEWFIELD PRODUCTION COMPANY Monument Butte State G-2-9-16 43		
String	Surf	Prod	
Casing Size(")	8.625	5.500	
Setting Depth (TVD)	1100	6421	
Previous Shoe Setting Depth (TVD)	0	1100	
Max Mud Weight (ppg)	8.3	8.6	
BOPE Proposed (psi)	500	2000	
Casing Internal Yield (psi)	2950	4810	
Operators Max Anticipated Pressure (psi)	2814	8.4	

Calculations	Surf String	8.625	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	475	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	343	YES      air drill
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	233	YES      OK
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	233	NO      OK
Required Casing/BOPE Test Pressure=		1100	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi      *Assumes 1psi/ft frac gradient

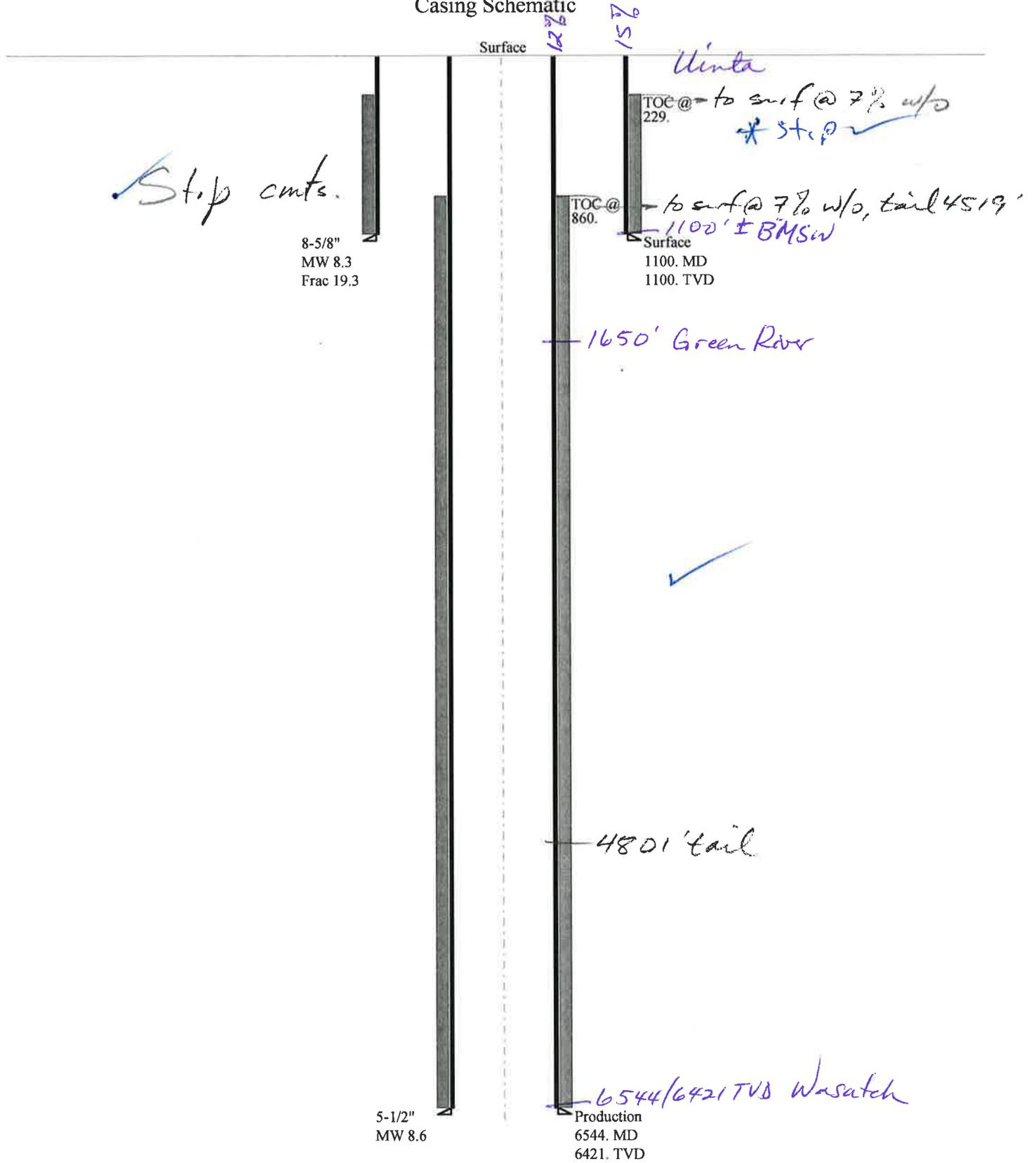
Calculations	Prod String	5.500	"
Max BHP (psi)	$.052 * \text{Setting Depth} * \text{MW} =$	2871	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	$\text{Max BHP} - (0.12 * \text{Setting Depth}) =$	2100	NO
MASP (Gas/Mud) (psi)	$\text{Max BHP} - (0.22 * \text{Setting Depth}) =$	1458	YES      OK
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	$\text{Max BHP} - .22 * (\text{Setting Depth} - \text{Previous Shoe Depth}) =$	1700	NO      Reasonable
Required Casing/BOPE Test Pressure=		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		1100	psi      *Assumes 1psi/ft frac gradient

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

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

# 43013501150000 Monument Butte State G-2-9-16

## Casing Schematic



Well name:	<b>43013501150000 Monument Butte State G-2-9-16</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	<b>Surface</b>	Project ID:	<b>43-013-50115</b>
Location:	<b>DUCHESNE COUNTY</b>		

**Design parameters:**

**Collapse**

Mud weight: 8.330 ppg  
Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 968 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP: 1,100 psi  
  
No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Tension:**

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

Tension is based on air weight.  
Neutral point: 962 ft

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 89 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft  
  
Cement top: 229 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 6,421 ft  
Next mud weight: 8.600 ppg  
Next setting BHP: 2,869 psi  
Fracture mud wt: 19,250 ppg  
Fracture depth: 1,100 ft  
Injection pressure: 1,100 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	1100	8.625	24.00	J-55	ST&C	1100	1100	7.972	5663
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	476	1370	2.878	1100	2950	2.68	26.4	244	9.24 J

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

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

Date: March 1, 2010  
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1100 ft, a mud weight of 8.33 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	<b>43013501150000 Monument Butte State G-2-9-16</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	Production	Project ID:	43-013-50115
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

Mud weight: 8.600 ppg  
 Design is based on evacuated pipe.

**Burst**

Max anticipated surface pressure: 1,456 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP: 2,869 psi

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

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

Tension is based on air weight.  
 Neutral point: 5,686 ft

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 164 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft  
 Cement top: 860 ft

**Directional Info - Build & Hold**

Kick-off point: 1200 ft  
 Departure at shoe: 1107 ft  
 Maximum dogleg: 1.5 °/100ft  
 Inclination at shoe: 13.02 °

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	6544	5.5	15.50	J-55	LT&C	6421	6544	4.825	23107
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2869	4040	1.408	2869	4810	1.68	99.5	217	2.18 J

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

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

Date: March 1, 2010  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 6421 ft, a mud weight of 8.6 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

# ON-SITE PREDRILL EVALUATION

## Utah Division of Oil, Gas and Mining

**Operator** NEWFIELD PRODUCTION COMPANY  
**Well Name** Monument Butte State G-2-9-16  
**API Number** 43013501150000      **APD No** 1909      **Field/Unit** MONUMENT BUTTE  
**Location: 1/4,1/4** NWNW    **Sec 2 Tw 9.0S Rng 16.0E** 564 FNL 658 FWL  
**GPS Coord (UTM)** 577347 4435231      **Surface Owner**

**Participants**

Floyd Bartlett (DOGM), Tim Eaton (Newfield).

**Regional/Local Setting & Topography**

The proposed Monument Butte State G-2-9-16 proposed oil well is to be directionally drilled from the existing pad of the Monument Butte State 4-2-9-16 producing oil well. No changes are planned to the existing pad. The reserve pit will be re-dug near the original location in the southeast side of the pad. The wells are on 20-acre spacing.

A field review of the site and the existing pad showed no concerns and should be suitable for drilling and operating the proposed additional wells.

SITLA owns both the surface and the minerals.

**Surface Use Plan**

**Current Surface Use**  
Existing Well Pad

<b>New Road Miles</b>	<b>Well Pad</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
	<b>Width    Length</b>		
0			

**Ancillary Facilities**

**Waste Management Plan Adequate?**

**Environmental Parameters**

**Affected Floodplains and/or Wetlands**

**Flora / Fauna**  
Existing Well Pad

**Soil Type and Characteristics**

**Erosion Issues**

**Sedimentation Issues**

**Site Stability Issues**

**Drainage Diverson Required?**

**Berm Required?**

**Erosion Sedimentation Control Required?**

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

**Reserve Pit**

**Site-Specific Factors**

**Site Ranking**

<b>Distance to Groundwater (feet)</b>	100 to 200	5	
<b>Distance to Surface Water (feet)</b>	>1000	0	
<b>Dist. Nearest Municipal Well (ft)</b>	>5280	0	
<b>Distance to Other Wells (feet)</b>		20	
<b>Native Soil Type</b>	Mod permeability	10	
<b>Fluid Type</b>	Fresh Water	5	
<b>Drill Cuttings</b>	Normal Rock	0	
<b>Annual Precipitation (inches)</b>		0	
<b>Affected Populations</b>			
<b>Presence Nearby Utility Conduits</b>	Not Present	0	
	<b>Final Score</b>	40	1 Sensitivity Level

**Characteristics / Requirements**

A reserve pit will be re-dug near the original location. Its dimensions are 80' x 40' x 8' deep. A 10-foot wide bench is provided around the outside. A 16-mil liner with an appropriate sub-liner is required.

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

**Other Observations / Comments**

Floyd Bartlett  
**Evaluator**

8/24/2009  
**Date / Time**

# Application for Permit to Drill Statement of Basis

3/8/2010

**Utah Division of Oil, Gas and Mining**

Page 1

<b>APD No</b>	<b>API WellNo</b>	<b>Status</b>	<b>Well Type</b>	<b>Surf Owner</b>	<b>CBM</b>
1909	43013501150000	LOCKED	OW	S	No
<b>Operator</b>	NEWFIELD PRODUCTION COMPANY		<b>Surface Owner-APD</b>		
<b>Well Name</b>	Monument Butte State G-2-9-16		<b>Unit</b>	GMBU (GRRV)	
<b>Field</b>	MONUMENT BUTTE		<b>Type of Work</b>	DRILL	
<b>Location</b>	NWNW 2 9S 16E S 564 FNL 658 FWL GPS Coord (UTM) 577344E 4435219N				

**Geologic Statement of Basis**

Newfield proposes to set 300' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 1,100'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 2. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a major source of useable ground water. However, ground water in the Uinta Formation should be of sufficient quality and quantity for isolated domestic and agricultural use and should be protected. Surface casing should be extended to cover the base of the moderately saline ground water.

Brad Hill  
**APD Evaluator**

9/1/2009  
**Date / Time**

**Surface Statement of Basis**

The proposed Monument Butte State G-2-9-16 proposed oil well is to be directionally drilled from the existing pad of the Monument Butte State 4-2-9-16 producing oil well. No changes are planned to the existing pad. The reserve pit will be re-dug near the original location in the southeast side of the pad. The wells are on 20-acre spacing.

A field review of the site and the existing pad showed no concerns and should be suitable for drilling and operating the proposed additional wells.

SITLA owns both the surface and the minerals. They were invited to the pre-site visit but did not attend.

The Utah Division of Wildlife Resources was also invited and did not attend.

Floyd Bartlett  
**Onsite Evaluator**

8/24/2009  
**Date / Time**

**Conditions of Approval / Application for Permit to Drill**

<b>Category</b>	<b>Condition</b>
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

**WORKSHEET  
APPLICATION FOR PERMIT TO DRILL**

---

---

**APD RECEIVED:** 8/18/2009

**API NO. ASSIGNED:** 43013501150000

**WELL NAME:** Monument Butte State G-2-9-16

**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695)

**PHONE NUMBER:** 435 646-4825

**CONTACT:** Mandie Crozier

**PROPOSED LOCATION:** NWNW 2 090S 160E

**Permit Tech Review:**

**SURFACE:** 0564 FNL 0658 FWL

**Engineering Review:**

**BOTTOM:** 1355 FNL 1430 FWL

**Geology Review:**

**COUNTY:** DUCHESNE

**LATITUDE:** 40.06557

**LONGITUDE:** -110.09306

**UTM SURF EASTINGS:** 577344.00

**NORTHINGS:** 4435219.00

**FIELD NAME:** MONUMENT BUTTE

**LEASE TYPE:** 3 - State

**LEASE NUMBER:** ML-21839

**PROPOSED PRODUCING FORMATION(S):** GREEN RIVER

**SURFACE OWNER:** 3 - State

**COALBED METHANE:** NO

---

**RECEIVED AND/OR REVIEWED:**

- PLAT**
- Bond:** STATE/FEE - B001834
- Potash**
- Oil Shale 190-5**
- Oil Shale 190-3**
- Oil Shale 190-13**
- Water Permit:** 43-7478
- RDCC Review:**
- Fee Surface Agreement**
- Intent to Commingle**

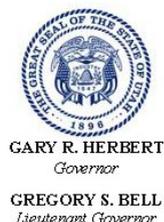
**Commingle Approved**

**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:** 460' fr unit boundary
  - R649-3-11. Directional Drill**
- 

**Comments:** Presite Completed

**Stipulations:** 5 - Statement of Basis - bhill  
15 - Directional - dmason  
25 - Surface Casing - ddoucet  
27 - Other - bhill



# 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:** Monument Butte State G-2-9-16  
**API Well Number:** 43013501150000  
**Lease Number:** ML-21839  
**Surface Owner:** STATE  
**Approval Date:** 3/9/2010

**Issued to:**

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

**Authority:**

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

**Duration:**

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

**General:**

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

**Conditions of Approval:**

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

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

Surface casing shall be cemented to the surface.

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).

**Additional Approvals:**

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

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

**Notification Requirements:**

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

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

**Contact Information:**

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

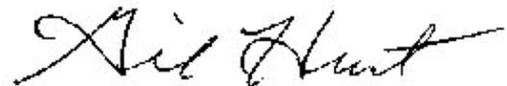
- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office  
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office  
801-231-8956 - after office hours

**Reporting Requirements:**

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

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

**Approved By:**



Gil Hunt  
Associate Director, Oil & Gas

Spud

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration

Rig Name/# Ross #26

Submitted By Mitch Benson

Phone Number (435) 823-5885

Name/Numer Monument Butte State G-2-9-16

Qtr/Qrt NW/NW Section 2

Township 9S

Range 16E

Lease Serial Number ML-21839

API Number 43-013-50115

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

Date/Time 4/29/2010 9:00:00 AM

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

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

Date/Time 4/30/2010 4:00:00 PM

Remarks:

STATE OF UTAH  
 DIVISION OF OIL, GAS AND MINING  
 ENTITY ACTION FORM - FORM 6

OPERATOR: NEWFIELD PRODUCTION COMPANY  
 ADDRESS: RT. 3 BOX 3630  
 MYTON, UT 84052

OPERATOR ACCT. NO. N2695

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION					SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG	COUNTY		
B	99999	17400	4301350044	FEDERAL 9-25-8-15	NESE	25	8S	15E	DUCHESNE	4/30/2010	5/18/10
WELL 1 COMMENTS: GRRV											
B	99999	17400	4301350023	FEDERAL 5-25-8-15	SWNW	25	8S	15E	DUCHESNE	4/30/2010	5/18/10
WELL 2 COMMENTS: GRRV											
B	99999	17400	4301350115	MON BUTTE STATE G-2-9-16	NWNW	2	9S	16E	DUCHESNE	4/29/2010	5/18/10
WELL 3 COMMENTS: GRRV BML = SENW											
B	99999	17400	4301334181	FEDERAL 13-30-9-16	SWSW	30	8S 9S	16E	DUCHESNE	4/27/2010	5/18/10
WELL 4 COMMENTS: GRRV											
B	99999	17400	4301334084	GREATER BOUNDARY II B-3-9-17	NENE	3	9S	17E	DUCHESNE	4/27/2010	5/18/10
WELL 5 COMMENTS: GRRV BML = NENE											
B	99999	17400	4301350124	MON BUTTE V-35-8-16	NWNE	2 35	9S 8	16E	DUCHESNE	4/16/2010	5/18/10
WELL 6 COMMENTS: GRRV BML = T 8S Sec 35 SESE											

- ACTION CODES (See instructions on back of form)
- A - 1 new entity for new well (single well only)
  - B - well to existing entity (group or unit well)
  - C - from one existing entity to another existing entity
  - D - well from one existing entity to a new entity
  - E - other (explain in comments section)

RECEIVED

MAY 03 2010

*[Signature]*  
 Signature  
 Production Clerk

Jentri Park

04/30/10

Date

NOTE: Use COMMENT section to explain why each Action Code was selected.

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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTAH STATE ML-21839
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: GMBU
8. WELL NAME and NUMBER: MONUMENT BUTTE STATE G-2-9-16
9. API NUMBER: 4301350115
10. FIELD AND POOL, OR WILDCAT: GREATER MB UNIT

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

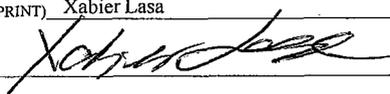
4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 0564 FNL 0658 FWL  
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: , 2, T9S, R16E NWNW

COUNTY: DUCHESNE  
STATE: UT

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 (Submit in Duplicate) Approximate date work will _____	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of Work Completion: 05/10/2010	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Spud Notice
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
On 4-29-10 MIRU ROSS spud rig #26. Drill 1140' of 12 1/4" hole with air mist. TIH W/25 Jt's 8 5/8" J-55 24# csgn. Set @ 1130.02'. On 5-5-10 Cement with 504 sks of Class "G" w/ 2% CaCL+ 1/4# Cello Flake. Mixed @ 15.8 ppg> 1.17 cf/sk yeild. Returned 26 bbls cement to pit.

NAME (PLEASE PRINT) Xabier Lasa TITLE Drilling Foreman  
SIGNATURE  DATE 05/11/2010

(This space for State use only)

**RECEIVED**  
**MAY 18 2010**  
DIV. OF OIL, GAS & MINING





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

5. LEASE DESIGNATION AND SERIAL NUMBER: UTAH STATE ML-21839
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: GMBU
8. WELL NAME and NUMBER: MONUMENT BUTTE STATE G-2-9-16
9. API NUMBER: 4301350115
10. FIELD AND POOL, OR WILDCAT: GREATER MB UNIT

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 0564 FWL 0658 FWL  
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: , 2, T9S, R16E

COUNTY: DUCHESNE  
STATE: UT

**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 (Submit in Duplicate)  Approximate date work will  <hr/>	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> REPERFORATE CURRENT FORMATION
	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> SIDETRACK TO REPAIR WELL
<input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only)  Date of Work Completion: 06/03/2010	<input type="checkbox"/> CASING REPAIR	<input type="checkbox"/> NEW CONSTRUCTION	<input type="checkbox"/> TEMPORARITLY ABANDON
	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> TUBING REPAIR
	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> VENT OR FLAIR
	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> PRODUCTION (START/STOP)	<input type="checkbox"/> WATER SHUT-OFF
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input checked="" type="checkbox"/> OTHER: - Weekly Status Report
	<input type="checkbox"/> CONVERT WELL TYPE	<input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  
The above subject well was completed on 06-03-10, attached is a daily completion status report.

NAME (PLEASE PRINT) Lucy Chavez-Naupoto TITLE Administrative Assistant

SIGNATURE  DATE 06/09/2010

(This space for State use only)

**RECEIVED**  
**JUN 14 2010**  
**DIV. OF OIL, GAS & MINING**

## Daily Activity Report

Format For Sundry

**MON BUTTE G-2-9-16**

**3/1/2010 To 7/30/2010**

**5/20/2010 Day: 1**

**Completion**

Rigless on 5/20/2010 - Run CBL & perforate 1st stage - Install 5m frac head. NU 6" 5K Cameron BOP. RU hot oil truck & pressure test casing, blind rams, frac head, & casing valves to 4500 psi w/ 2 bw. RU The Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ ' w/ cement top @ . Perforate stage #1, CP1 sds (5969'-71') w/ 3 1/8" Port plug guns (11 gram .36" EH 16.82" pen) w/ 3 spf for a total of 6 shots. CP1 sds (5955'-63') w/ 3 1/8" Port plug guns (11 gram .36" EH 16.82" pen) w/ 3 spf for a total of 24 shots. RD The Peforators LLC WLT.

**Daily Cost:** \$0

**Cumulative Cost:** \$14,880

**5/26/2010 Day: 2**

**Completion**

Rigless on 5/26/2010 - Frac stages 1-6, flow back well, SWIFN - Frac & perforate well as described in stimulation tab. Open well for immediate flow back @ approx. 3 BPM. 1170 bbl recovered. SWIFN. 1554 BWTR

**Daily Cost:** \$0

**Cumulative Cost:** \$124,218

**5/28/2010 Day: 3**

**Completion**

WWS #1 on 5/28/2010 - MIRU Western #1. ND Cameron BOP. NU Schaeffer BOP. RIH w/ chomp bit. DU CBP. SWIFN. - MIRU Western #1. RU The Perforators wireline. Set kill plug @ 4456'. Bleed off well. ND Cameron BOP & 5m frac head. NU 3m production head & Schaeffer BOP. RIH w/ 4 3/4" chomp bit, bit sub & new 2 7/8" tbg. from pipe racks (tallying & drifting). Tag CBP @ 4456'. RU powerswivel & pump. DU CBP in 45 min. Cont. RIH w/ tbg. Tag fill @ 4486'. C/O to CBP @ 4580'. Circulate well clean. Pull up to 4518'. SWIFN. 1530 BWTR.

**Daily Cost:** \$0

**Cumulative Cost:** \$173,830

**6/1/2010 Day: 4**

**Completion**

WWS #1 on 6/1/2010 - DU CBPs. Flow well. - 900 psi on csg., 850 psi on tbg. Bleed off well. Circulate well. Cont. RIH w/ tbg. Tag CBP @ 4580'. DU CBP in 47 min. Cont. RIH w/ tbg. Tag 5110'. DU CBP in 26 min. Cont. RIH w/ tbg. Tag CBP @ 5290'. DU CBP in 25 min. Cont. RIH w/ tbg. Tag CBP @ 5450'. DU CBP in 39 min. RIH w/ tbg. to 5619'. RU well to flow to treater. Turn well over to pumper to flow.

**Daily Cost:** \$0

**Cumulative Cost:** \$185,210

**6/2/2010 Day: 5**

**Completion**

WWS #1 on 6/2/2010 - Round trip tbg. - Csg. @ 600 psi, tbg. @ 20 psi. Bleed off well. Circulate well to kill well. Cont. RIH w/ tbg. Tag CBP @ 5630'. DU CBP in 18 min. Cont. RIH w/ tbg. Tag fill @ 6247'. C/O to PBSD @ 6411'. Circulate well clean. POOH w/ tbg. LD BHA. RIH

w/ 2 7/8" notched collar, 2 jts 2 7/8" tbg., PSN, 1 jt 2 7/8" tbg., 5 1/2" TAC, 189 jts 2 7/8" tbg. SWIFN.

**Daily Cost:** \$0

**Cumulative Cost:** \$191,630

---

**6/3/2010 Day: 6**

**Completion**

WWS #1 on 6/3/2010 - ND BOP. RIH w/ rods. PWOP @ 5:00 p.m. 144" stroke length, 6 spm. Final Report. 700 BWTR. - 200 psi on well. Circulate well to kill well. ND BOP. X-over for rods. RIH w/ Central Hydraulic rod pump, 4- 1 1/2" weight bars, 232- 7/8" guided rods (8 per), 1- 8', 6', 4', 2' x 7/8" pony subs, 1 1/2" x 30' polished rod. Seat pump. RU pumping unit. Hang off rods. Stroke test to 800 psi. Good pump action. RD. Put well on production @ 5:00 p.m. 144" stroke, 6 spm. Final Report. 700 BWTR. **Finalized**

**Daily Cost:** \$0

**Cumulative Cost:** \$235,129

---

**Pertinent Files: Go to File List**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires: July 31, 2010

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
ML-21839

1a. Type of Well  Oil Well  Gas Well  Dry  Other  
 b. Type of Completion:  New Well  Work Over  Deepen  Plug Back  Diff. Resvr.,  
 Other: \_\_\_\_\_

6. If Indian, Allottee or Tribe Name

2. Name of Operator  
NEWFIELD EXPLORATION COMPANY

7. Unit or CA Agreement Name and No.  
GMBU

3. Address  
1401 17TH ST. SUITE 1000 DENVER, CO 80202

3a. Phone No. (include area code)  
(435)646-3721

8. Lease Name and Well No.  
MONUMENT BUTTE STATE G-2-9-16

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

*BHL reviewed  
by HSM*

9. AFI Well No.  
43-013-50115

10. Field and Pool or Exploratory  
MONUMENT BUTTE

At surface 564' FNL & 658' FWL (NW/NW) SEC. 2, T9S, R16E (ML-21839)

11. Sec., T., R., M., on Block and  
Survey or Area  
SEC. 2, T9S, R16E

At top prod. interval reported below 1161' FNL & 1267' FWL (NW/NW) SEC. 2, T9S, R16E (ML-21839)

12. County or Parish

At total depth 1523' FNL & 1649' FWL (SE/NW) SEC. 2, T9S, R16E (ML-21839)

13. State  
UT

14. Date Spudded  
04/29/2010

15. Date T.D. Reached  
05/13/2010

16. Date Completed 06/02/2010  
 D & A  Ready to Prod.

17. Elevations (DF, RKB, RT, GL)\*  
5579' GL 5591' KB

18. Total Depth: MD 6468'  
TVD 6264'

19. Plug Back T.D.: MD 6411'  
TVD 6208

20. Depth Bridge Plug Set: MD  
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
DUAL IND GRD, SP, COMP. DENSITY, COMP. NEUTRON, GR, CALIPER, CMT BOND

22. Was well cored?  No  Yes (Submit analysis)  
Was DST run?  No  Yes (Submit report)  
Directional Survey?  No  Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cement Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	8-5/8" J-55	24#	0	1130'		520 CLASS G			
7-7/8"	5-1/2" J-55	15.5#	0	6458'		250 PRIMLITE		00'	
						425 50/50 POZ			

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8"	EOT@ 6044'	TA @ 5947'						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Green River			5955-5971' CP1	.36"	3	30
B) Green River			5547-5555' A1	.36"	3	24
C) Green River			5344-5391' B1 B2	.36"	3	36
D) Green River			5220-5233' C	.36"	3	39

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
5955-5971'	Frac w/ 49610#'s 20/40 sand in 304 bbls of Lightning 17 fluid.
5547-5555'	Frac w/ 24263#'s 20/40 sand in 207 bbls of Lightning 17 fluid.
5344-5391'	Frac w/ 75693#'s 20/40 sand in 467 bbls of Lightning 17 fluid.
5220-5233'	Frac w/ 45136#'s 20/40 sand in 296 bbls of Lightning 17 fluid.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
6-2-10	6-18-10	24	→	127	0	81			2-1/2" x 1-3/4" x 20' x 24' RHAC Pump
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→					PRODUCING	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

\*(See instructions and spaces for additional data on page 2)

RECEIVED

JUN 29 2010

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production ➔	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate ➔	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production ➔	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate ➔	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

USED FOR FUEL

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

GEOLOGICAL MARKERS

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				GARDEN GULCH MRK GARDEN GULCH 1	3970' 4186'
				GARDEN GULCH 2 POINT 3	4312' 4585'
				X MRKR Y MRKR	4851' 4887'
				DOUGALS CREEK MRK BI CARBONATE MRK	5015' 5271'
				B LIMESTON MRK CASTLE PEAK	5406' 5896'
				BASAL CARBONATE	6342'

32. Additional remarks (include plugging procedure):

Stage 5: Green River Formation (D1) 5034-5066', .36" 3/39 Frac w/ 44992#'s of 20/40 sand in 294 bbls of Lightning 17 fluid

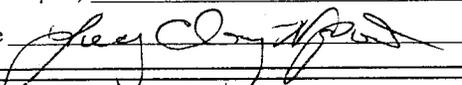
Stage 6: Green River Formation (GB4) 4514-4521', .36" 3/21 Frac w/ 23987#'s of 20/40 sand in 181 bbls of Lightning 17 fluid

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- Electrical/Mechanical Logs (1 full set req'd.)     
  Geologic Report     
  DST Report     
  Directional Survey  
 Sundry Notice for plugging and cement verification     
  Core Analysis     
  Other: Drilling Daily Activity

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)\*

Name (please print) Lucy Chavez-Naupoto Title Administrative Assistant

Signature  Date 06/23/2010

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.

**NEWFIELD**



# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)**

**SECTION 2 9S 16E**

**G-2-9-16**

**Wellbore #1**

**Design: Actual**

## **Standard Survey Report**

**07 June, 2010**

**HATHAWAY HB BURNHAM**  
DIRECTIONAL & MWD SERVICES



# HATHAWAY BURNHAM

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 2 9S 16E  
**Well:** G-2-9-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well G-2-9-16  
**TVD Reference:** G-2-9-16 @ 5591.0ft (EST KB)  
**MD Reference:** G-2-9-16 @ 5591.0ft (EST KB)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

<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 2 9S 16E, SEC 2 9S 16E				
<b>Site Position:</b>		<b>Northing:</b>	7,193,600.00ft	<b>Latitude:</b>	40° 3' 34.952 N
<b>From:</b>	Map	<b>Easting:</b>	2,036,100.00ft	<b>Longitude:</b>	110° 5' 10.480 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.91 °

<b>Well</b>	G-2-9-16, SHL LAT:40 03 56.18, LONG: -110 05 37.47					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	7,195,714.53 ft	<b>Latitude:</b>	40° 3' 56.180 N
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,033,968.07 ft	<b>Longitude:</b>	110° 5' 37.470 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	0.0 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>
	IGRF200510	2009/07/15	11.56	65.86	52,496

<b>Design</b>	Actual				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<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	134.82	

<b>Survey Program</b>	Date 2010/06/07				
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
1,180.0	6,468.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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
1,180.0	0.11	119.56	1,180.0	-0.6	1.0	1.1	0.01	0.01	0.00
1,225.0	0.18	136.12	1,225.0	-0.6	1.1	1.2	0.18	0.16	36.80
1,270.0	0.53	105.73	1,270.0	-0.7	1.3	1.5	0.86	0.78	-67.53
1,316.0	0.94	132.19	1,316.0	-1.0	1.8	2.0	1.13	0.89	57.52
1,361.0	1.71	131.46	1,361.0	-1.7	2.6	3.1	1.71	1.71	-1.62
1,406.0	2.35	131.79	1,406.0	-2.8	3.8	4.7	1.42	1.42	0.73
1,451.0	3.19	131.35	1,450.9	-4.2	5.4	6.8	1.87	1.87	-0.98
1,497.0	4.04	129.66	1,496.8	-6.1	7.6	9.7	1.86	1.85	-3.67
1,542.0	4.75	135.33	1,541.7	-8.5	10.1	13.2	1.85	1.58	12.60
1,587.0	5.58	138.58	1,586.5	-11.4	12.9	17.2	1.95	1.84	7.22
1,633.0	6.57	138.54	1,632.2	-15.1	16.1	22.1	2.15	2.15	-0.09
1,678.0	7.14	138.96	1,676.9	-19.1	19.7	27.4	1.27	1.27	0.93



Company: NEWFIELD EXPLORATION  
 Project: USGS Myton SW (UT)  
 Site: SECTION 2 9S 16E  
 Well: G-2-9-16  
 Wellbore: Wellbore #1  
 Design: Actual

Local Co-ordinate Reference: Well G-2-9-16  
 TVD Reference: G-2-9-16 @ 5591.0ft (EST KB)  
 MD Reference: G-2-9-16 @ 5591.0ft (EST KB)  
 North Reference: True  
 Survey Calculation Method: Minimum Curvature  
 Database: EDM 2003.21 Single User Db

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)
1,723.0	7.84	137.24	1,721.5	-23.5	23.6	33.3	1.63	1.56	-3.82
1,768.0	8.46	136.77	1,766.1	-28.1	27.9	39.6	1.39	1.38	-1.04
1,814.0	9.12	135.88	1,811.5	-33.2	32.8	46.7	1.46	1.43	-1.93
1,859.0	9.71	135.18	1,855.9	-38.5	37.9	54.0	1.34	1.31	-1.56
1,904.0	10.24	136.12	1,900.2	-44.1	43.4	61.8	1.23	1.18	2.09
1,950.0	10.70	133.68	1,945.5	-49.9	49.3	70.2	1.39	1.00	-5.30
2,040.0	11.56	130.77	2,033.8	-61.6	62.2	87.5	1.14	0.96	-3.23
2,086.0	12.41	128.21	2,078.8	-67.7	69.6	97.0	2.18	1.85	-5.57
2,131.0	13.43	130.04	2,122.6	-74.0	77.4	107.1	2.44	2.27	4.07
2,176.0	14.04	129.47	2,166.4	-80.9	85.6	117.7	1.39	1.36	-1.27
2,221.0	14.50	128.94	2,210.0	-87.9	94.2	128.7	1.06	1.02	-1.18
2,267.0	15.16	128.85	2,254.4	-95.3	103.3	140.4	1.44	1.43	-0.20
2,312.0	15.95	130.72	2,297.8	-103.0	112.6	152.5	2.08	1.76	4.16
2,357.0	16.50	130.26	2,341.0	-111.2	122.2	165.0	1.26	1.22	-1.02
2,403.0	17.71	131.68	2,385.0	-120.0	132.4	178.5	2.78	2.63	3.09
2,448.0	18.48	132.32	2,427.7	-129.4	142.8	192.5	1.77	1.71	1.42
2,493.0	18.59	132.56	2,470.4	-139.0	153.3	206.8	0.30	0.24	0.53
2,584.0	18.48	133.64	2,556.7	-158.8	174.4	235.7	0.40	-0.12	1.19
2,674.0	18.17	134.17	2,642.1	-178.4	194.8	264.0	0.39	-0.34	0.59
2,765.0	17.82	135.75	2,728.7	-198.3	214.7	292.1	0.66	-0.38	1.74
2,856.0	18.79	136.54	2,815.1	-218.9	234.5	320.6	1.10	1.07	0.87
2,946.0	21.00	135.51	2,899.7	-240.9	255.8	351.3	2.49	2.46	-1.14
3,037.0	23.14	136.36	2,984.0	-265.5	279.6	385.4	2.38	2.35	0.93
3,128.0	24.00	136.54	3,067.4	-291.9	304.6	421.8	0.95	0.95	0.20
3,218.0	22.24	135.31	3,150.2	-317.3	329.2	457.1	2.03	-1.96	-1.37
3,309.0	21.14	133.97	3,234.7	-340.9	353.1	490.8	1.33	-1.21	-1.47
3,399.0	18.98	131.99	3,319.3	-362.0	375.7	521.6	2.52	-2.40	-2.20
3,490.0	20.50	135.13	3,404.9	-383.2	397.9	552.3	2.04	1.67	3.45
3,581.0	19.75	135.13	3,490.4	-405.3	420.0	583.6	0.82	-0.82	0.00
3,671.0	19.14	133.86	3,575.2	-426.3	441.4	613.6	0.82	-0.68	-1.41
3,762.0	18.33	132.70	3,661.4	-446.4	462.7	642.8	0.98	-0.89	-1.27
3,853.0	17.58	133.42	3,748.0	-465.5	483.2	670.9	0.86	-0.82	0.79
3,943.0	15.97	133.30	3,834.2	-483.4	502.0	696.8	1.79	-1.79	-0.13
4,034.0	16.19	136.69	3,921.6	-501.2	519.9	722.0	1.06	0.24	3.73
4,124.0	16.50	134.72	4,008.0	-519.3	537.5	747.3	0.71	0.34	-2.19
4,215.0	16.28	139.70	4,095.3	-538.1	555.0	773.0	1.56	-0.24	5.47
4,306.0	18.17	139.51	4,182.2	-558.7	572.4	799.8	2.08	2.08	-0.21
4,396.0	16.98	135.49	4,268.0	-578.7	590.8	827.0	1.89	-1.32	-4.47
4,487.0	16.26	135.57	4,355.2	-597.3	609.0	853.0	0.79	-0.79	0.09
4,577.0	16.63	136.06	4,441.5	-615.5	628.8	878.5	0.44	0.41	0.54
4,668.0	16.68	135.24	4,528.7	-634.2	645.0	904.5	0.26	0.05	-0.90
4,759.0	14.70	130.94	4,616.3	-651.0	662.9	929.1	2.52	-2.18	-4.73
4,849.0	15.42	132.85	4,703.2	-666.7	680.3	952.5	0.97	0.80	2.12
4,940.0	15.47	132.76	4,790.9	-683.1	698.1	976.7	0.06	0.05	-0.10
5,030.0	15.23	132.34	4,877.7	-699.2	715.6	1,000.5	0.29	-0.27	-0.47
5,121.0	16.26	132.67	4,965.3	-715.9	733.8	1,025.2	1.14	1.13	0.36
5,212.0	16.28	134.04	5,052.6	-733.4	752.4	1,050.7	0.42	0.02	1.51
5,302.0	16.44	138.00	5,139.0	-751.7	770.0	1,076.0	1.25	0.18	4.40
5,393.0	14.64	142.28	5,226.7	-770.3	785.6	1,100.2	2.34	-1.98	4.70
5,483.0	15.67	139.31	5,313.5	-788.5	800.5	1,123.6	1.43	1.14	-3.30
5,574.0	15.51	136.65	5,401.2	-806.7	816.9	1,148.1	0.80	-0.18	-2.92
5,665.0	15.22	134.55	5,488.9	-823.9	833.7	1,172.2	0.69	-0.32	-2.31
5,755.0	14.50	132.15	5,575.9	-839.8	850.5	1,195.2	1.05	-0.80	-2.67
5,846.0	13.53	137.19	5,664.2	-855.2	866.2	1,217.2	1.71	-1.07	5.54



# HATHAWAY BURNHAM

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 2 9S 16E  
**Well:** G-2-9-16  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well G-2-9-16  
**TVD Reference:** G-2-9-16 @ 5591.0ft (EST KB)  
**MD Reference:** G-2-9-16 @ 5591.0ft (EST KB)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

### 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)
5,937.0	13.69	130.76	5,752.7	-870.1	881.6	1,238.6	1.67	0.18	-7.07
6,027.0	15.36	131.20	5,839.8	-884.9	898.6	1,261.1	1.86	1.86	0.49
6,118.0	16.73	132.83	5,927.2	-901.7	917.3	1,286.3	1.58	1.51	1.79
6,208.0	16.17	128.26	6,013.6	-918.3	936.6	1,311.7	1.57	-0.62	-5.08
6,299.0	17.29	126.08	6,100.7	-934.1	957.5	1,337.6	1.41	1.23	-2.40
6,423.0	13.10	127.64	6,220.4	-953.5	983.5	1,369.8	3.39	-3.38	1.26
6,454.3	12.04	128.02	6,250.9	-957.7	988.9	1,376.5	3.39	-3.38	1.22
<b>G-2-9-16 TGT</b>									
6,468.0	11.58	128.21	6,264.3	-959.5	991.1	1,379.3	3.39	-3.38	1.38

### Wellbore Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
G-2-9-16 TGT	0.00	0.00	6,310.0	-779.9	784.8	7,194,947.04	2,034,765.08	40° 3' 48.472 N	110° 5' 27.375 W
- hi/miss target									
- Shape									
- actual wellpath misses by 277.0ft at 6453.2ft MD (6249.8 TVD, -957.6 N, 988.7 E)									
- Circle (radius 75.0)									

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

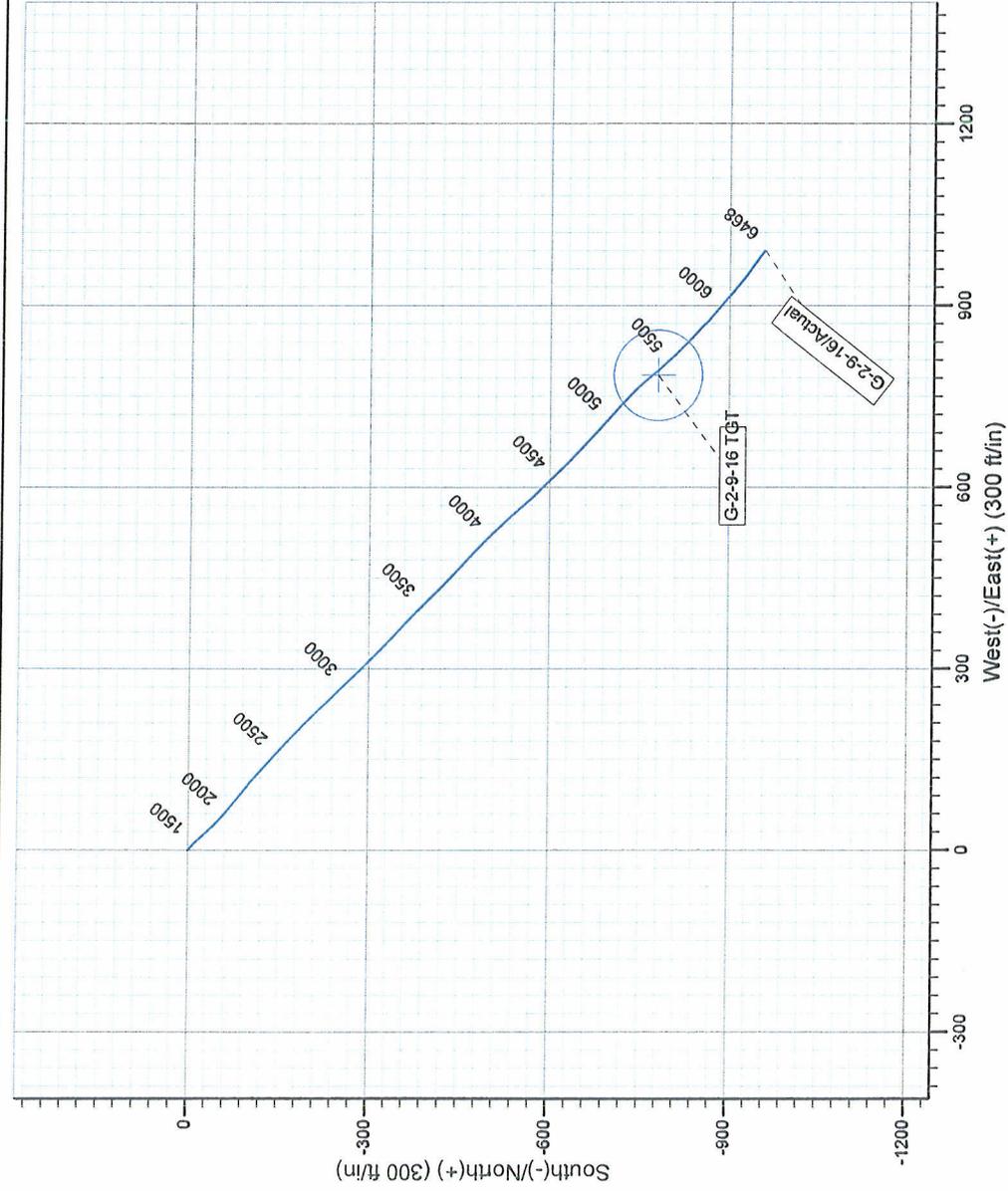
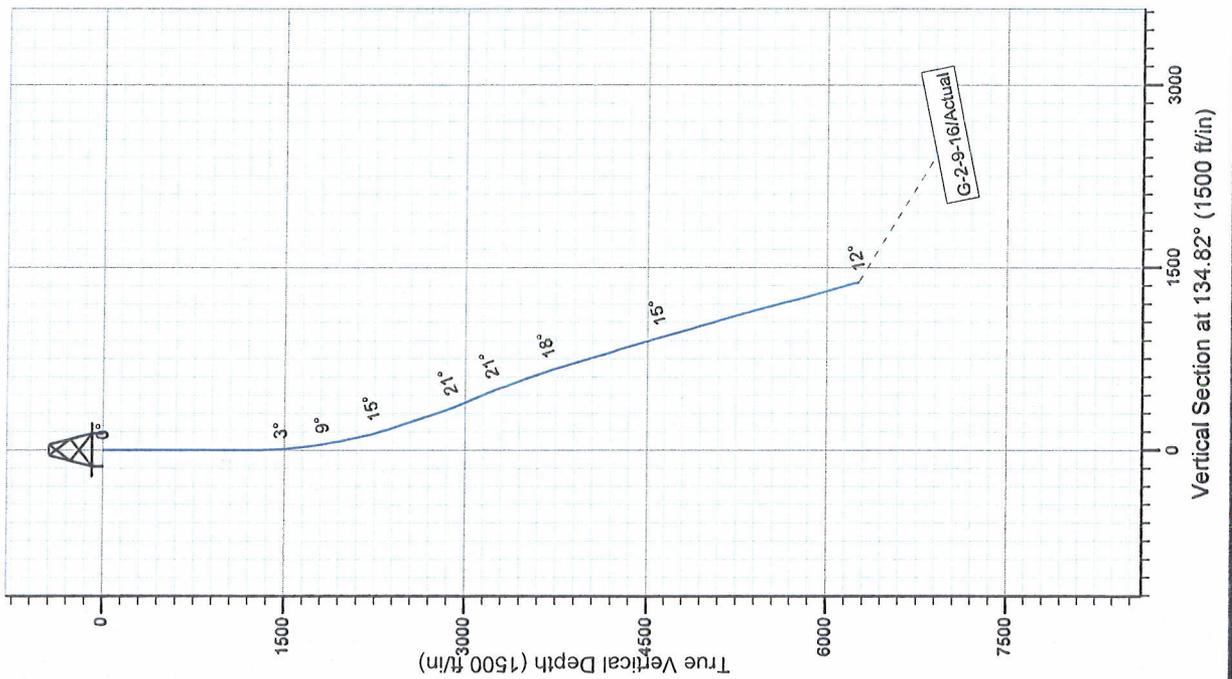


Project: USGS Myton SW (UT)  
 Site: SECTION 2 9S 16E  
 Well: G-2-9-16  
 Wellbore: Wellbore #1  
 SURVEY: Actual

FINAL SURVEY REPORT



Azimuths to True North  
 Magnetic North: 11.56°  
 Magnetic Field  
 Strength: 52495.8sn T  
 Dip Angle: 65.86°  
 Date: 2009/07/15  
 Model: IGRF200510



Design: Actual (G-2-9-16/Wellbore #1)

Created By: *Tara Hudson* Date: 21:57, June 07 2010  
 THIS SURVEY IS CORRECT TO THE BEST OF MY  
 KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.

**Daily Activity Report**

Format For Sundry

**MON BUTTE G-2-9-16****3/1/2010 To 7/30/2010****MON BUTTE G-2-9-16****Waiting on Cement****Date:** 5/7/2010

Ross #26 at 1140. Days Since Spud - On 4/29/10 R/U Ross # 26 Spud @ 8:30AM. Drill to 1140' of 12 1/4" hole run 25 jts 8 5/8" casing set - @ 1,130.02'KB - Returned 26bbls cement to pit. - On 5/5/10 R/U BJ Services and CMT W/ 160sksG+2%CaCl+.25#/SKCello Flake Mixed @ 15.8ppg W/ 1.17 yield

**Daily Cost:** \$0**Cumulative Cost:** \$90,430**MON BUTTE G-2-9-16****Waiting on Cement****Date:** 5/10/2010

Capstar #328 at 1140. 0 Days Since Spud - rig down and work on rig repairs, move on 5-10-10

**Daily Cost:** \$0**Cumulative Cost:** \$90,780**MON BUTTE G-2-9-16****Drill 7 7/8" hole with fresh water****Date:** 5/11/2010

Capstar #328 at 2765. 1 Days Since Spud - Accept rig @ 13:00 5-10-10 - No H2S or flow in last 24 hours - Move rig w/ Howcroft. Set equipment and rig up and nipple up , Accept rig 13:00 5-10-10 - Test pipe&blind rams,choke manifold,kelly,safety valve to 2000#/10min. And Csg& hydrill 1500#/30 min - P/U bit, .33 Hunting M.M,Monel ,gap sub,antenna sub,Monel and HWDP and TIH Tag @ 1066' - Drill 7 7/8" hole F/ 1066' to 2765' w/ 15K WOB,TRPM-184,GPM-409,Avg ROP-148 ft/hr

**Daily Cost:** \$0**Cumulative Cost:** \$146,559**MON BUTTE G-2-9-16****Drill 7 7/8" hole with fresh water****Date:** 5/12/2010

Capstar #328 at 5226. 2 Days Since Spud - Rig serv - No H2S in the last 24 hrs - Drill 77/8 hole f/ 2765-4079' w/ 20/25K WOB,TRPM-184,GPM-409,Avg ROP-90.6 ft/hr - Drill 77/8 hole f/ 2765-4079' w/ 20/25K WOB,TRPM-184,GPM-409,Avg ROP-146 ft/hr

**Daily Cost:** \$0**Cumulative Cost:** \$175,439**MON BUTTE G-2-9-16****Logging****Date:** 5/13/2010

Capstar #328 at 6468. 3 Days Since Spud - Drill 77/8 hole f/ 5226-5664' w/ 20/25K WOB,TRPM-184,GPM-409,Avg ROP-67 ft/hr ( 10 GPM flow @ 5200' - Rig serv - Circ f/ Laydown - LDDP to 4000' & pump 10# brine to stop flow - LDDP & BHA - Held saftey mtg w/Pheonix Survey Inc & RU & log w/ Compensated density Compensated Neutron Gamma - Ray Dual Guard - Drill 77/8 hole f/ 5664-6468' w/ 20/25K WOB,TRPM-184,GPM-409,Avg ROP-94.5 ft/hr

**Daily Cost:** \$0**Cumulative Cost:** \$222,438

---

**MON BUTTE G-2-9-16****Rigging down****Date:** 5/14/2010

Capstar #328 at 6468. 4 Days Since Spud - Get ready to run 5.5 casing - Run 148 jts of 5.5 J55 15.5# LT&C casing shoe set @ 6458' & Float collar @ 6411' Trans 3 jts of 5.5 - casing to the Monumont Butte federal W-35-8-16 - Circ f/ cement job - Hold saftey mtg w/ BJ & RU & cement w/ 250sks of lead cement mixed @ 11 ppg 3.53 yeild PLII+3%KCL+5# - Log well w/ Pheonix Survey Inc - #CF+0.5#SF+.3SMS+FP-6L Disp w/ 153 bbls & 18 bbls of cement returned to pit Plug bumped to 2200 psi - Nipple & set 5.5 casing slips w/ 100,000#s - Clean mud pits - Release rig @ 23:00 on 5/13/10 - BLM & State was notif - CSE+0.5#CF+2#KOL+.5SMS+FP+SF & 425sks of tail 14.4 ppg 1.24 yeild 50:50:2+3% KCL+0.5%EC-1+.25 **Finalized**

**Daily Cost:** \$0**Cumulative Cost:** \$328,618

---

**Pertinent Files: Go to File List**