

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>		<b>1. WELL NAME and NUMBER</b> GMBU S-16-9-17
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		<b>3. FIELD OR WILDCAT</b> MONUMENT BUTTE
<b>4. TYPE OF WELL</b> Oil Well Coalbed Methane Well: NO		<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> GMBU (GRRV)
<b>6. NAME OF OPERATOR</b> NEWFIELD PRODUCTION COMPANY		<b>7. OPERATOR PHONE</b> 435 646-4825
<b>8. ADDRESS OF OPERATOR</b> Rt 3 Box 3630 , Myton, UT, 84052		<b>9. OPERATOR E-MAIL</b> mcrozier@newfield.com
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> ML-3453B	<b>11. MINERAL 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>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>		<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>		<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>
<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>		<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1943 FSL 669 FEL	NESE	16	9.0 S	17.0 E	S
Top of Uppermost Producing Zone	1470 FSL 1106 FEL	NESE	16	9.0 S	17.0 E	S
At Total Depth	1007 FSL 1564 FEL	SWSE	16	9.0 S	17.0 E	S

<b>21. COUNTY</b> DUCHESNE	<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1007	<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 20
<b>27. ELEVATION - GROUND LEVEL</b> 5280	<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 797	<b>26. PROPOSED DEPTH</b> MD: 5667 TVD: 5667
	<b>28. BOND NUMBER</b> B001834	<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 437478

**Hole, Casing, and Cement Information**

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
SURF	12.25	8.625	0 - 300	24.0	J-55 ST&C	8.3	Class G	138	1.17	15.8
PROD	7.875	5.5	0 - 5667	15.5	J-55 LT&C	8.3	Premium Lite High Strength	253	3.26	11.0
							50/50 Poz	363	1.24	14.3

**ATTACHMENTS**

**VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES**

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

<b>NAME</b> Mandie Crozier	<b>TITLE</b> Regulatory Tech	<b>PHONE</b> 435 646-4825
<b>SIGNATURE</b>	<b>DATE</b> 05/26/2011	<b>EMAIL</b> mcrozier@newfield.com
<b>API NUMBER ASSIGNED</b> 43013507930000	<b>APPROVAL</b>   Permit Manager	

NEWFIELD PRODUCTION COMPANY  
 GMBU S-16-9-17  
 AT SURFACE: NE/SE SECTION 16, T9S, R17E  
 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' – 1220'
Green River	1220'
Wasatch	5720'
<b>Proposed TD</b>	<b>5667'</b>

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

Green River Formation (Oil)      1220' – 5720'

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

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

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

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

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

4. **PROPOSED CASING PROGRAM**

a. **Casing Design: GMBU S-16-9-17**

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	300'	24.0	J-55	STC	2,950 17.53	1,370 14.35	244,000 33.89
Prod casing 5-1/2"	0'	5,667'	15.5	J-55	LTC	4,810 2.67	4,040 2.24	217,000 2.47

Assumptions:

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

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

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

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

b. **Cementing Design: GMBU S-16-9-17**

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
			ft <sup>3</sup>			
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17
			161			
Prod casing Lead	3,667'	Prem Lite II w/ 10% gel + 3% KCl	253	30%	11.0	3.26
			826			
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363	30%	14.3	1.24
			451			

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

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

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

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

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

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

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

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

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

From surface to  $\pm 300$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 1/2" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

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

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

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

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

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

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

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

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

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

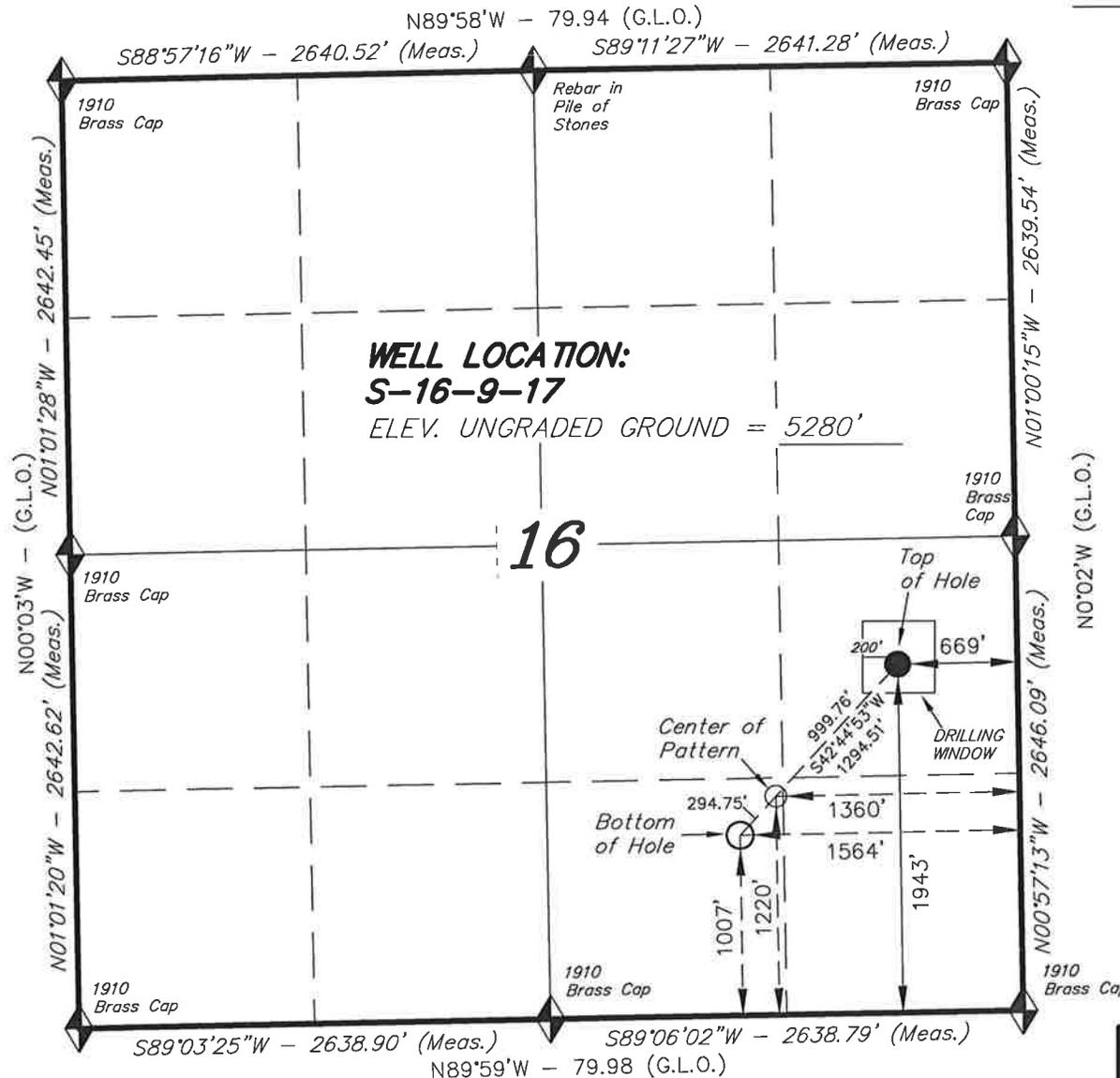
No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

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

It is anticipated that the drilling operations will commence the third quarter of 2011, and take approximately seven (7) days from spud to rig release.

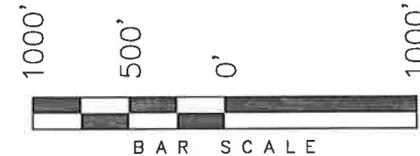
# T9S, R17E, S.L.B.&M.

## NEWFIELD EXPLORATION COMPANY



WELL LOCATION, S-16-9-17, LOCATED AS SHOWN IN THE NE 1/4 SE 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, S-16-9-17, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

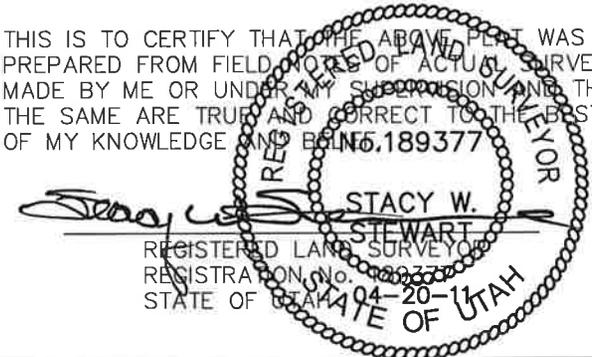


**NOTES:**

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



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



◆ = SECTION CORNERS LOCATED

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

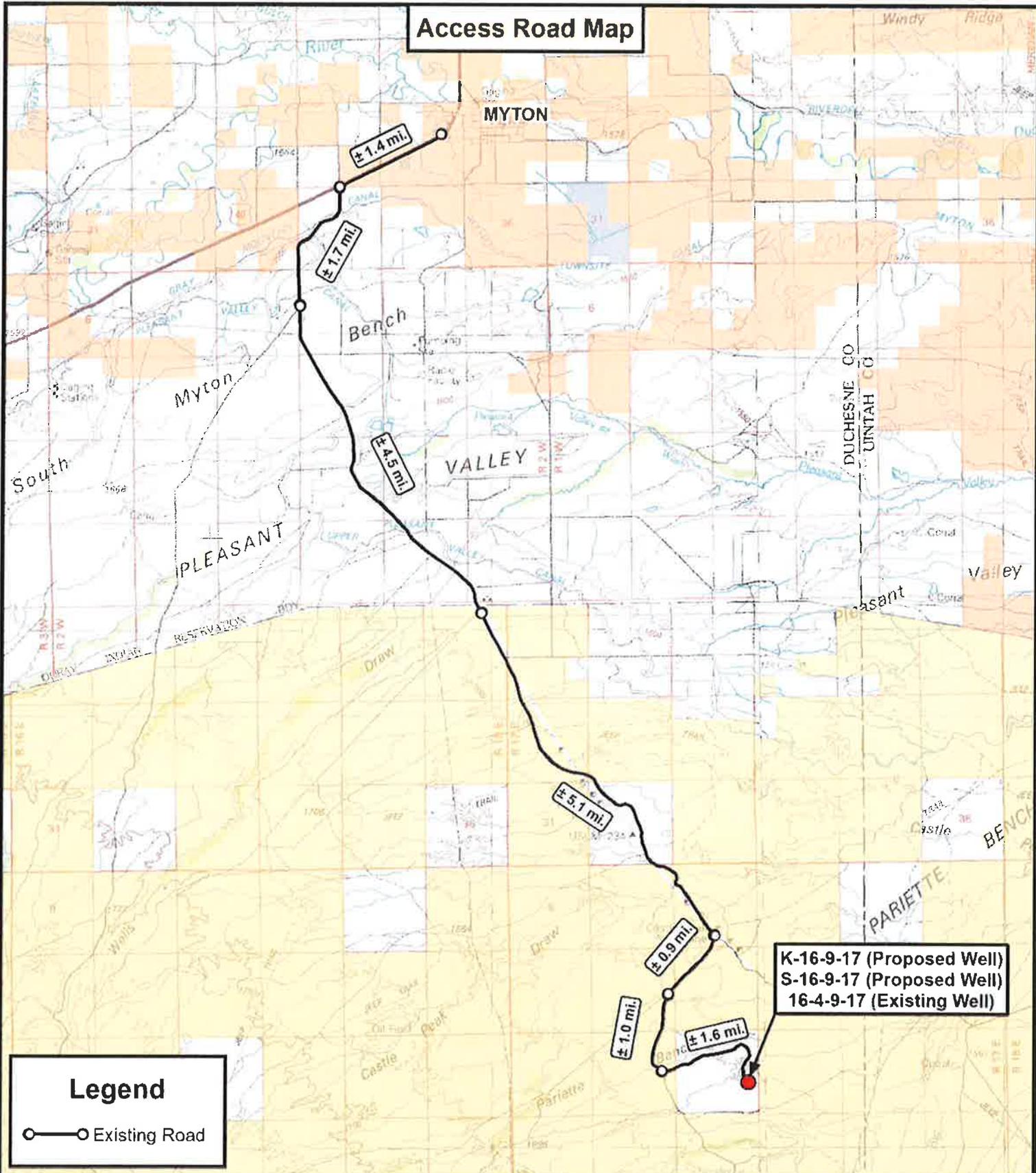
**S-16-9-17**  
 (Surface Location) NAD 83  
 LATITUDE = 40° 01' 44.52"  
 LONGITUDE = 110° 00' 16.42"

### TRI STATE LAND SURVEYING & CONSULTING

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

DATE SURVEYED: 02-28-11	SURVEYED BY: S.V.	VERSION:
DATE DRAWN: 04-20-11	DRAWN BY: M.W.	V1
REVISED:	SCALE: 1" = 1000'	

**Access Road Map**



**K-16-9-17 (Proposed Well)**  
**S-16-9-17 (Proposed Well)**  
**16-4-9-17 (Existing Well)**

**Legend**

○—○ Existing Road

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

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



**NEWFIELD EXPLORATION COMPANY**

K-16-9-17 (Proposed Well)  
 S-16-9-17 (Proposed Well)  
 16-4-9-17 (Existing Well)

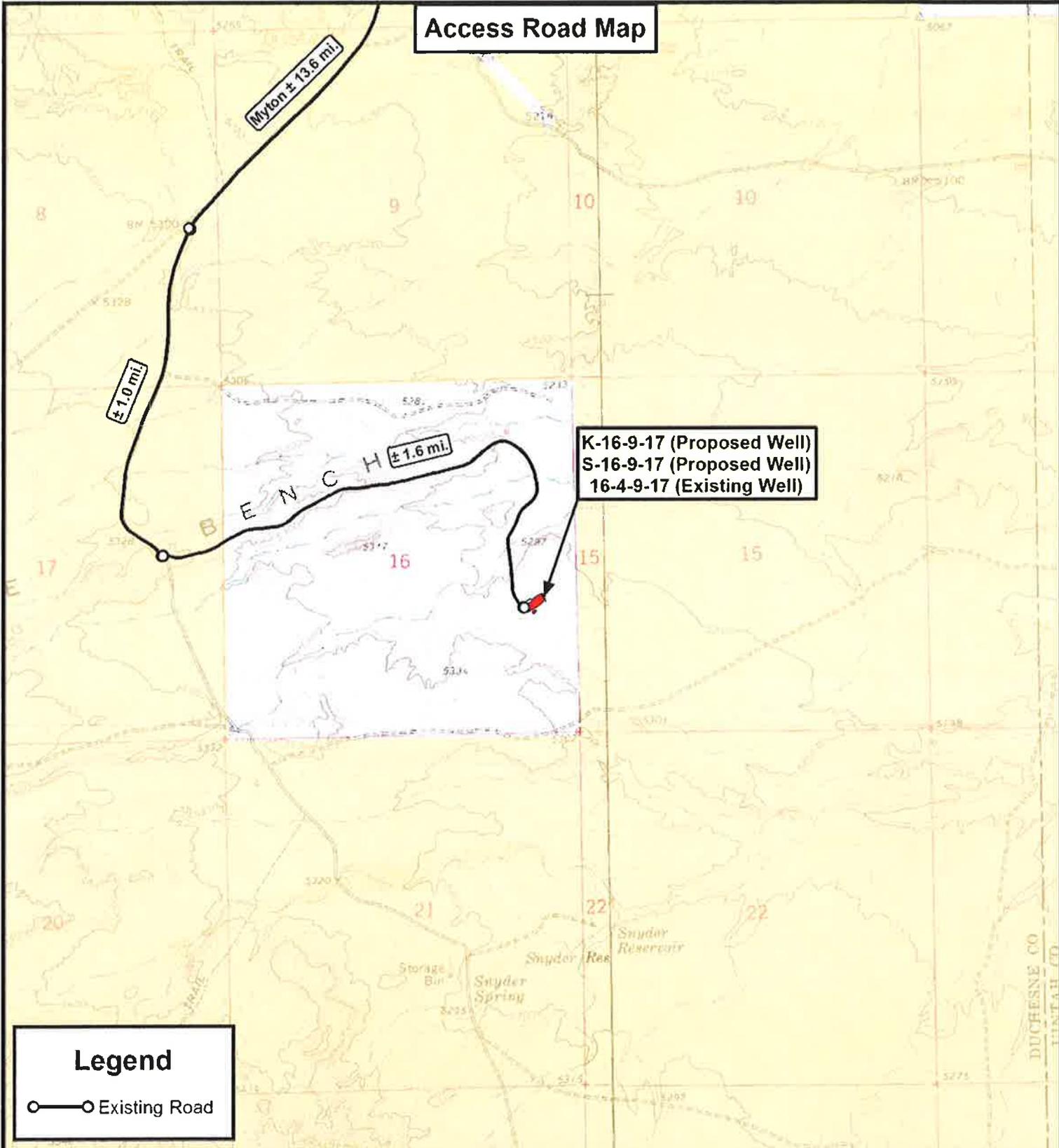
SEC. 16, T9S, R17E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	C.H.M.	REVISED:	VERSION:
DATE:	04-27-2011		V1
SCALE:	1:100,000		

**TOPOGRAPHIC MAP**

SHEET  
**A**

**Access Road Map**



**K-16-9-17 (Proposed Well)  
S-16-9-17 (Proposed Well)  
16-4-9-17 (Existing Well)**

**Legend**

○—○ Existing Road

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

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

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**NEWFIELD EXPLORATION COMPANY**

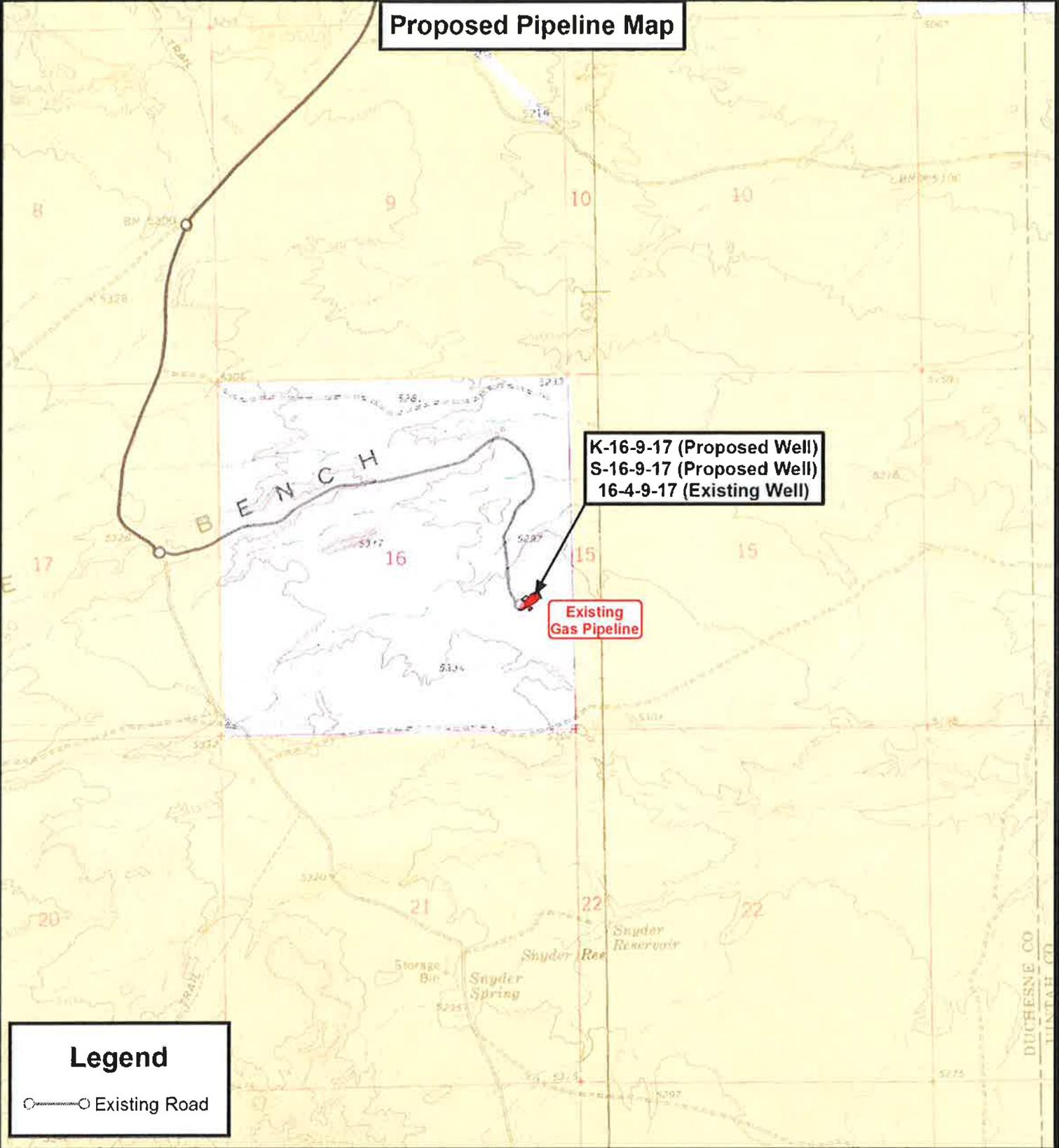
K-16-9-17 (Proposed Well)  
S-16-9-17 (Proposed Well)  
16-4-9-17 (Existing Well)  
SEC. 16, T9S, R17E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	C.H.M.	REVISED:	VERSION:
DATE:	04-27-2011		<b>V1</b>
SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET  
**B**

**Proposed Pipeline Map**



**K-16-9-17 (Proposed Well)  
S-16-9-17 (Proposed Well)  
16-4-9-17 (Existing Well)**

**Existing Gas Pipeline**

**Legend**

○—○ Existing Road

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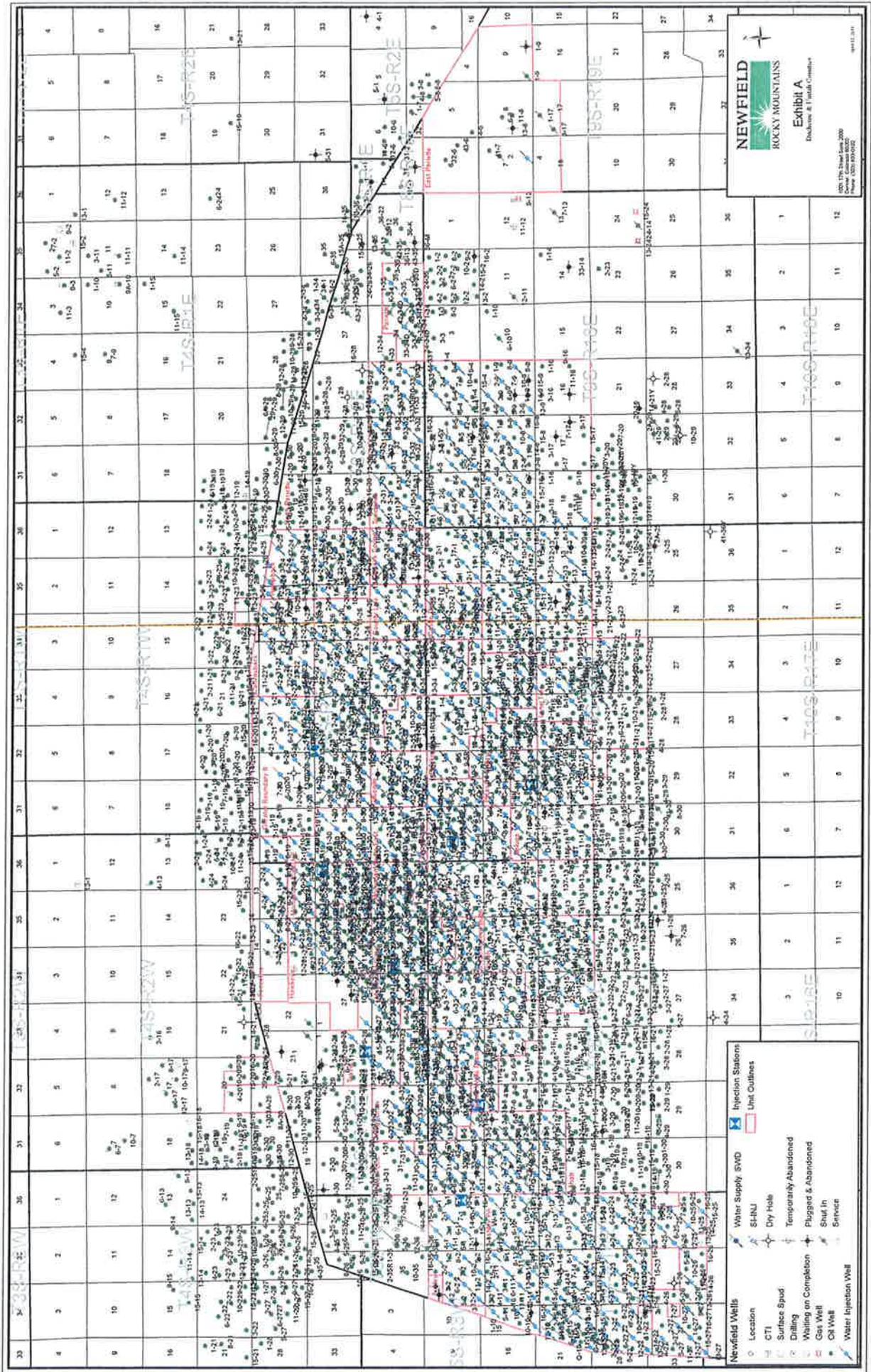
**NEWFIELD EXPLORATION COMPANY**

**K-16-9-17 (Proposed Well)  
S-16-9-17 (Proposed Well)  
16-4-9-17 (Existing Well)  
SEC. 16, T9S, R17E, S.L.B.&M. Duchesne County, UT.**

DRAWN BY:	C.H.M.	REVISED:	VERSION:
DATE:	04-27-2011		<b>V1</b>
SCALE:	1" = 2,000'		

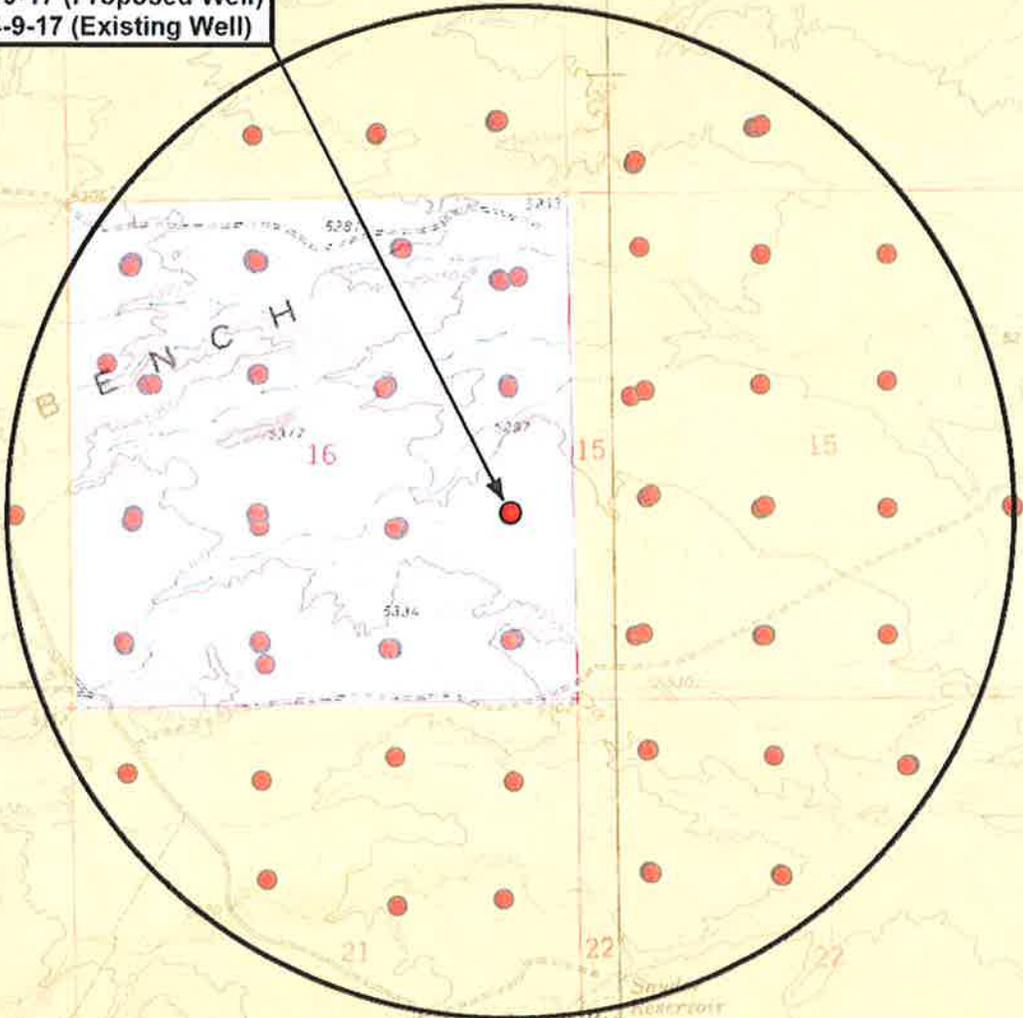
**TOPOGRAPHIC MAP**

SHEET  
**C**



**Exhibit "B" Map**

**K-16-9-17 (Proposed Well)  
S-16-9-17 (Proposed Well)  
16-4-9-17 (Existing Well)**



**Legend**

- 1 Mile Radius
- Pad Location



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**NEWFIELD EXPLORATION COMPANY**

**K-16-9-17 (Proposed Well)  
S-16-9-17 (Proposed Well)  
16-4-9-17 (Existing Well)  
SEC. 16, T9S, R17E, S.L.B.&M. Duchesne County, UT.**

DRAWN BY:	C.H.M.	REVISED:	VERSION:
DATE:	04-27-2011		<b>V1</b>
SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET  
**D**



# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)  
SECTION 16 T9S, R17E  
S-16-9-17**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**19 April, 2011**





<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well S-16-9-17
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Site:</b>	SECTION 16 T9S, R17E	<b>North Reference:</b>	True
<b>Well:</b>	S-16-9-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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

<b>Site</b>	SECTION 16 T9S, R17E, SEC 16 T9S, R17E				
<b>Site Position:</b>		<b>Northing:</b>	7,183,439.74 ft	<b>Latitude:</b>	40° 1' 51.237 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,056,769.95 ft	<b>Longitude:</b>	110° 0' 46.831 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.95 °

<b>Well</b>	S-16-9-17, SHL LAT:40°01'44.52" LONG: -110°00'16.42"					
<b>Well Position</b>	<b>+N/-S</b>	-679.8 ft	<b>Northing:</b>	7,182,799.62 ft	<b>Latitude:</b>	40° 1' 44.520 N
	<b>+E/-W</b>	2,365.4 ft	<b>Easting:</b>	2,059,146.35 ft	<b>Longitude:</b>	110° 0' 16.420 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	5,292.0 ft	<b>Ground Level:</b>	5,280.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2011/04/19	11.31	65.80	52,287

<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>
	4,500.0	0.0	0.0	222.75

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,710.7	16.66	222.75	1,695.1	-117.8	-108.8	1.50	1.50	0.00	222.75	
4,638.5	16.66	222.75	4,500.0	-734.1	-678.6	0.00	0.00	0.00	0.00	S-16-9-17 TGT
5,666.7	16.66	222.75	5,485.0	-950.6	-878.7	0.00	0.00	0.00	0.00	



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well S-16-9-17
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Site:</b>	SECTION 16 T9S, R17E	<b>North Reference:</b>	True
<b>Well:</b>	S-16-9-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	222.75	700.0	-1.0	-0.9	1.3	1.50	1.50	0.00
800.0	3.00	222.75	799.9	-3.8	-3.6	5.2	1.50	1.50	0.00
900.0	4.50	222.75	899.7	-8.6	-8.0	11.8	1.50	1.50	0.00
1,000.0	6.00	222.75	999.3	-15.4	-14.2	20.9	1.50	1.50	0.00
1,100.0	7.50	222.75	1,098.6	-24.0	-22.2	32.7	1.50	1.50	0.00
1,200.0	9.00	222.75	1,197.5	-34.5	-31.9	47.0	1.50	1.50	0.00
1,300.0	10.50	222.75	1,296.1	-47.0	-43.4	64.0	1.50	1.50	0.00
1,400.0	12.00	222.75	1,394.2	-61.3	-56.7	83.5	1.50	1.50	0.00
1,500.0	13.50	222.75	1,491.7	-77.5	-71.6	105.5	1.50	1.50	0.00
1,600.0	15.00	222.75	1,588.6	-95.6	-88.3	130.2	1.50	1.50	0.00
1,700.0	16.50	222.75	1,684.9	-115.5	-106.8	157.3	1.50	1.50	0.00
1,710.7	16.66	222.75	1,695.1	-117.8	-108.8	160.4	1.50	1.50	0.00
1,800.0	16.66	222.75	1,780.7	-136.5	-126.2	186.0	0.00	0.00	0.00
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2,700.0	16.66	222.75	2,642.9	-326.0	-301.4	444.0	0.00	0.00	0.00
2,800.0	16.66	222.75	2,738.7	-347.1	-320.8	472.7	0.00	0.00	0.00
2,900.0	16.66	222.75	2,834.5	-368.1	-340.3	501.3	0.00	0.00	0.00
3,000.0	16.66	222.75	2,930.3	-389.2	-359.8	530.0	0.00	0.00	0.00
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3,600.0	16.66	222.75	3,505.1	-515.5	-476.5	702.0	0.00	0.00	0.00
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3,900.0	16.66	222.75	3,792.5	-578.7	-534.9	788.0	0.00	0.00	0.00
4,000.0	16.66	222.75	3,888.3	-599.7	-554.4	816.7	0.00	0.00	0.00
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4,638.5	16.66	222.75	4,500.0	-734.1	-678.6	999.8	0.00	0.00	0.00
<b>S-16-9-17 TGT</b>									
4,700.0	16.66	222.75	4,558.9	-747.1	-690.6	1,017.4	0.00	0.00	0.00
4,800.0	16.66	222.75	4,654.7	-768.1	-710.1	1,046.1	0.00	0.00	0.00
4,900.0	16.66	222.75	4,750.5	-789.2	-729.5	1,074.7	0.00	0.00	0.00
5,000.0	16.66	222.75	4,846.3	-810.3	-749.0	1,103.4	0.00	0.00	0.00



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well S-16-9-17
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Site:</b>	SECTION 16 T9S, R17E	<b>North Reference:</b>	True
<b>Well:</b>	S-16-9-17	<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)
5,100.0	16.66	222.75	4,942.1	-831.3	-768.5	1,132.1	0.00	0.00	0.00
5,200.0	16.66	222.75	5,037.9	-852.4	-787.9	1,160.7	0.00	0.00	0.00
5,300.0	16.66	222.75	5,133.7	-873.4	-807.4	1,189.4	0.00	0.00	0.00
5,400.0	16.66	222.75	5,229.5	-894.5	-826.8	1,218.1	0.00	0.00	0.00
5,500.0	16.66	222.75	5,325.3	-915.5	-846.3	1,246.8	0.00	0.00	0.00
5,600.0	16.66	222.75	5,421.1	-936.6	-865.8	1,275.4	0.00	0.00	0.00
5,666.7	16.66	222.75	5,485.0	-950.6	-878.7	1,294.5	0.00	0.00	0.00



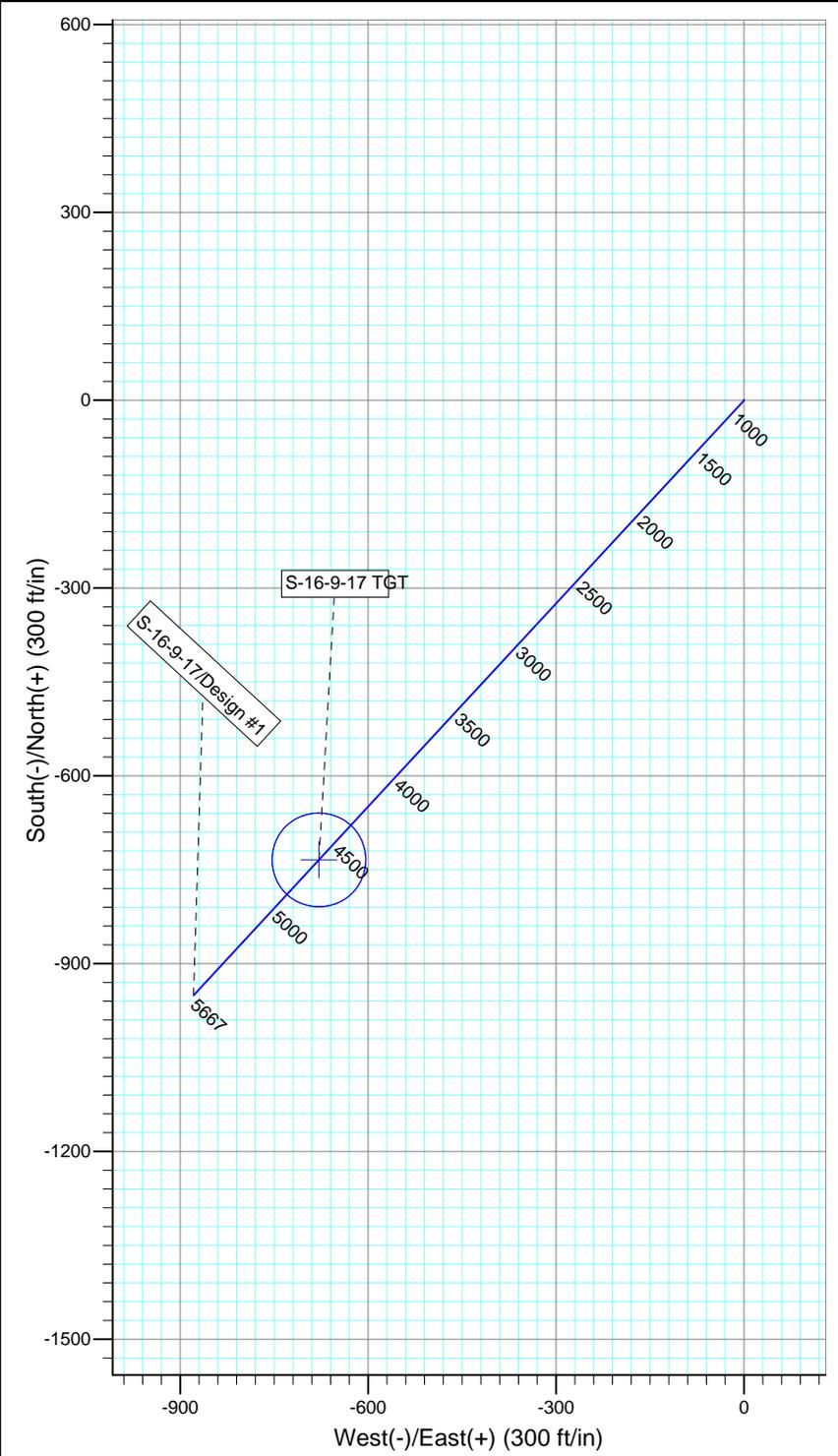
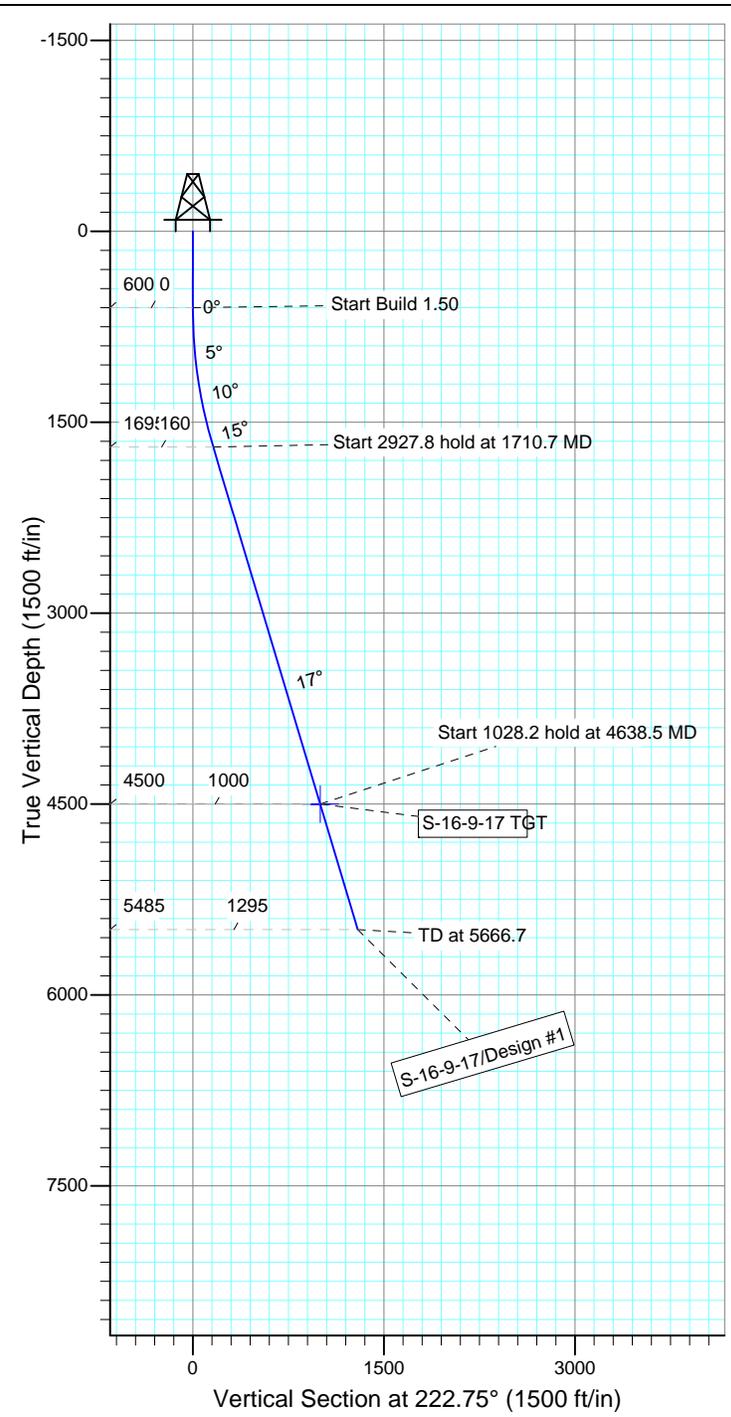
Project: USGS Myton SW (UT)  
 Site: SECTION 16 T9S, R17E  
 Well: S-16-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.31°

Magnetic Field  
 Strength: 52287.2snT  
 Dip Angle: 65.80°  
 Date: 2011/04/19  
 Model: IGRF2010

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



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
S-16-9-17 TGT	4500.0	-734.1	-678.6	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1710.7	16.66	222.75	1695.1	-117.8	-108.8	1.50	222.75	160.4	
4	4638.5	16.66	222.75	4500.0	-734.1	-678.6	0.00	0.00	999.8	S-16-9-17 TGT
5	5666.7	16.66	222.75	5485.0	-950.6	-878.7	0.00	0.00	1294.5	



**NEWFIELD PRODUCTION COMPANY  
GMBU S-16-9-17  
AT SURFACE: NE/SE SECTION 16, T9S, R17E  
DUCHESNE COUNTY, UTAH**

**ONSHORE ORDER NO. 1**

**MULTI-POINT SURFACE USE & OPERATIONS PLAN**

**1. EXISTING ROADS**

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU S-16-9-17 located in the NE 1/4 SE 1/4 Section 16, T9S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles to the junction of this highway and UT State Hwy 53; proceed southeasterly – 11.3 miles to it's junction with an existing road to the southwest; proceed southwesterly – 1.9 miles to it's junction with an existing road to the northeast; proceed in a northeasterly and then southerly direction – 1.6 miles to it's junction with the access road to the existing 16-4-9-17 well pad.

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

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

**2. PLANNED ACCESS ROAD**

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing 16-4-9-17 well pad. See attached **Topographic Map "B"**.

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

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

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

**3. LOCATION OF EXISTING WELLS**

Refer to Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

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

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

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

Tank batteries will be built to State specifications.

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

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

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

Johnson Water District  
Water Right : 43-10136

Maurice Harvey Pond  
Water Right: 47-1358

Neil Moon Pond  
Water Right: 43-11787

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

There will be no water well drilled at this site.

6. **SOURCE OF CONSTRUCTION MATERIALS**

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

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

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

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

A portable toilet will be provided for human waste.

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

8. **ANCILLARY FACILITIES**

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

9. **WELL SITE LAYOUT**

See attached Location Layout Sheet.

**Fencing Requirements**

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.

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

10. **PLANS FOR RESTORATION OF SURFACE:**

- a) Producing Location

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

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

- b) Dry Hole Abandoned Location

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

11. **SURFACE OWNERSHIP** – State of Utah.

11. **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

**Water Disposal**

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

**Additional Surface Stipulations**

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

**Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU S-16-9-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU S-16-9-17, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

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

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

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

Representative

Name: 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 #S-16-9-17, Section 16, Township 9S, Range 17E: Lease ML-3453B Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #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.

5/27/11  
Date

\_\_\_\_\_  
Mandie Crozier  
Regulatory Specialist  
Newfield Production Company

## 2-M SYSTEM

Blowout Prevention Equipment Systems

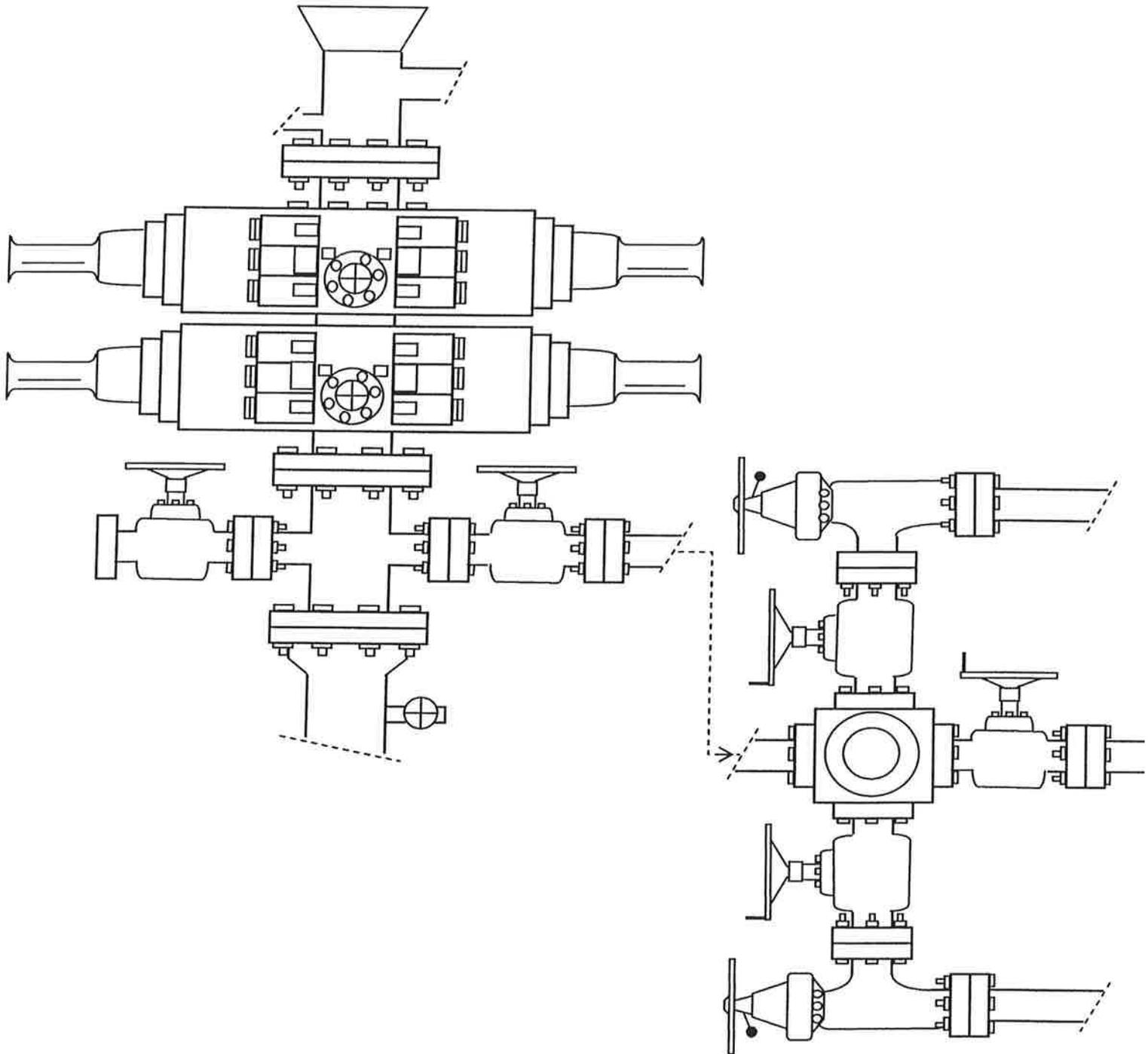


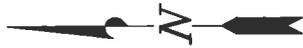
EXHIBIT C

# NEWFIELD EXPLORATION COMPANY

## WELL PAD INTERFERENCE PLAT

- K-16-9-17 (Proposed Well)
- S-16-9-17 (Proposed Well)
- 16-4-9-17 (Existing Well)

Pad Location: NESE Section 16, T9S, R17E, S.L.B.&M.



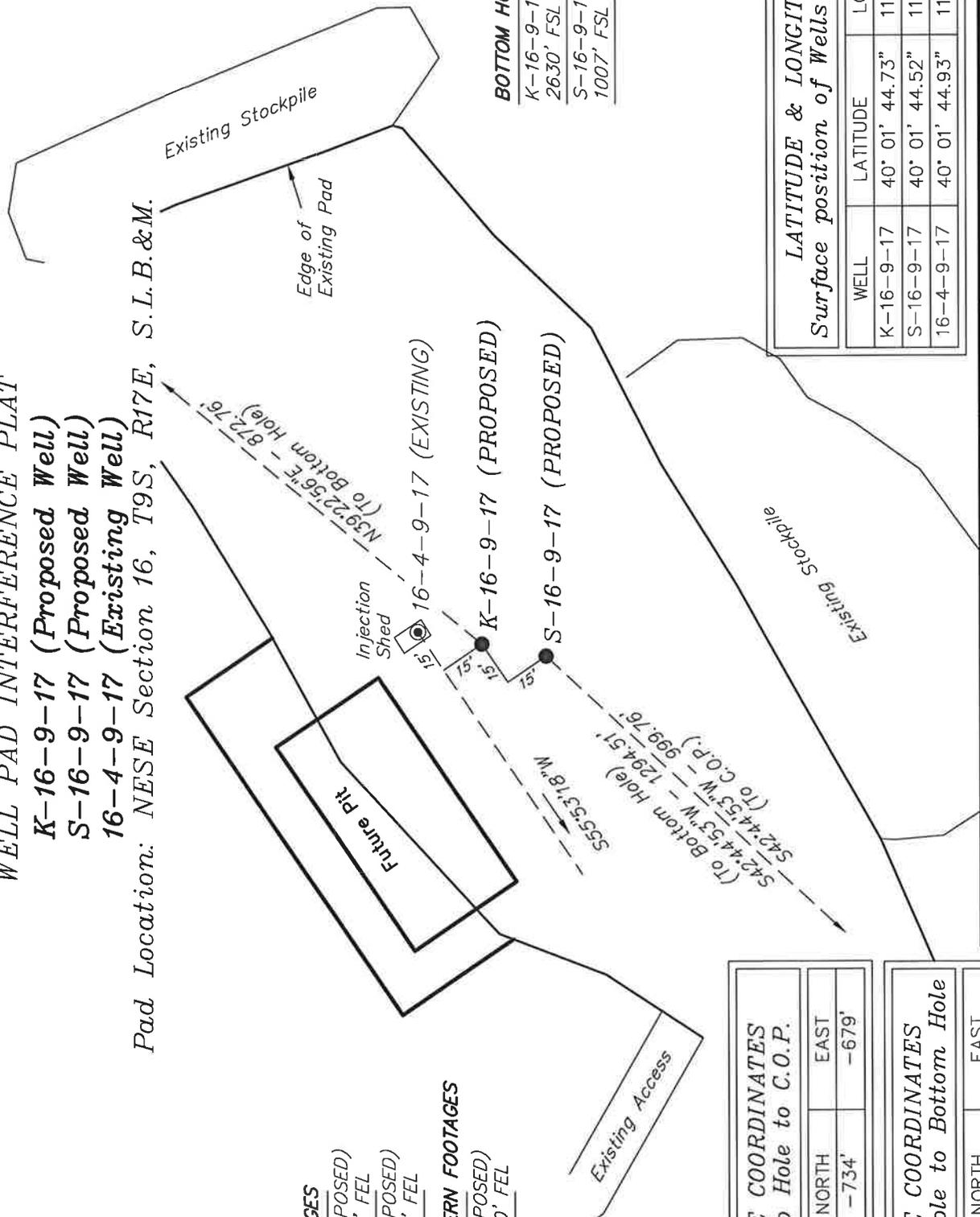
### TOP HOLE FOOTAGES

- K-16-9-17 (PROPOSED)  
1964' FSL & 665' FEL
- S-16-9-17 (PROPOSED)  
1943' FSL & 669' FEL

### CENTER OF PATTERN FOOTAGES

- S-16-9-17 (PROPOSED)  
1220' FSL & 1360' FEL

- ### BOTTOM HOLE FOOTAGES
- K-16-9-17 (PROPOSED)  
2630' FSL & 100' FEL
  - S-16-9-17 (PROPOSED)  
1007' FSL & 1564' FEL



RELATIVE COORDINATES From Top Hole to C.O.P.		
WELL	NORTH	EAST
S-16-9-17	-734'	-679'

RELATIVE COORDINATES From Top Hole to Bottom Hole		
WELL	NORTH	EAST
K-16-9-17	675'	554'
S-16-9-17	-951'	-879'

LATITUDE & LONGITUDE Surface position of Wells (NAD 83)		
WELL	LATITUDE	LONGITUDE
K-16-9-17	40° 01' 44.73"	110° 00' 16.36"
S-16-9-17	40° 01' 44.52"	110° 00' 16.42"
16-4-9-17	40° 01' 44.93"	110° 00' 16.31"

SURVEYED BY: S.V.	DATE SURVEYED: 02-28-11	VERSION: V1
DRAWN BY: M.W.	DATE DRAWN: 04-20-11	
SCALE: 1" = 50'	REVISED:	

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

# NEWFIELD EXPLORATION COMPANY

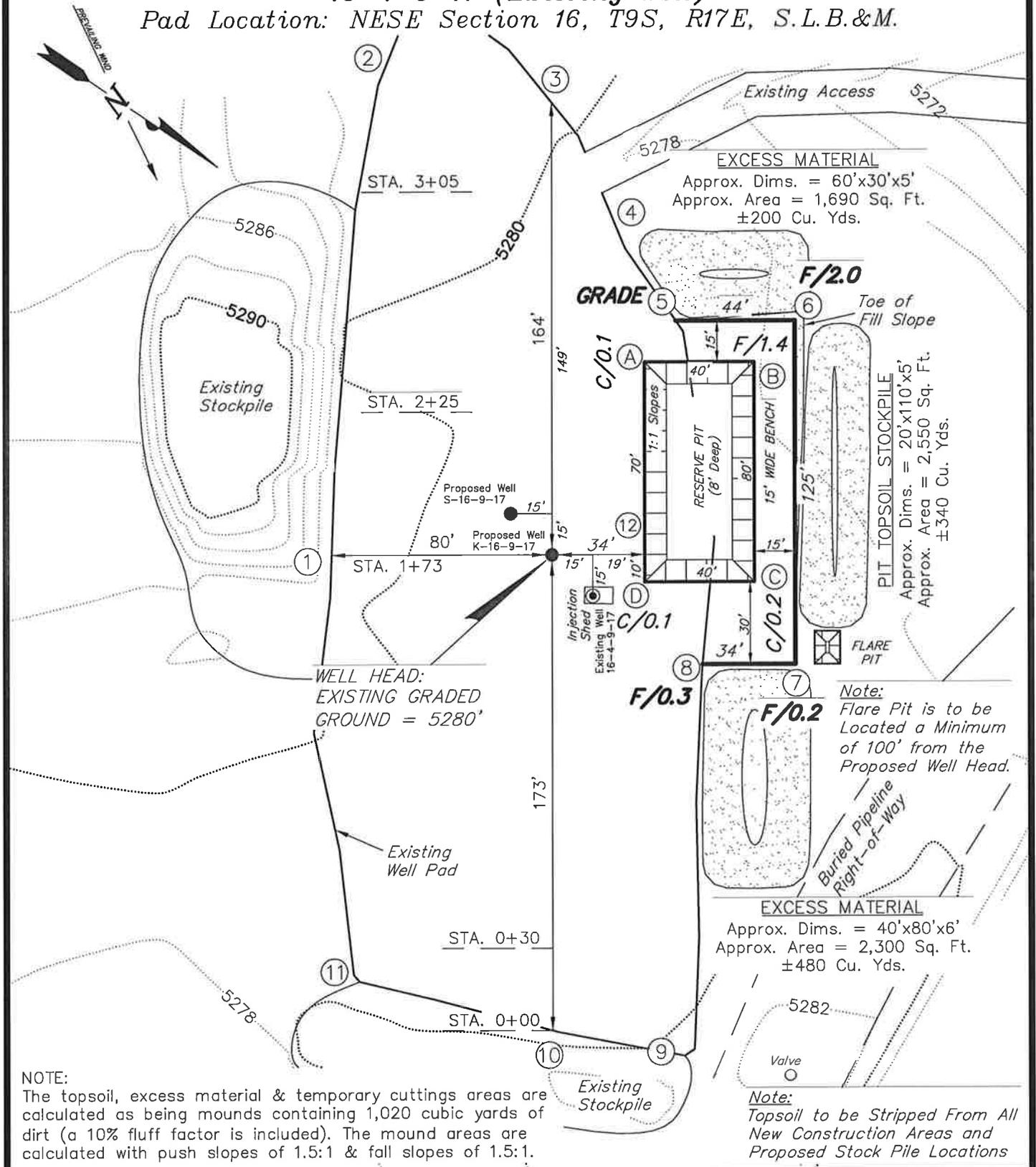
## LOCATION LAYOUT

**K-16-9-17 (Proposed Well)**

**S-16-9-17 (Proposed Well)**

**16-4-9-17 (Existing Well)**

Pad Location: NESE Section 16, T9S, R17E, S.L.B.&M.



**NOTE:**  
 The topsoil, excess material & temporary cuttings areas are calculated as being mounds containing 1,020 cubic yards of dirt (a 10% fluff factor is included). The mound areas are calculated with push slopes of 1.5:1 & fall slopes of 1.5:1.

**Note:**  
 Topsoil to be Stripped From All New Construction Areas and Proposed Stock Pile Locations

SURVEYED BY: S.V.	DATE SURVEYED: 02-28-11	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 03-16-11	V1
SCALE: 1" = 50'	REVISED:	

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

# NEWFIELD EXPLORATION COMPANY

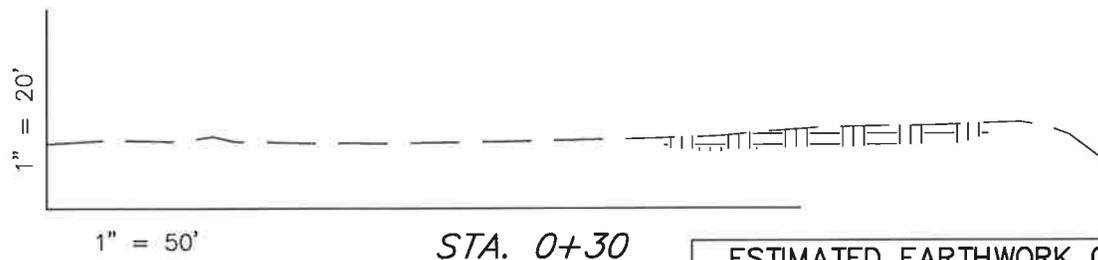
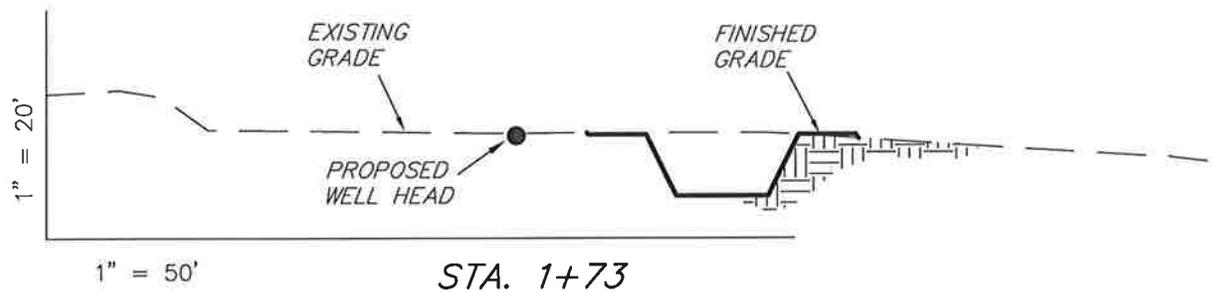
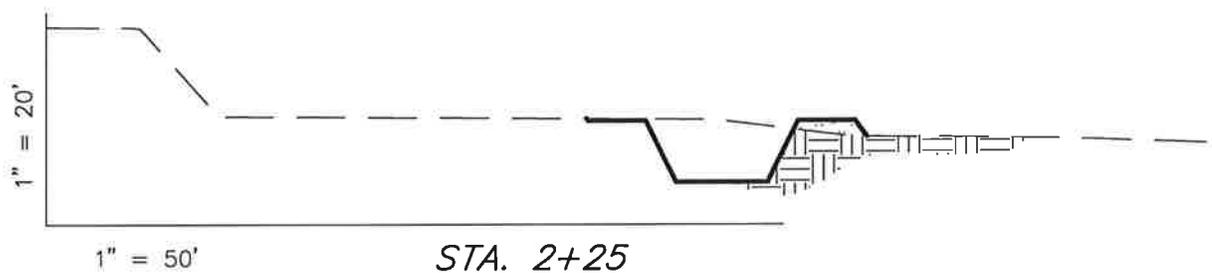
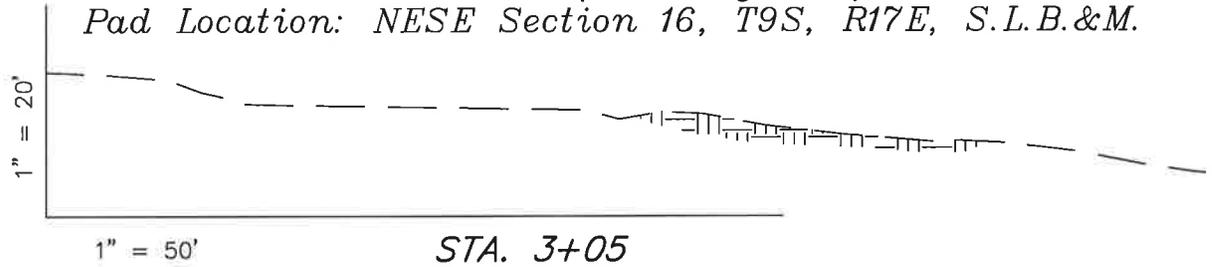
## CROSS SECTIONS

**K-16-9-17 (Proposed Well)**

**S-16-9-17 (Proposed Well)**

**16-4-9-17 (Existing Well)**

*Pad Location: NESE Section 16, T9S, R17E, S.L.B.&M.*



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

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

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	20	90	Topsoil is not included in Pad Cut	-70
PIT	690	0		690
<b>TOTALS</b>	<b>710</b>	<b>90</b>	<b>310</b>	<b>620</b>

SURVEYED BY: S.V.	DATE SURVEYED: 02-28-11	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 03-16-11	<b>V1</b>
SCALE: 1" = 50'	REVISED:	

**Tri State**  
Land Surveying, Inc.

180 NORTH VERNAL AVE. VERNAL, UTAH 84078

(435) 781-2501

# NEWFIELD EXPLORATION COMPANY

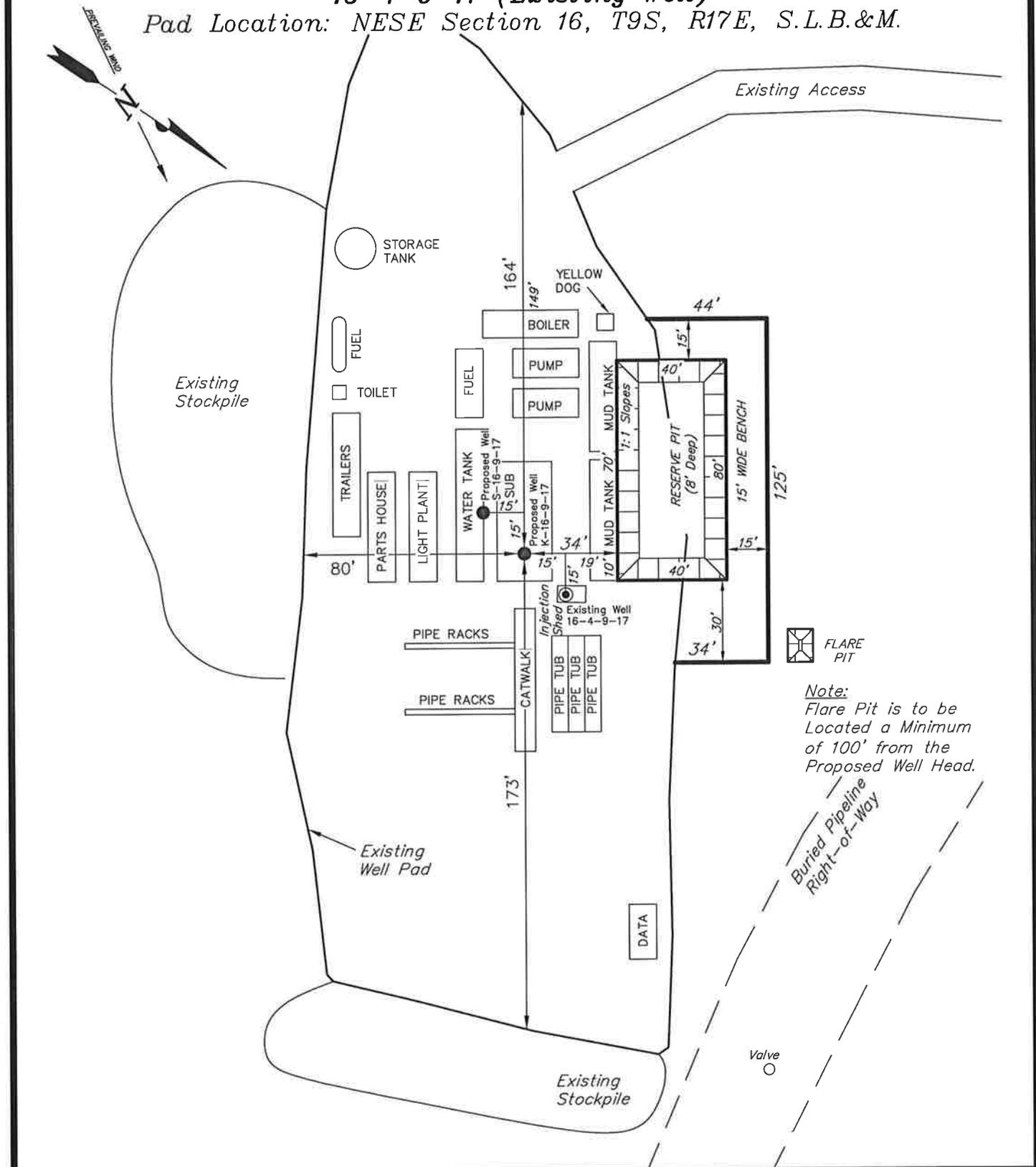
## TYPICAL RIG LAYOUT

**K-16-9-17 (Proposed Well)**

**S-16-9-17 (Proposed Well)**

**16-4-9-17 (Existing Well)**

Pad Location: NESE Section 16, T9S, R17E, S.L.B.&M.



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

Buried Pipeline Right-of-Way

Valve

SURVEYED BY: S.V.	DATE SURVEYED: 02-28-11	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 03-16-11	V1
SCALE: 1" = 50'	REVISED:	

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



VIA ELECTRONIC DELIVERY

May 31, 2011

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

RE: Directional Drilling  
**GMBU S-16-9-17**  
Greater Monument Butte (Green River) Unit

Surface Hole: T9S-R17E Section 16: NESE (ML-3453B)  
1943' FSL 669' FEL

At Target: T9S-R17E Section 16: SWSE (ML-3453B)  
1007' FSL 1564' FEL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company ("NPC") of an Application for Permit to Drill the above referenced well dated 5/27/2011, 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 303-383-4153 or by email at [pburns@newfield.com](mailto:pburns@newfield.com). Your consideration in this matter is greatly appreciated.

Sincerely,  
Newfield Production Company

A handwritten signature in blue ink, appearing to read "PB", is written over a light blue horizontal line.

Peter Burns  
Land Associate

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

FORM 3

AMENDED REPORT   
(highlight changes)

<b>APPLICATION FOR PERMIT TO DRILL</b>				5. MINERAL LEASE NO: ML-3453B	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>				7. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA	
B. TYPE OF WELL: OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> OTHER _____ SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				8. UNIT or CA AGREEMENT NAME: Greater Monument Butte	
2. NAME OF OPERATOR: Newfield Production Company				9. WELL NAME and NUMBER: GMBU S-16-9-17	
3. ADDRESS OF OPERATOR: Route #3 Box 3630 CITY Myton STATE UT ZIP 84052			PHONE NUMBER (435) 646-3721	10. FIELD AND POOL, OR WILDCAT: Monument Butte	
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: NE/SE 1943' FSL 669' FEL Sec. 16 T9S R17E AT PROPOSED PRODUCING ZONE: SW/SE 1007' FSL 1564' FEL Sec. 16 T9S R17E				11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 16 9S 17E	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: Approximately 16.2 miles southeast of Myton, Utah				12. COUNTY: Duchesne	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) Approx. 1,007' f/lse line, NA' f/unit line		16. NUMBER OF ACRES IN LEASE 560.00 acres		17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 20 acres	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) Approx. 797'		19. PROPOSED DEPTH: 5,667		20. BOND DESCRIPTION: #B001834	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5280' GL		22. APPROXIMATE DATE WORK WILL START: 3rd Qtr. 2011		23. ESTIMATED DURATION: (15) days from SPUD to rig release	

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT			
12 1/4	8 5/8	J-55	24.0	300	Class G w/2% CaCl	155 sx +/-	1.17	15.8
7 7/8	5 1/2	J-55	15.5	5,667	Lead(Prem Lite II)	275 sx +/-	3.26	11.0
					Tail (50/50 Poz)	450 sx +/-	1.24	14.3

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Mandie Crozier TITLE Regulatory Specialist

SIGNATURE *Mandie Crozier* DATE 5/22/11

(This space for State use only)

API NUMBER ASSIGNED: \_\_\_\_\_

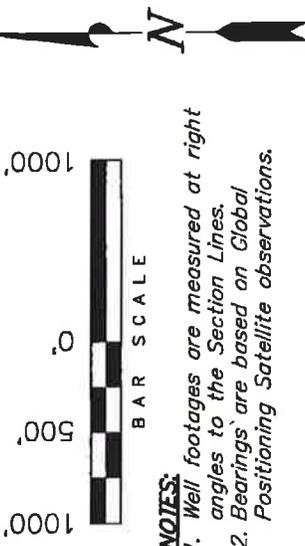
APPROVAL: \_\_\_\_\_

# T9S, R17E, S.L.B.&M.

# NEWFIELD EXPLORATION COMPANY

WELL LOCATION, S-16-9-17, LOCATED AS SHOWN IN THE NE 1/4 SE 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, S-16-9-17, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

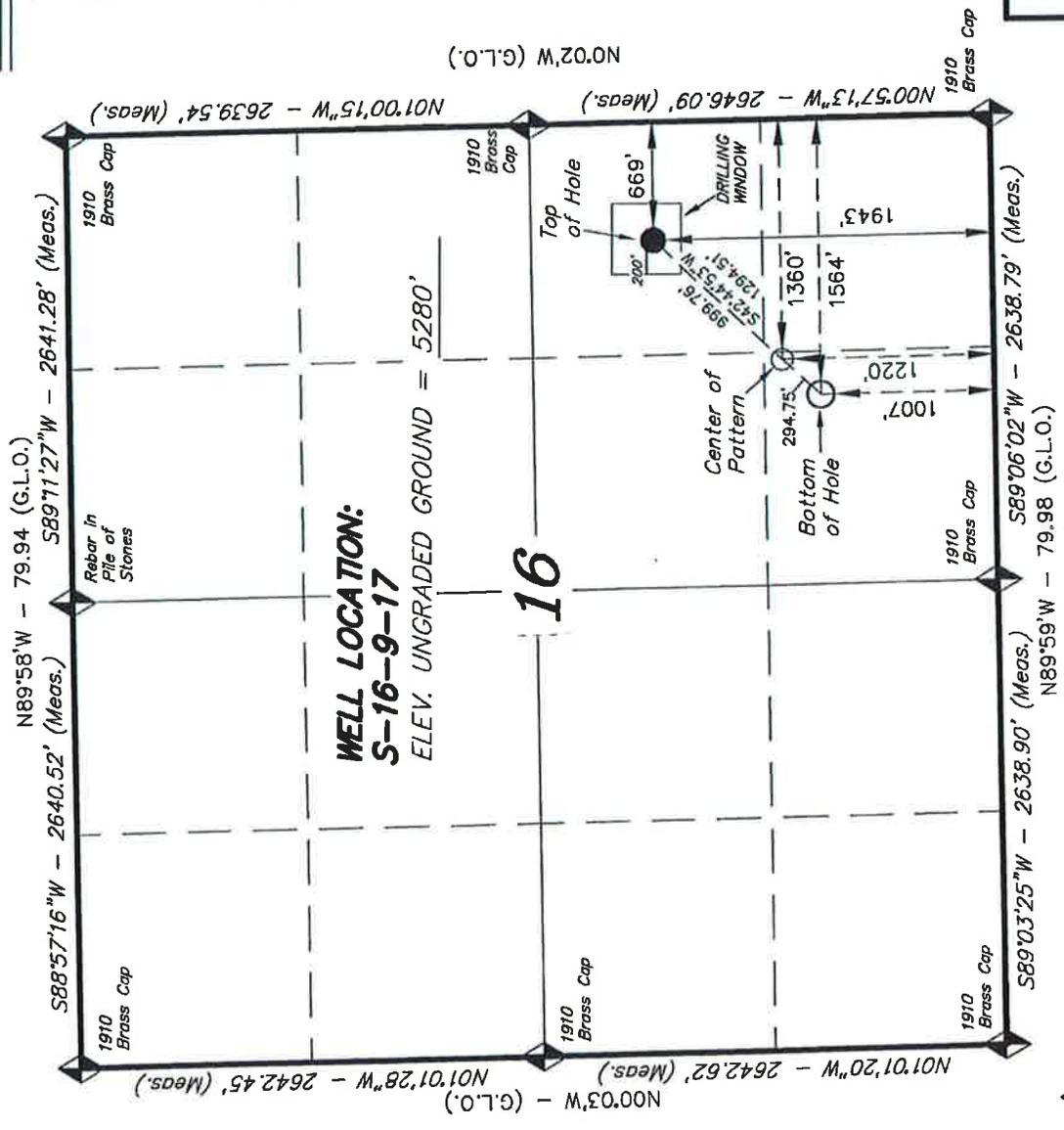


**NOTES:**

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

THIS IS TO CERTIFY THAT THE ABOVE PLAN WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. 189377

STACY W.  
REGISTERED LAND SURVEYOR  
REGISTRATION NO. 04-20-11  
STATE OF UTAH



◆ = SECTION CORNERS LOCATED

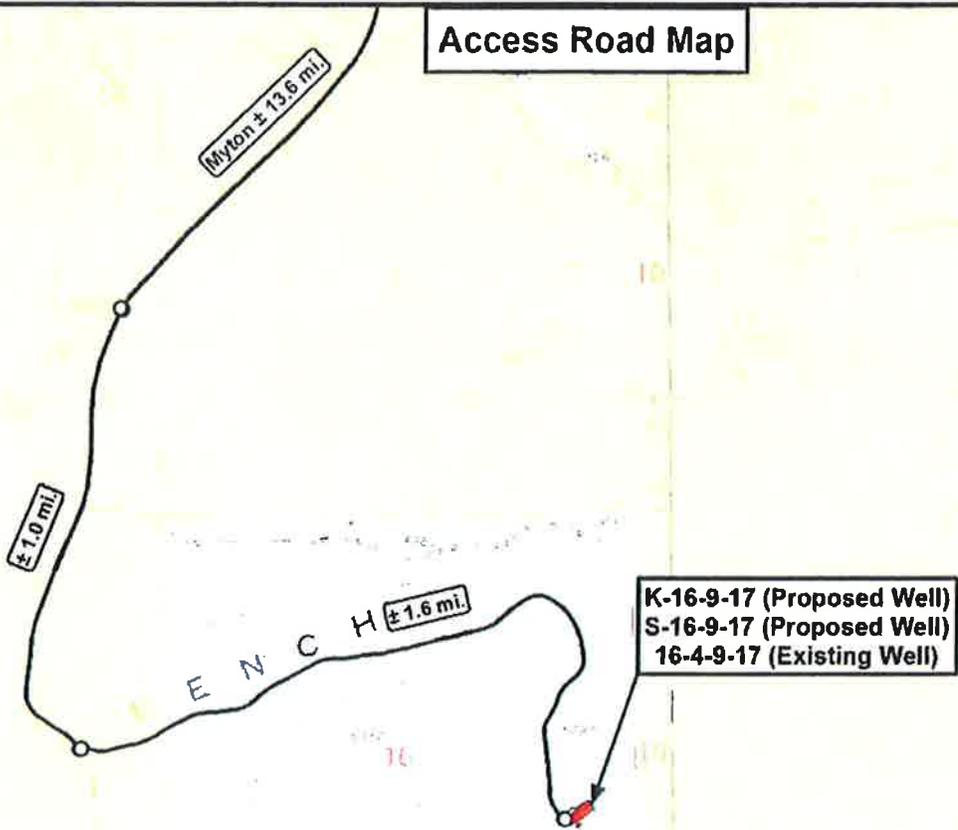
BASIS OF ELEV; Elevations are based on an N.G.S. OPUS Correction. LOCATION: LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

**S-16-9-17**  
(Surface Location) **NAD 83**  
LATITUDE = 40° 01' 44.52"  
LONGITUDE = 110° 00' 16.42"

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

DATE SURVEYED: 02-28-11	SURVEYED BY: S.V.	VERSION: V1
DATE DRAWN: 04-20-11	DRAWN BY: M.W.	
REVISED:	SCALE: 1" = 1000'	

**Access Road Map**



**Legend**

○—○ Existing Road

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

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

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



**NEWFIELD EXPLORATION COMPANY**

K-16-9-17 (Proposed Well)  
S-16-9-17 (Proposed Well)  
16-4-9-17 (Existing Well)  
SEC. 16, T9S, R17E, S.L.B.&M. Duchesne County, UT.

DRAWN BY:	C.H.M.	REVISED:	VERSION:
DATE:	04-27-2011		V1
SCALE:	1" = 2,000'		

**TOPOGRAPHIC MAP**

SHEET  
**B**

# 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)**

June 3, 2011

## Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Greater Monument  
Butte Unit, Duchesne and Uintah Counties,  
Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-013-50787	GMBU K-16-9-17	Sec 16 T09S R17E 1964 FSL 0665 FEL BHL Sec 16 T09S R17E 2630 FSL 0100 FEL
43-013-50788	GMBU H-16-9-17	Sec 16 T09S R17E 1979 FNL 1951 FEL BHL Sec 16 T09S R17E 0993 FNL 2566 FWL
43-013-50789	GMBU S-32-8-16	Sec 32 T08S R16E 1944 FSL 0558 FEL BHL Sec 32 T08S R16E 1162 FSL 1486 FEL
43-013-50790	GMBU I-16-9-17	Sec 16 T09S R17E 1964 FNL 1935 FEL BHL Sec 16 T09S R17E 1162 FNL 1018 FEL
43-013-50791	GMBU L-16-9-17	Sec 16 T09S R17E 1853 FSL 1836 FEL BHL Sec 16 T09S R17E 2577 FNL 1072 FEL
43-013-50792	GMBU R-16-9-17	Sec 16 T09S R17E 0587 FSL 1961 FEL BHL Sec 16 T09S R17E 1460 FSL 2465 FWL
43-013-50793	GMBU S-16-9-17	Sec 16 T09S R17E 1943 FSL 0669 FEL BHL Sec 16 T09S R17E 1007 FSL 1564 FEL
43-013-50794	GMBU M-16-9-17	Sec 16 T09S R17E 1838 FSL 1850 FEL BHL Sec 16 T09S R17E 2444 FNL 2491 FWL

**RECEIVED: June 06, 2011**

API#	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-047-51629	GMBU H-35-8-17	Sec 35 T08S R17E 2078 FNL 2203 FEL BHL Sec 35 T08S R17E 1115 FNL 2573 FEL
43-047-51630	GMBU I-35-8-17	Sec 35 T08S R17E 2060 FNL 2191 FEL BHL Sec 35 T08S R17E 1337 FNL 1327 FEL
43-047-51631	GMBU L-35-8-17	Sec 35 T08S R17E 2029 FNL 0710 FEL BHL Sec 35 T08S R17E 2445 FSL 1604 FEL
43-047-51632	GMBU O-36-8-17	Sec 35 T08S R17E 2011 FNL 0700 FEL BHL Sec 36 T08S R17E 2422 FSL 0259 FWL
43-047-51633	GMBU R-35-8-17	Sec 35 T08S R17E 2008 FSL 2193 FWL BHL Sec 35 T08S R17E 0942 FSL 2467 FEL
43-013-50798	GMBU Q-22-8-17	Sec 22 T08S R17E 0565 FSL 0820 FWL BHL Sec 22 T08S R17E 1203 FSL 1693 FWL
43-047-51634	GMBU P-25-8-17	Sec 25 T08S R17E 0735 FSL 0615 FWL BHL Sec 25 T08S R17E 1398 FSL 0009 FWL
43-047-51635	GMBU Q-25-8-17	Sec 25 T08S R17E 0755 FSL 0620 FWL BHL Sec 25 T08S R17E 1475 FSL 1559 FWL
43-047-51636	GMBU M-35-8-17	Sec 35 T08S R17E 2029 FSL 2197 FWL BHL Sec 35 T08S R17E 2600 FNL 2502 FEL
43-013-50799	GMBU D-3-9-17	Sec 34 T08S R17E 0466 FSL 0424 FWL BHL Sec 03 T09S R17E 0151 FNL 1599 FWL
43-013-50800	GMBU A-4-9-17	Sec 34 T08S R17E 0459 FSL 0404 FWL BHL Sec 04 T09S R17E 0030 FNL 0040 FEL

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

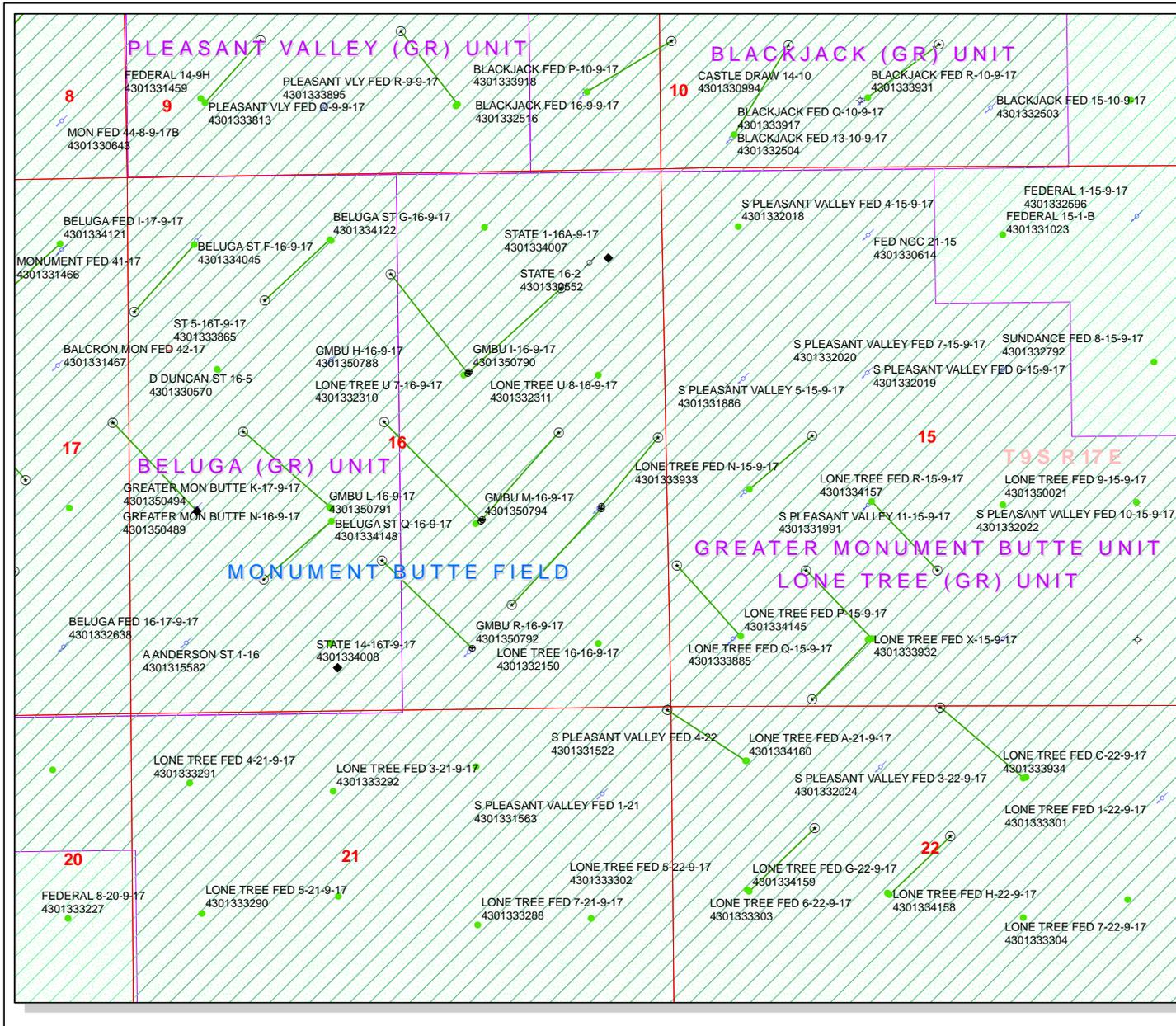
Michael L. Coulthard

Digitally signed by Michael L. Coulthard  
DN: cn=Michael L. Coulthard, o=Bureau of Land Management,  
ou=Branch of Minerals, email=Michael\_Coulthard@blm.gov, c=US  
Date: 2011.06.03 08:24:54 -06'00'

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

MCoulthard:mc:6-3-11

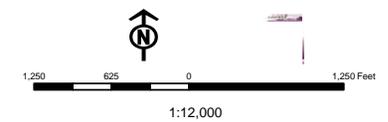
**RECEIVED: June 06, 2011**



**API Number: 4301350793**  
**Well Name: GMBU S-16-9-17**  
**Township T0.9 . Range R1.7 . Section 16**  
**Meridian: SLBM**  
**Operator: NEWFIELD PRODUCTION COMPANY**

Map Prepared:  
 Map Produced by Diana Mason

Units	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERMAL	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
Unknown	SGW - Shut-in Gas Well
ABANDONED	SOW - Shut-in Oil Well
ACTIVE	TA - Temp. Abandoned
COMBINED	TW - Test Well
INACTIVE	WDW - Water Disposal
STORAGE	WIW - Water Injection Well
TERMINATED	WSW - Water Supply Well
Sections	
Township	



**From:** Jim Davis  
**To:** Bonner, Ed; Garrison, LaVonne; Hill, Brad; Mason, Diana  
**CC:** mcrozier@newfield.com; teaton@newfield.com  
**Date:** 7/14/2011 8:48 AM  
**Subject:** Newfield APD approvals

The following wells have been approved by SITLA including arch and paleo clearance.

Newfield Production's GMBU V-32-8-17 [API #4301350842]  
Newfield Production's GMBU S-32-8-16 [API #4301350789]  
Newfield Production's GMBU L-32-8-16 [API #4301350837]  
Newfield Production's GMBU I-16-9-17 [API #4301350790]  
Newfield Production's GMBU H-16-9-17 [API #4301350788]  
Newfield Production's GMBU H-32-8-16 [API #4301350836]  
Newfield Production's GMBU G-32-8-16 [API #4301350835]  
Newfield Production's GMBU Q-32-8-16 [API #4301350838]  
Newfield Production's GMBU R-32-8-16 [API #4301350839]  
Newfield Production's GMBU W-2-9-17 [API #4304751665]  
Newfield Production's GMBU K-16-9-17 [API #4301350787]  
Newfield Production's GMBU S-16-9-17 [API #4301350793]  
Newfield Production's GMBU L-16-9-17 [API #4301350791]  
Newfield Production's GMBU M-16-9-17 [API #4301350794]  
Newfield Production's GMBU R-16-9-17 [API #4301350792]

-Jim Davis

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

BOPE REVIEW NEWFIELD PRODUCTION COMPANY GMBU S-16-9-17 43013507930000

Well Name	NEWFIELD PRODUCTION COMPANY GMBU S-16-9-17 4301			
String	Surf	Prod		
Casing Size(")	8.625	5.500		
Setting Depth (TVD)	300	5485		
Previous Shoe Setting Depth (TVD)	0	300		
Max Mud Weight (ppg)	8.3	8.4		
BOPE Proposed (psi)	500	2000		
Casing Internal Yield (psi)	2950	4810		
Operators Max Anticipated Pressure (psi)	2375	8.3		

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

Calculations	Prod String	5.500	"
Max BHP (psi)	.052*Setting Depth*MW=	2396	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1738	YES <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1189	YES <input type="checkbox"/> OK
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1255	NO <input type="checkbox"/> Reasonable for area
Required Casing/BOPE Test Pressure=		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		300	psi *Assumes 1psi/ft frac gradient

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

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO <input type="checkbox"/>
			<b>*Can Full Expected Pressure Be Held At Previous Shoe?</b>
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO <input type="checkbox"/>
Required Casing/BOPE Test Pressure=			psi

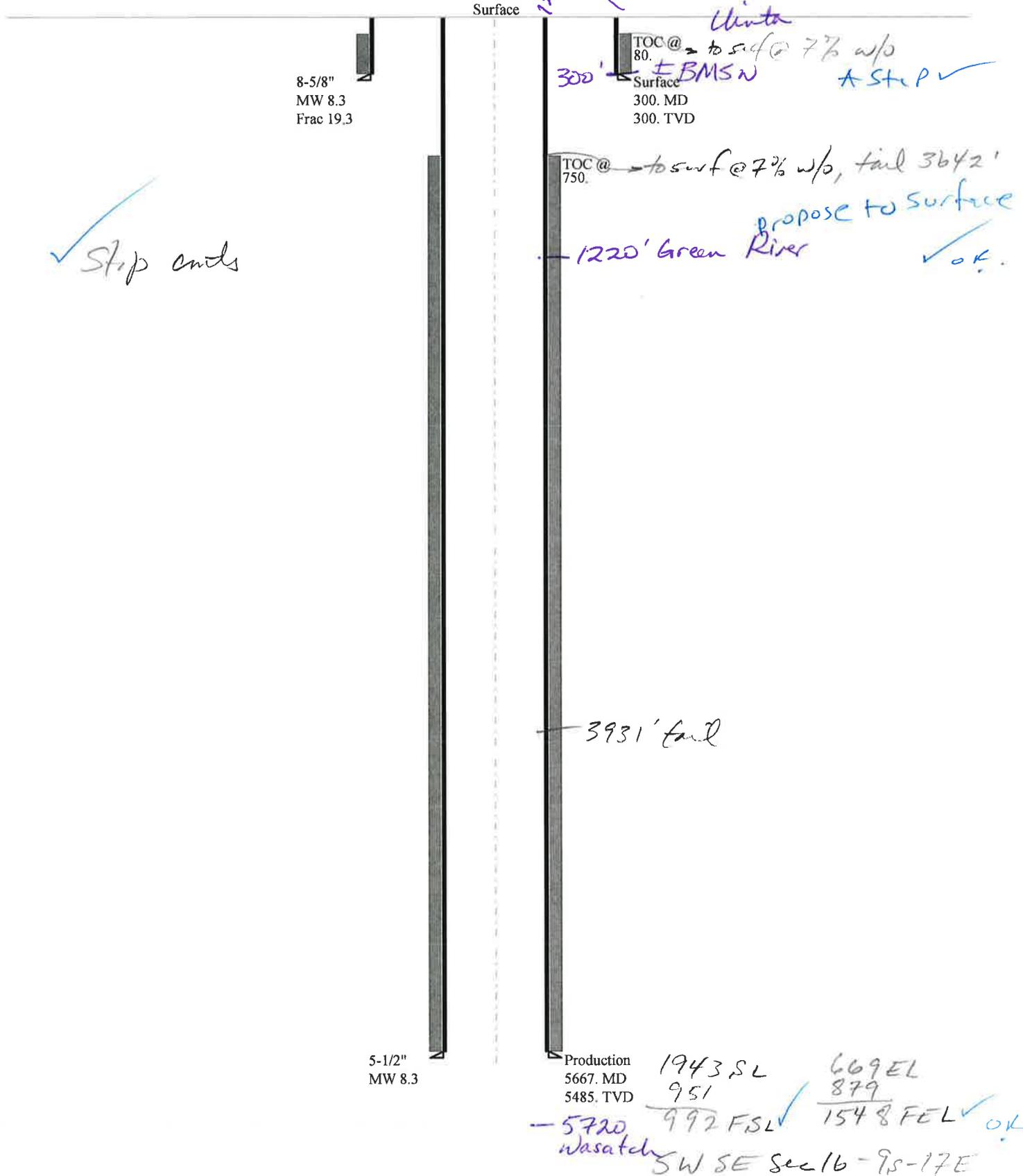
API Well Number: 43013507930000

\*Max Pressure Allowed @ Previous Casing Shoe=

psi \*Assumes 1psi/ft frac gradient

# 43013507930000 GMBU S-16-9-17

## Casing Schematic



Well name:	43013507930000 GMBU S-16-9-17		
Operator:	NEWFIELD PRODUCTION COMPANY		
String type:	Surface	Project ID:	43-013-50793
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

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

**Burst**

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

No backup mud specified.

**Minimum design factors:**

**Collapse:**

Design factor: 1.125

**Burst:**

Design factor: 1.00

**Tension:**

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

Tension is based on air weight.  
 Neutral point: 262 ft

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 78 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft  
 Cement top: 80 ft

**Non-directional string.**

**Re subsequent strings:**

Next setting depth: 5,485 ft  
 Next mud weight: 8.400 ppg  
 Next setting BHP: 2,394 psi  
 Fracture mud wt: 19.250 ppg  
 Fracture depth: 300 ft  
 Injection pressure: 300 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	300	8.625	24.00	J-55	ST&C	300	300	7.972	1544

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	130	1370	10.557	300	2950	9.83	7.2	244	33.90 J

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

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

Date: August 1, 2011  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 300 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>43013507930000 GMBU S-16-9-17</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	Production	Project ID:	43-013-50793
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

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

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 74 °F  
 Bottom hole temperature: 151 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 100 ft  
 Cement top: 750 ft

**Burst**

Max anticipated surface pressure: 1,167 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 2,374 psi

No backup mud specified.

**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: 4,945 ft

**Directional Info - Build & Hold**

Kick-off point 600 ft  
 Departure at shoe: 1295 ft  
 Maximum dogleg: 1.5 °/100ft  
 Inclination at shoe: 16.66 °

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	5667	5.5	15.50	J-55	LT&C	5485	5667	4.825	20010
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	2374	4040	1.702	2374	4810	2.03	85	217	2.55 J

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

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

Date: August 1, 2011  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 5485 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.

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** GMBU S-16-9-17  
**API Number** 43013507930000      **APD No** 3883      **Field/Unit** MONUMENT BUTTE  
**Location: 1/4,1/4** NESE      **Sec** 16      **Tw** 9.0S      **Rng** 17.0E      1943 FSL 669 FEL  
**GPS Coord (UTM)** 585001 4431257      **Surface Owner**

**Participants**

Floyd Bartlett (DOGM), Tim Eaton (Newfield), Jim Davis (SITLA) and Alex Hansen (UDWR).

**Regional/Local Setting & Topography**

The proposed GMBU K-16- 9-17 and GMBU S-16-9-17 oil wells will be directional drilled from the pad of the State 16-4-9-17 water flood injection well. The area is designated for 20 acre spacing. No changes are needed to the existing pad. The reserve pit is within a small fill (1.4 feet). No stability concerns exist. No drainage diversions are needed.

A field review of the existing pad showed no stability concerns as it now exists. It should be suitable for drilling and operating the proposed additional wells.

SITLA owns 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>		

**Ancillary Facilities****Waste Management Plan Adequate?****Environmental Parameters****Affected Floodplains and/or Wetlands****Flora / Fauna**

Existing pad.

**Soil Type and Characteristics****Erosion Issues****Sedimentation Issues****Site Stability Issues****Drainage Diversion 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 40' x 80' x 8' deep will be dug in the northwest corner of the site. It will be lined with a 16-mil liner and sub felt. It is within a small fill (1.4 feet).

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

**Other Observations / Comments**

Floyd Bartlett  
**Evaluator**

6/14/2011  
**Date / Time**

# Application for Permit to Drill Statement of Basis

8/8/2011

## 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>
3883	43013507930000	LOCKED	OW	S	No
<b>Operator</b>	NEWFIELD PRODUCTION COMPANY		<b>Surface Owner-APD</b>		
<b>Well Name</b>	GMBU S-16-9-17		<b>Unit</b>	GMBU (GRRV)	
<b>Field</b>	MONUMENT BUTTE		<b>Type of Work</b>	DRILL	
<b>Location</b>	NESE 16 9S 17E S 1943 FSL 669 FEL		GPS Coord (UTM)	585004E	4431259N

### 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 300'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the center of Section 16. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect useable sources of underground water.

Brad Hill  
**APD Evaluator**

6/27/2011  
**Date / Time**

### Surface Statement of Basis

The proposed GMBU K-16- 9-17 and GMBU S-16-9-17 oil wells will be directional drilled from the pad of the State 16-4-9-17 water flood injection well. The area is designated for 20 acre spacing. No changes are needed to the existing pad. The reserve pit is within a small fill (1.4 feet). No stability concerns exist. No drainage diversions are needed.

A field review of the existing pad showed no stability concerns as it now exists. It should be suitable for drilling and operating the proposed additional wells.

SITLA owns the surface and the minerals. Mr. Jim Davis of SITLA attended the evaluation and had no concerns. Mr. Alex Hansen of the UDWR also attended and had no recommendations for wildlife.

Floyd Bartlett  
**Onsite Evaluator**

6/14/2011  
**Date / Time**

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

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	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:** 5/26/2011**API NO. ASSIGNED:** 43013507930000**WELL NAME:** GMBU S-16-9-17**OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695)**PHONE NUMBER:** 435 646-4825**CONTACT:** Mandie Crozier**PROPOSED LOCATION:** NESE 16 090S 170E**Permit Tech Review:** **SURFACE:** 1943 FSL 0669 FEL**Engineering Review:** **BOTTOM:** 1007 FSL 1564 FEL**Geology Review:** **COUNTY:** DUCHESNE**LATITUDE:** 40.02916**LONGITUDE:** -110.00378**UTM SURF EASTINGS:** 585004.00**NORTHINGS:** 4431259.00**FIELD NAME:** MONUMENT BUTTE**LEASE TYPE:** 3 - State**LEASE NUMBER:** ML-3453B**PROPOSED PRODUCING FORMATION(S):** GREEN RIVER**SURFACE OWNER:** 3 - State**COALBED METHANE:** NO**RECEIVED AND/OR REVIEWED:**

- PLAT
- Bond: STATE - B001834
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 437478
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

**Commingle Approved****LOCATION AND SITING:**

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

**Comments:** Presite Completed

**Stipulations:** 5 - Statement of Basis - bhill  
 8 - Cement to Surface -- 2 strings - hmadonald  
 15 - Directional - dmason  
 27 - Other - bhill



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** GMBU S-16-9-17  
**API Well Number:** 43013507930000  
**Lease Number:** ML-3453B  
**Surface Owner:** STATE  
**Approval Date:** 8/8/2011

**Issued to:**

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

**Authority:**

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

**Duration:**

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

**General:**

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

**Conditions of Approval:**

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

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

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

Cement volumes for the 8 5/8" and 5 1/2" casing strings shall be determined from actual hole diameters in order to place cement from the pipe setting depths back to the surface.

**Additional Approvals:**

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

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

- Plug and abandonment of the well – contact Dustin Doucet

**Notification Requirements:**

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

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

**Contact Information:**

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

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

**Reporting Requirements:**

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

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

**Approved By:**



For John Rogers  
Associate Director, Oil & Gas

BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross # 29 Submitted  
By Branden Arnold Phone Number 435-401-0223  
Well Name/Number GMBU S-16-9-17  
Qtr/Qtr NE/SE Section 16 Township 9S Range 17E  
Lease Serial Number ML-3453B  
API Number 43-013-50793

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

Date/Time 8/15/11      9:00 AM  PM

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

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

Date/Time 8/15/11      3:00 AM  PM

BOPE

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

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

Remarks \_\_\_\_\_

---

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-3453B
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>  <b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> GMBU S-16-9-17
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY	<b>9. API NUMBER:</b> 43013507930000
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052	<b>PHONE NUMBER:</b> 435 646-4825 Ext
<b>4. LOCATION OF WELL FOOTAGES AT SURFACE:</b> 1943 FSL 0669 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 16 Township: 09.0S Range: 17.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE  <b>COUNTY:</b> DUCHESNE  <b>STATE:</b> UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 8/25/2011	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="APD Change"/>

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

On the original TVD given to the directional planner for the GMBU S-16-9-17 was too shallow, therefore we need to amend the originally permitted proposed depth of 5667'(MD) to a deeper depth of 5964'(MD). The new proposed Bottom Hole Footages will be 945' FSL and 1623' FEL. Attached find a new Plat, Well Pad Interference Plat, Directional Drill Plan, and Drilling Program reflecting the change in proposed depth.

**Approved by the Utah Division of Oil, Gas and Mining**

Date: 08/31/2011

By: *Derek Quist*

<b>NAME (PLEASE PRINT)</b> Mandie Crozier	<b>PHONE NUMBER</b> 435 646-4825	<b>TITLE</b> Regulatory Tech
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/25/2011	

Well name:	<b>43013507930000 GMBU S-16-9-17</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	Production	Project ID:	43-013-50793
Location:	DUCHESNE COUNTY		

**Design parameters:****Collapse**

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

**Burst**

Max anticipated surface pressure: 1,227 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP: 2,497 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: 5,205 ft

**Environment:**

H2S considered? No  
Surface temperature: 74 °F  
Bottom hole temperature: 155 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft

Cement top: 1,047 ft

**Directional well information:**

Kick-off point: 600 ft  
Departure at shoe: 1380 ft  
Maximum dogleg: 1.5 °/100ft  
Inclination at shoe: 16.66 °

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	5964	5.5	15.50	J-55	LT&C	5770	5964	4.825	21059
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	2497	4040	1.618	2497	4810	1.93	89.4	217	2.43 J

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

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

Date: August 31, 2011  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 5770 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.

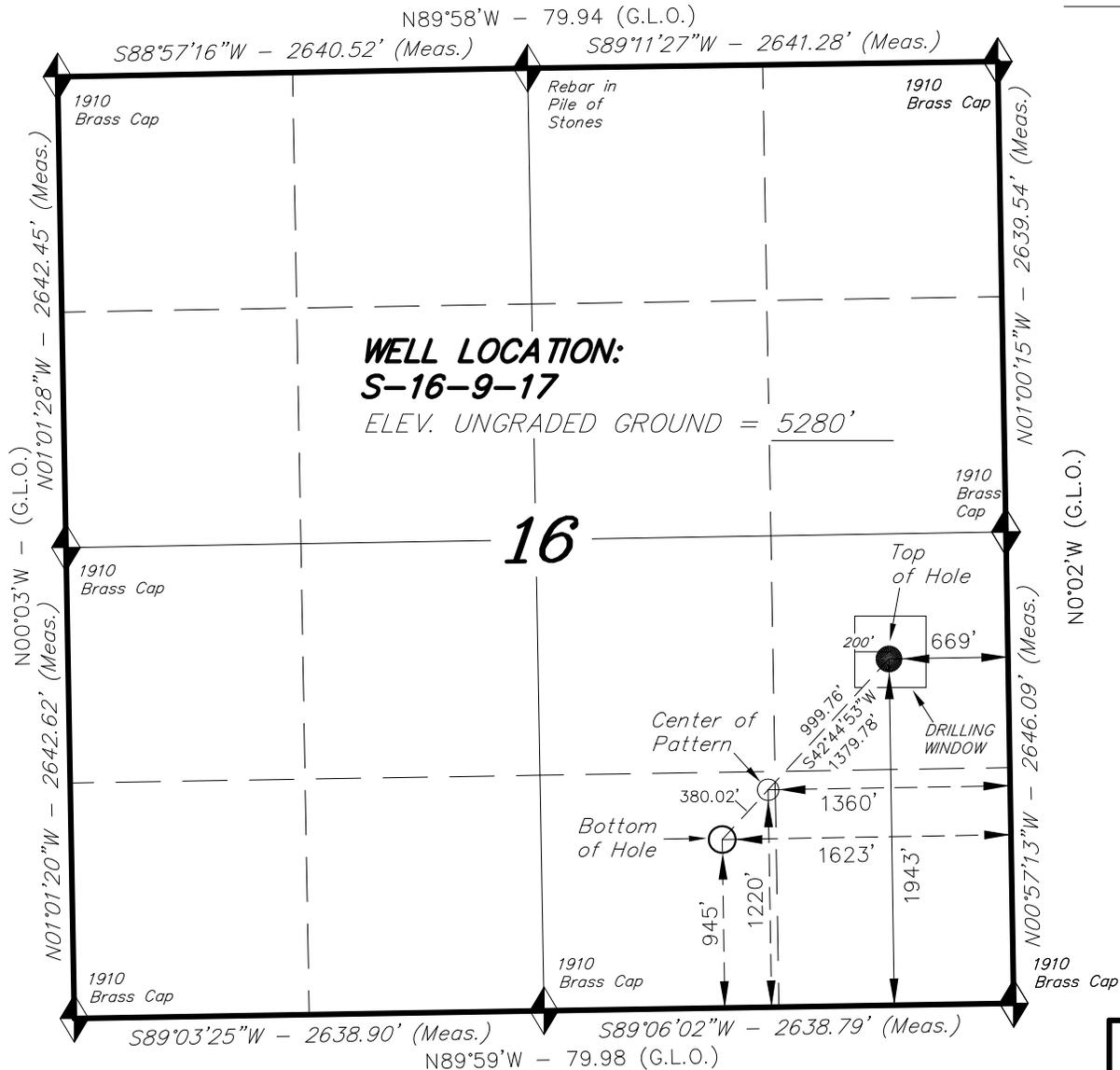
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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

**RECEIVED** Aug. 25, 2011

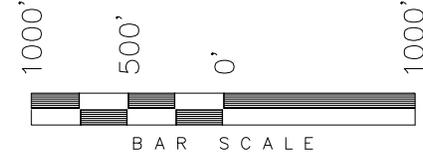
# T9S, R17E, S.L.B.&M.

# NEWFIELD EXPLORATION COMPANY



WELL LOCATION, S-16-9-17, LOCATED AS SHOWN IN THE NE 1/4 SE 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

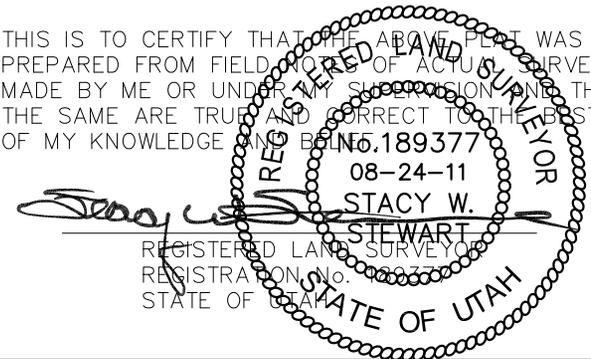
TARGET BOTTOM HOLE, S-16-9-17, LOCATED AS SHOWN IN THE SW 1/4 SE 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



**NOTES:**

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

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



◆ = SECTION CORNERS LOCATED

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

**S-16-9-17**  
 (Surface Location) NAD 83  
 LATITUDE = 40° 01' 44.52"  
 LONGITUDE = 110° 00' 16.42"

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

DATE SURVEYED: 02-28-11	SURVEYED BY: S.V.	VERSION:
DATE DRAWN: 04-20-11	DRAWN BY: M.W.	V2
REVISED: 08-24-11 - M.W.	SCALE: 1" = 1000'	

# NEWFIELD EXPLORATION COMPANY

## WELL PAD INTERFERENCE PLAT

**K-16-9-17 (Proposed Well)**

**S-16-9-17 (Proposed Well)**

**16-4-9-17 (Existing Well)**

Pad Location: NESE Section 16, T9S, R17E, S.L.B.&M.



### TOP HOLE FOOTAGES

*K-16-9-17 (PROPOSED)*

1964' FSL & 665' FEL

*S-16-9-17 (PROPOSED)*

1943' FSL & 669' FEL

### CENTER OF PATTERN FOOTAGES

*S-16-9-17 (PROPOSED)*

1220' FSL & 1360' FEL

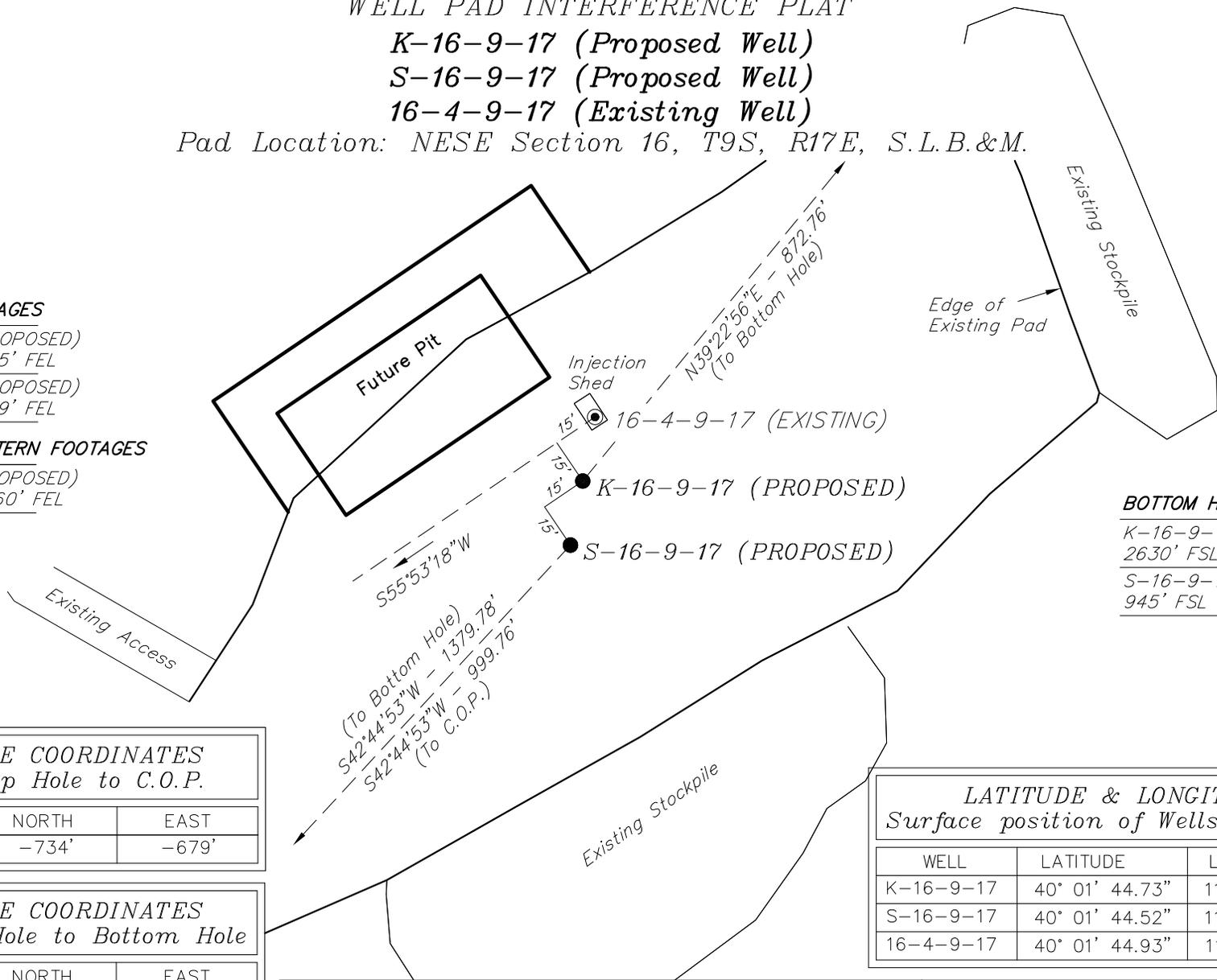
### BOTTOM HOLE FOOTAGES

*K-16-9-17 (PROPOSED)*

2630' FSL & 100' FEL

*S-16-9-17 (PROPOSED)*

945' FSL & 1623' FEL



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

WELL	NORTH	EAST
S-16-9-17	-734'	-679'

### RELATIVE COORDINATES From Top Hole to Bottom Hole

WELL	NORTH	EAST
K-16-9-17	675'	554'
S-16-9-17	-1,013	-937'

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

WELL	LATITUDE	LONGITUDE
K-16-9-17	40° 01' 44.73"	110° 00' 16.36"
S-16-9-17	40° 01' 44.52"	110° 00' 16.42"
16-4-9-17	40° 01' 44.93"	110° 00' 16.31"

SURVEYED BY: S.V.	DATE SURVEYED: 02-28-11	VERSION:
DRAWN BY: M.W.	DATE DRAWN: 04-20-11	V2
SCALE: 1" = 50'	REVISED: M.W. - 08-24-11	

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



# **NEWFIELD EXPLORATION**

**USGS Myton SW (UT)  
SECTION 16 T9S, R17E  
S-16-9-17**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**17 August, 2011**





## PayZone Directional Services, LLC.

## Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well S-16-9-17
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Site:</b>	SECTION 16 T9S, R17E	<b>North Reference:</b>	True
<b>Well:</b>	S-16-9-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

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

<b>Site</b>	SECTION 16 T9S, R17E, SEC 16 T9S, R17E				
<b>Site Position:</b>		<b>Northing:</b>	7,183,439.74 ft	<b>Latitude:</b>	40° 1' 51.237 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,056,769.95 ft	<b>Longitude:</b>	110° 0' 46.831 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.95 °

<b>Well</b>	S-16-9-17, SHL LAT:40°01'44.52" LONG: -110°00'16.42"					
<b>Well Position</b>	<b>+N/-S</b>	-679.8 ft	<b>Northing:</b>	7,182,799.62 ft	<b>Latitude:</b>	40° 1' 44.520 N
	<b>+E/-W</b>	2,365.4 ft	<b>Easting:</b>	2,059,146.35 ft	<b>Longitude:</b>	110° 0' 16.420 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	5,292.0 ft	<b>Ground Level:</b>	5,280.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2011/04/19	11.31	65.80	52,287

<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	222.75

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,710.7	16.66	222.75	1,695.1	-117.8	-108.8	1.50	1.50	0.00	222.75	
4,638.5	16.66	222.75	4,500.0	-734.1	-678.6	0.00	0.00	0.00	0.00	S-16-9-17 TGT
5,964.1	16.66	222.75	5,770.0	-1,013.2	-936.6	0.00	0.00	0.00	0.00	



## PayZone Directional Services, LLC.

## Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well S-16-9-17
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Site:</b>	SECTION 16 T9S, R17E	<b>North Reference:</b>	True
<b>Well:</b>	S-16-9-17	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	222.75	700.0	-1.0	-0.9	1.3	1.50	1.50	0.00
800.0	3.00	222.75	799.9	-3.8	-3.6	5.2	1.50	1.50	0.00
900.0	4.50	222.75	899.7	-8.6	-8.0	11.8	1.50	1.50	0.00
1,000.0	6.00	222.75	999.3	-15.4	-14.2	20.9	1.50	1.50	0.00
1,100.0	7.50	222.75	1,098.6	-24.0	-22.2	32.7	1.50	1.50	0.00
1,200.0	9.00	222.75	1,197.5	-34.5	-31.9	47.0	1.50	1.50	0.00
1,300.0	10.50	222.75	1,296.1	-47.0	-43.4	64.0	1.50	1.50	0.00
1,400.0	12.00	222.75	1,394.2	-61.3	-56.7	83.5	1.50	1.50	0.00
1,500.0	13.50	222.75	1,491.7	-77.5	-71.6	105.5	1.50	1.50	0.00
1,600.0	15.00	222.75	1,588.6	-95.6	-88.3	130.2	1.50	1.50	0.00
1,700.0	16.50	222.75	1,684.9	-115.5	-106.8	157.3	1.50	1.50	0.00
1,710.7	16.66	222.75	1,695.1	-117.8	-108.8	160.4	1.50	1.50	0.00
1,800.0	16.66	222.75	1,780.7	-136.5	-126.2	186.0	0.00	0.00	0.00
1,900.0	16.66	222.75	1,876.5	-157.6	-145.7	214.6	0.00	0.00	0.00
2,000.0	16.66	222.75	1,972.3	-178.7	-165.1	243.3	0.00	0.00	0.00
2,100.0	16.66	222.75	2,068.1	-199.7	-184.6	272.0	0.00	0.00	0.00
2,200.0	16.66	222.75	2,163.9	-220.8	-204.1	300.6	0.00	0.00	0.00
2,300.0	16.66	222.75	2,259.7	-241.8	-223.5	329.3	0.00	0.00	0.00
2,400.0	16.66	222.75	2,355.5	-262.9	-243.0	358.0	0.00	0.00	0.00
2,500.0	16.66	222.75	2,451.3	-283.9	-262.5	386.6	0.00	0.00	0.00
2,600.0	16.66	222.75	2,547.1	-305.0	-281.9	415.3	0.00	0.00	0.00
2,700.0	16.66	222.75	2,642.9	-326.0	-301.4	444.0	0.00	0.00	0.00
2,800.0	16.66	222.75	2,738.7	-347.1	-320.8	472.7	0.00	0.00	0.00
2,900.0	16.66	222.75	2,834.5	-368.1	-340.3	501.3	0.00	0.00	0.00
3,000.0	16.66	222.75	2,930.3	-389.2	-359.8	530.0	0.00	0.00	0.00
3,100.0	16.66	222.75	3,026.1	-410.2	-379.2	558.7	0.00	0.00	0.00
3,200.0	16.66	222.75	3,121.9	-431.3	-398.7	587.3	0.00	0.00	0.00
3,300.0	16.66	222.75	3,217.7	-452.3	-418.1	616.0	0.00	0.00	0.00
3,400.0	16.66	222.75	3,313.5	-473.4	-437.6	644.7	0.00	0.00	0.00
3,500.0	16.66	222.75	3,409.3	-494.5	-457.1	673.3	0.00	0.00	0.00
3,600.0	16.66	222.75	3,505.1	-515.5	-476.5	702.0	0.00	0.00	0.00
3,700.0	16.66	222.75	3,600.9	-536.6	-496.0	730.7	0.00	0.00	0.00
3,800.0	16.66	222.75	3,696.7	-557.6	-515.5	759.4	0.00	0.00	0.00
3,900.0	16.66	222.75	3,792.5	-578.7	-534.9	788.0	0.00	0.00	0.00
4,000.0	16.66	222.75	3,888.3	-599.7	-554.4	816.7	0.00	0.00	0.00
4,100.0	16.66	222.75	3,984.1	-620.8	-573.8	845.4	0.00	0.00	0.00
4,200.0	16.66	222.75	4,079.9	-641.8	-593.3	874.0	0.00	0.00	0.00
4,300.0	16.66	222.75	4,175.7	-662.9	-612.8	902.7	0.00	0.00	0.00
4,400.0	16.66	222.75	4,271.5	-683.9	-632.2	931.4	0.00	0.00	0.00
4,500.0	16.66	222.75	4,367.3	-705.0	-651.7	960.1	0.00	0.00	0.00
4,600.0	16.66	222.75	4,463.1	-726.0	-671.1	988.7	0.00	0.00	0.00
4,638.5	16.66	222.75	4,500.0	-734.1	-678.6	999.8	0.00	0.00	0.00
4,700.0	16.66	222.75	4,558.9	-747.1	-690.6	1,017.4	0.00	0.00	0.00
4,800.0	16.66	222.75	4,654.7	-768.1	-710.1	1,046.1	0.00	0.00	0.00
4,900.0	16.66	222.75	4,750.5	-789.2	-729.5	1,074.7	0.00	0.00	0.00
5,000.0	16.66	222.75	4,846.3	-810.3	-749.0	1,103.4	0.00	0.00	0.00
5,100.0	16.66	222.75	4,942.1	-831.3	-768.5	1,132.1	0.00	0.00	0.00



## PayZone Directional Services, LLC.

## Planning Report



<b>Database:</b>	EDM 2003.21 Single User Db	<b>Local Co-ordinate Reference:</b>	Well S-16-9-17
<b>Company:</b>	NEWFIELD EXPLORATION	<b>TVD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Project:</b>	USGS Myton SW (UT)	<b>MD Reference:</b>	S-16-9-17 @ 5292.0ft (Original Well Elev)
<b>Site:</b>	SECTION 16 T9S, R17E	<b>North Reference:</b>	True
<b>Well:</b>	S-16-9-17	<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)	
5,200.0	16.66	222.75	5,037.9	-852.4	-787.9	1,160.7	0.00	0.00	0.00	
5,300.0	16.66	222.75	5,133.7	-873.4	-807.4	1,189.4	0.00	0.00	0.00	
5,400.0	16.66	222.75	5,229.5	-894.5	-826.8	1,218.1	0.00	0.00	0.00	
5,500.0	16.66	222.75	5,325.3	-915.5	-846.3	1,246.8	0.00	0.00	0.00	
5,600.0	16.66	222.75	5,421.1	-936.6	-865.8	1,275.4	0.00	0.00	0.00	
5,700.0	16.66	222.75	5,516.9	-957.6	-885.2	1,304.1	0.00	0.00	0.00	
5,800.0	16.66	222.75	5,612.7	-978.7	-904.7	1,332.8	0.00	0.00	0.00	
5,900.0	16.66	222.75	5,708.5	-999.7	-924.1	1,361.4	0.00	0.00	0.00	
5,964.1	16.66	222.75	5,770.0	-1,013.2	-936.6	1,379.8	0.00	0.00	0.00	



Sundry Number: 17825 API Well Number: 43013507930000

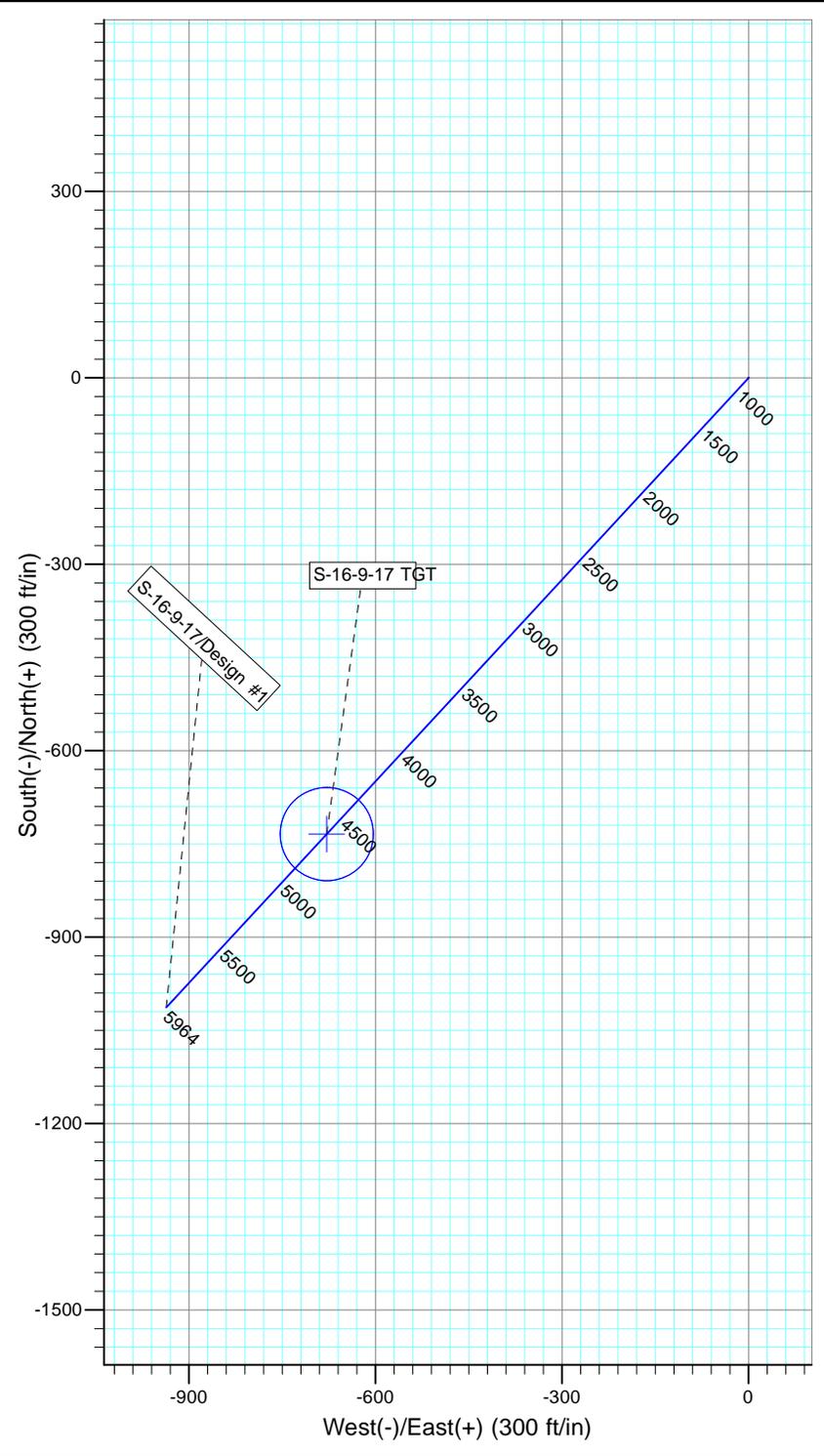
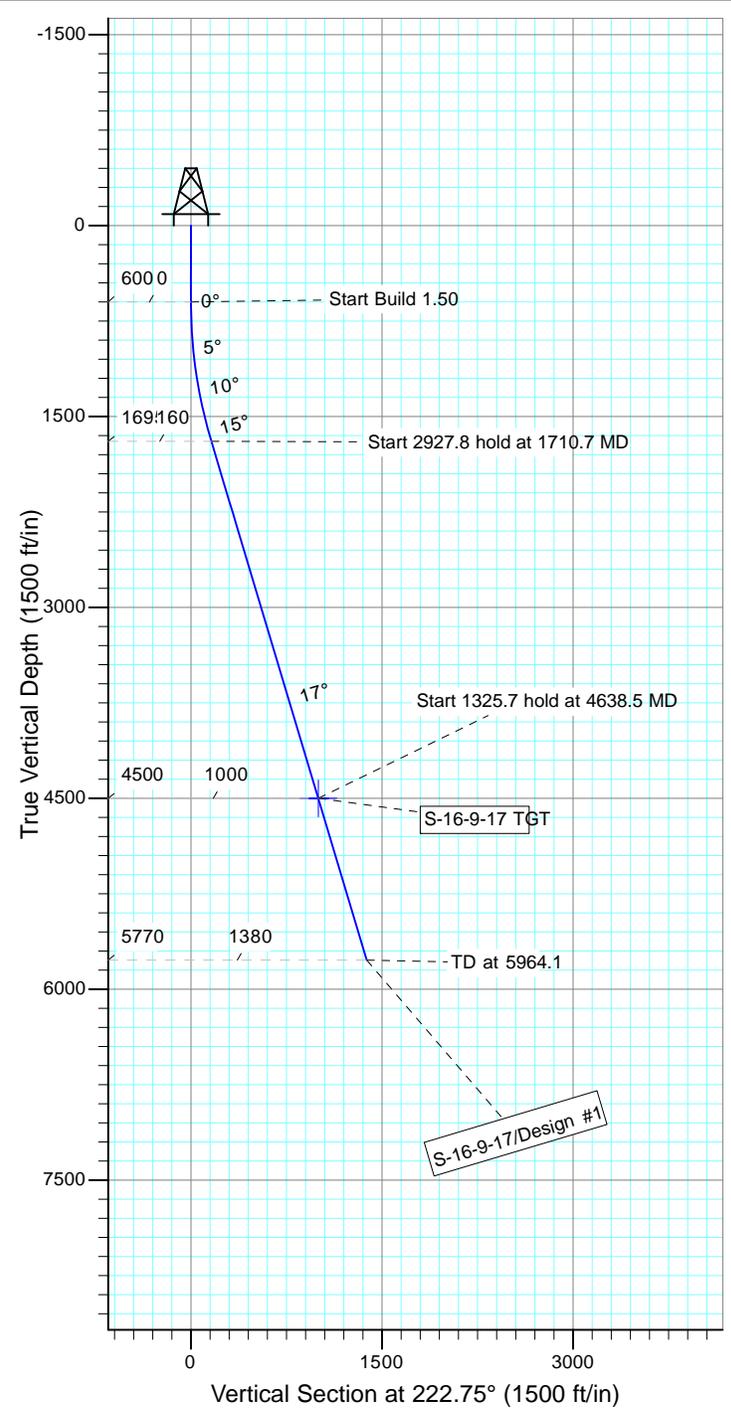
Project: USGS Myton SW (UT)  
 Site: SECTION 16 T9S, R17E  
 Well: S-16-9-17  
 Wellbore: Wellbore #1  
 Design: Design #1



Azimuths to True North  
 Magnetic North: 11.31°

Magnetic Field  
 Strength: 52287.2snT  
 Dip Angle: 65.80°  
 Date: 2011/04/19  
 Model: IGRF2010

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



WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
S-16-9-17 TGT	4500.0	-734.1	-678.6	Circle (Radius: 75.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1710.7	16.66	222.75	1695.1	-117.8	-108.8	1.50	222.75	160.4	
4	4638.5	16.66	222.75	4500.0	-734.1	-678.6	0.00	0.00	999.8	S-16-9-17 TGT
5	5964.1	16.66	222.75	5770.0	-1013.2	-936.6	0.00	0.00	1379.8	



RECEIVED Aug. 25, 2011

NEWFIELD PRODUCTION COMPANY  
GMBU S-16-9-17  
AT SURFACE: NE/SE SECTION 16, T9S, R17E  
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' – 1220'
Green River	1220'
Wasatch	5720'
<b>Proposed TD</b>	<b>5964'</b>

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

Green River Formation (Oil)	1220' – 5720'
-----------------------------	---------------

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

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

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

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

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

4. **PROPOSED CASING PROGRAM**

a. **Casing Design: GMBU S-16-9-17**

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	300'	24.0	J-55	STC	2,950 17.53	1,370 14.35	244,000 33.89
Prod casing 5-1/2"	0'	5,964'	15.5	J-55	LTC	4,810 2.53	4,040 2.13	217,000 2.35

Assumptions:

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

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

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

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

b. **Cementing Design: GMBU S-16-9-17**

Job	Fill	Description	Sacks	OH Excess*	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
			ft <sup>3</sup>			
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17
			161			
Prod casing Lead	3,964'	Prem Lite II w/ 10% gel + 3% KCl	274	30%	11.0	3.26
			893			
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363	30%	14.3	1.24
			451			

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

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

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

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

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

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

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

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

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

From surface to  $\pm 300$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 1/2" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

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

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

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

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

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

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

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

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

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

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

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

It is anticipated that the drilling operations will commence the third quarter of 2011, and take approximately seven (7) days from spud to rig release.

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				COUNTY	SPUD DATE	EFFECTIVE DATE
					QQ	SC	TP	RG			
B	99999	17400	4301350790	GMBU I-16-9-17	SWNE	16	9S	17E	DUCHESNE	8/11/2011	8/29/11
WELL 1 COMMENTS: <i>GERV</i> <span style="margin-left: 200px;"><i>BHL = NENE</i></span>											
A	99999	18185	4301350814	MILES #15-8-3-2	SWSE	8	3S	2E	DUCHESNE	8/11/2011	8/29/11
<b>CONFIDENTIAL</b>											
A	99999	18186	4304751411	RIO GRANDE 9-13-4-1W	NESE	13	4S	1W	UINTAH	8/11/2011	8/29/11
<i>GERV</i>											
B	99999	17400	4301350793	GMBU S-16-9-17	NESE	16	9S	17E	DUCHESNE	8/15/2011	8/29/11
<i>GERV</i> <span style="margin-left: 200px;"><i>BHL = SWSE</i></span>											
B	99999	17400	4301350793	GMBU S-16-9-17	NESE	16	9S	17E	DUCHESNE	8/15/2011	
<i>Duplicate</i>											
B	99999	17400	4301350835	GMBU G-32-8-16	SENE	32	8S	16E	DUCHESNE	8/15/2011	8/29/11
<i>GERV</i> <span style="margin-left: 200px;"><i>BHL = NENE</i></span>											

- ACTION CODES (See instructions on back of form)
- A - 1 new entity for new well (single well only)
  - B - 1 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 - thor (explain in comments section)

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

**RECEIVED**  
**AUG 18 2011**

DIV. OF OIL, GAS & MINING

*[Signature]*  
 Signature \_\_\_\_\_ Jentri Park  
 Production Clerk 08/18/11

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

5. LEASE DESIGNATION AND SERIAL NUMBER:  
UTAH STATE ML-3453-B

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT or CA AGREEMENT NAME:  
GMBU

1. TYPE OF WELL: OIL WELL  GAS WELL  OTHER

8. WELL NAME and NUMBER:  
GMBU S-16-9-17

2. NAME OF OPERATOR:  
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:  
4301350793

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

PHONE NUMBER  
435.646.3721

10. FIELD AND POOL, OR WILDCAT:  
GREATER MB UNIT

4. LOCATION OF WELL:  
FOOTAGES AT SURFACE: 1943 FSL 0669 FEL COUNTY: DUCHESNE

OTR/OTR. SECTION, TOWNSHIP, RANGE, MERIDIAN: , 16, T9S, R17E 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:	<input type="checkbox"/> CHANGE WELL NAME	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> WATER DISPOSAL
08/23/2011	<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 8/15/11 MIRU Ross #29. Spud well @9:00 AM. Drill 310' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24# csgn. Set @ 310.92. On 8/17/11 cement with 160 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 5 barrels cement to pit. WOC.

**RECEIVED**  
**AUG 29 2011**  
DIV. OF OIL, GAS & MINING

NAME (PLEASE PRINT) Branden Arnold TITLE \_\_\_\_\_  
SIGNATURE *Branden Arnold* DATE 08/23/2011

(This space for State use only)





<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> ML-3453B
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
		<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>1. TYPE OF WELL</b> Oil Well	<b>8. WELL NAME and NUMBER:</b> GMBU S-16-9-17	
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY	<b>9. API NUMBER:</b> 43013507930000	
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052	<b>PHONE NUMBER:</b> 435 646-4825 Ext	<b>9. FIELD and POOL or WILDCAT:</b> MONUMENT BUTTE
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1943 FSL 0669 FEL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESE Section: 16 Township: 09.0S Range: 17.0E Meridian: S	<b>COUNTY:</b> DUCHESNE	
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 10/4/2011	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> DEEPEN <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> WILDCAT WELL DETERMINATION <input type="checkbox"/> OTHER	
<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text"/>		
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
<p>The above well was completed on 10/04/2011. Attached is a daily completion status report.</p> <p style="text-align: right;"><b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY</b></p>		
<b>NAME (PLEASE PRINT)</b> Jennifer Peatross	<b>PHONE NUMBER</b> 435 646-4885	<b>TITLE</b> Production Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/7/2011	

## Daily Activity Report

Format For Sundry

**GMBU S-16-9-17**

**8/1/2011 To 10/30/2011**

**9/15/2011 Day: 1**

**Completion**

Rigless on 9/15/2011 - Run CBL & perf 1st stage. - NU 5M Cameron BOP. RU H/O truck & pressure test casing, blind rams, frac head & casing valves to 4500 psi. RU Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5913' cement top @ 55'. Perforate LODC sds as shown in perforation report. 141 BWTR. SWIFN.

**Daily Cost:** \$25,508

**Cumulative Cost:** \$25,508

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**9/19/2011 Day: 2**

**Completion**

Rigless on 9/19/2011 - Frac & flow back well. - - MIRU The Perforators WLT crane. RU Baker Hughes frac equipment. Break & frac stg #1. Perforate & frac stgs #2-4. RD WLT & frac equipment. EWTR 2449 BBLs. RU flow back equipment. Open well to pit for immediate flow back @ approx 3 BPM. Flow back well for 2.5 hrs to recover 375 BBLs. EWTR 2074 BBLs.

**Daily Cost:** \$124,049

**Cumulative Cost:** \$149,557

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**9/23/2011 Day: 3**

**Completion**

NC #2 on 9/23/2011 - MIRUSU, P/U Tbg - Move From GMBU K-16-9-17 To The GMBU S-16-9-17, MIRUSU, R/D Cameron BOPS, R/U Weatherford BOPS, R/U Workfloor, Rig Maintenance, SWI, CSDFN @ 7:00 PM, 7:00 To 7:30 PM C/Trvl.

**Daily Cost:** \$3,467

**Cumulative Cost:** \$153,024

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**9/26/2011 Day: 4**

**Completion**

NC #2 on 9/26/2011 - P/U Tbg, Start To Drill Out Plgs - 5:30 To 6:00 AM C/Trvl, 6:00 AM OWU, Rig Maintenance, P/U & TIH W/- Bit & Bit Sub, 120- Jts Tbg, Tag Sand, R/U Nabors Pwr Swvl, Start To Clean Out Sand, Approx. 315' Sand On Top Of Plg, Pwr Swvl Stopped Turning, Lost Circ After 2- Jts Tbg, Try To Work Tbg Free, SWI, CSDFN @ 7:00 PM, 7:00 To 7:30 PM C/Trvl.

**Daily Cost:** \$6,335

**Cumulative Cost:** \$159,359

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**9/27/2011 Day: 5**

**Completion**

NC #2 on 9/27/2011 - Try To See Where Tbg Is Stuck At, Perf Tbg, Try To Circ Sand Out - 5:30 To 6:00 AM C/Trvl, 6:00 AM OWU, R/U Nabors Pwr Swvl, Try To Work Tbg Free, Try To Pmp Down The Tbg Caught & Held Pressure @ 2,000 Psi, Try To Pmp Down The Csg, Caught & Held Pressure @ 2,000 Psi, R/U The Perforators LLC. Wireline Truck, Free Point Tbg, Suspected Bridge Plug @ Approx. 1950', POOH W/- Wireline, RIH W/- Perf Gun, Perf Tbg @ 1960', Try To Circ Plug Out, Never Did See Any Sand In Returns, R/U Pwr Swvle, Try To Work Tbg Free, Unsuccessful, R/D Pwr Swvl, RIH W/- Wireline Again To Free Point, Free Point Tool Not Working Correctly, POOH W/- Wireline, SWI, CSDFN @ 6:30 PM, 6:30 To 7:00 PM C/Trvl.

**RECEIVED** Nov. 07, 2011

**Daily Cost:** \$8,028**Cumulative Cost:** \$167,387

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**9/28/2011 Day: 6****Completion**

NC #2 on 9/28/2011 - Free Point Tbg, Cut Off Tbg, POOH W/- Tbg, TIH & Try To Fish Tbg - 5:30 To 6:00 AM C/Trvl, 6:00 AM OWU, R/U The Perforators LLC. Wireline, RIH W/- Free Point Tool, Free Point Tbg, POOH W/- Wireline, RIH W/- Wireline & Chemical Cutter, Cut Tbg Off @ 3937', POOH W/- Wireline, R/D Wireline, Try To POOH W/- Tbg, unsuccessful, R/U Nabors Pwr Swvl, Rotate Tbg While Trying To Circ, Tbg Finally Broke Free, R/D Pwr Swvl, POOH W/- 121- Jts Tbg & Cut Off Piece, P/U & TIH W/- Wash Shoe, 2- Wash Pup Jts, Top Sub, Bumper Sub & Jars, X - Over, 4' Tbg Sub, 120- Jts Tbg, R/U Pwr Swvl, Circ Over Top Of Fish Neck, Circ Clean, POOH W/- Tools & Tbg, P/U & TIH W/- Overshot, 80- Jts Tbg, SWI, CSDFN @ 7:00 PM, 7:00 To 7:30 PM C/Trvl.

**Daily Cost:** \$18,247**Cumulative Cost:** \$185,634

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**9/29/2011 Day: 7****Completion**

NC #2 on 9/29/2011 - Try To POOH W/- Fish, No Good, TIH W/- Wash Over Tools - 5:30 To 6:00 AM C/Trvl, 6:00 AM OWU, TIH W/- 41- Jts Tbg, Latch Onto Fish Top, Jar On Tbg For Approx. 3 Hrs, Unsuccessful Getting Tbg Unstuck, Get Off Of Tbg, POOH W/- Tbg, P/U & TIH W/- Wash Shoe, 2- Wash Pup Jts, Top Sub, Jars & Bumper Subs, X - Over, 4' Tbg Sub, 120- Jts Tbg, R/U Pwr Swvl, Swvl In The Hole While Circ To Plg @ 4190', Circ For Approx. 1 Hr, POOH W/- 46 Jts Tbg, Lost Approx. 105 Bbls Wtr Circulating, SWI, CSDFN @ 7:00 PM, 7:00 To 7:30 PM C/Trvl.

**Daily Cost:** \$49,207**Cumulative Cost:** \$234,841

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**9/30/2011 Day: 8****Completion**

NC #2 on 9/30/2011 - Finish Fishing Tbg, TIH W/- Bit & Drill Out Plgs - 5:30 To 6:00 AM C/Trvl, 6:00 AM OWU, POOH W/- 82- Jts Tbg, Wash Over Tools, P/U & TIH W/- Fishing Tools, 128- Jts Tbg, Latch Onto Fish Top, POOH W/- Tbg, Fishing Tools, Fish, P/U & TIH W/- Bit & Bit Sub, 130- Jts Tbg, R/U Pwr Swvl, Drill Out Plg #1, 26 Min Drill Time, Swvl In The Hole To Plg #2 @ 4640', Drill Out Plg, 29 Min Drill Time, Swvl In The Hole To Plg #3 @ 5010', Drill Out Plg, 27 Min Drill Time, Circ Well Clean, SWI, CSDFN @ 7:00 PM, 7:00 To 7:30 PM C/Trvl.

**Daily Cost:** \$24,372**Cumulative Cost:** \$259,213

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**10/3/2011 Day: 9****Completion**

NC #2 on 10/3/2011 - Swab Well, Round Trip Tbg - 5:30 To 6:00 AM C/Trvl, 6:00 AM OWU, Swvl In The Hole To PBTD @ 5940', Circ Well Clean For Approx. 1 Hr, POOH W/- 5- Jts Tbg, R/U Sandline, Swab Well, Made 12 Swab Runs, Swab Back Approx. 165 Bbls Fluid, R/D Sandline, TIH W/- 5- Jts Tbg, Circ Well Clean For Approx. 1 Hr, L/D A Total Of 29- Jts Tbg, POOH W/- 160- Jts Tbg, Bit Sub & Bit, P/U & TIH W/- NC, 2- Jts Tbg, SN, 2- Jts Tbg, TA, 156- Jts Tbg, Set TA In 18,000 Lbs Tension, R/D Weatherford BOPS, R/U Wellhead, X - Over For Rods, SWI, CSDFN @ 7:00 PM, 7:00 To 7:30 PM C/Trvl.

**Daily Cost:** \$6,101**Cumulative Cost:** \$265,314**RECEIVED** Nov. 07, 2011

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**10/4/2011 Day: 10****Completion**

NC #2 on 10/4/2011 - P/U Rods, PWOP - 5:30 To 6:00 AM C/Trvl, 6:00 AM OWU, P/U & Stroke Test W/- Central Hydraulics 2 1/2 x 1 3/4 x 21 x 24' RHAC Rod Pmp (Max STL 225"), TIH W/- Pmp, 5- 1 1/2" x 25' Wt Bars (W/- Stabilizer Sub Inbetween Each Wt Bar), 115- 3/4" Guided Rods, 85- 7/8" Guided Rods, 1- 4', 1- 2' x 7/8" Pony Subs, 1 1/2" x 30' Polished Rod, R/U Pmp Unit, R/U Rig Pmp, Fill & Test Tbg To 800 Psi Using Pmp Unit, Good Test, Took 4 Bbls Wtr To Fill, PWOP @ 2:00 PM, 144" STL, 5 SPM. FINAL REPORT **Finalized**

**Daily Cost:** \$28,248**Cumulative Cost:** \$293,562

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**Pertinent Files:** [Go to File List](#)**RECEIVED** Nov. 07, 2011

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-3453B

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

6. If Indian, Allottee or Tribe Name  
NA

7. Unit or CA Agreement Name and No.  
GMBU

2. Name of Operator  
NEWFIELD EXPLORATION COMPANY

8. Lease Name and Well No.  
GMBU S-16-9-17

3. Address 1401 17TH ST. SUITE 1000 DENVER, CO 80202 3a. Phone No. (include area code)  
(435) 646-3721

9. AFI Well No.  
43-013-50793

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

10. Field and Pool or Exploratory  
MONUMENT BUTTE

At surface 1943' FSL & 669' FEL (NE/SE) SEC. 16, T9S, R17E (ML-3453B)

11. Sec., T., R., M., on Block and  
Survey or Area SEC. 16, T9S, R17E

At top prod. interval reported below 1330' FSL & 1226' FEL (NE/SE) SEC. 16, T9S, R17E (ML-3453B)

12. County or Parish 13. State  
DUCHEсне UT

At total depth <sup>OK</sup> 940' FSL & 1592' FEL (SW/SE) SEC. 16, T9S, R17E (ML-3453B)

14. Date Spudded 08/15/2011 15. Date T.D. Reached 09/02/2011 16. Date Completed 10/04/2011  
 D & A  Ready to Prod.

17. Elevations (DF, RKB, RT, GL)\*  
5280' GL 5292' KB

18. Total Depth: MD 5964' TVD 5771' 19. Plug Back T.D.: MD 5940' TVD 5747'

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 Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	8-5/8" J-55	24#	0	310'		160 CLASS G			
7-7/8"	5-1/2" J-55	15.5#	0	5964'		250 PRIMLITE		55'	
						450 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@ 5191'	TA @ 5058'						

25. Producing Intervals 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Green River	3974'	5127'	3974-5127	.36"	69	
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
3974-5127'	Frac w/ 275647#s 20/40 sand in 1959 bbls of Lightning 17 fluid, in 4 stages.

RECEIVED

FEB 13 2012

DIV. OF OIL, GAS & MINING

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
10/5/11	10/15/11	24	→	28	1	15			2-1/2" x 1-3/4" x 21' 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)

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

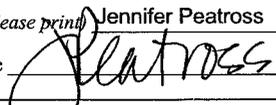
Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
GREEN RIVER	3974'	5127'		GARDEN GULCH MRK	3479'
				GARDEN GULCH 1	3676'
				GARDEN GULCH 2	3790'
				POINT 3	4062'
				X MRKR	4310'
				Y MRKR	4347'
				DOUGLAS CREEK MRK	4472'
				BI CARBONATE MRK	4707'
				B LIMESTONE MRK	4820'
				CASTLE PEAK	5328'
				BASAL CARBONATE	5767'
				WASATCH	5895'

32. Additional remarks (include plugging procedure):

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) Jennifer Peatross Title Production Technician  
 Signature  Date 11/16/2011

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 ENERGY SERVICES, L.P. 10000 WEST 10TH AVENUE, SUITE 1000, DENVER, CO 80202

# **NEWFIELD EXPLORATION**

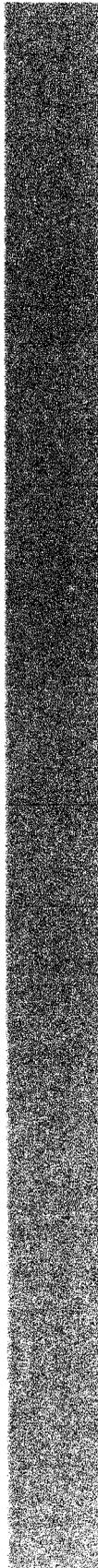
**USGS Myton SW (UT)  
SECTION 16 T9S, R17E  
S-16-9-17**

**Wellbore #1**

**Design: Actual**

## **Standard Survey Report**

**12 January, 2012**





# Payzone Directional Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 16 T9S, R17E  
**Well:** S-16-9-17  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well S-16-9-17  
**TVD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**MD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**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 16 T9S, R17E, SEC 16 T9S, R17E				
<b>Site Position:</b>		<b>Northing:</b>	7,183,439.74 ft	<b>Latitude:</b>	40° 1' 51.237 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,056,769.95 ft	<b>Longitude:</b>	110° 0' 46.831 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.95 °

<b>Well</b>	S-16-9-17, SHL LAT:40°01'44.52" LONG: -110°00'16.42"					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	7,182,799.61 ft	<b>Latitude:</b>	40° 1' 44.520 N
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,059,146.35 ft	<b>Longitude:</b>	110° 0' 16.420 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	5,292.0 ft	<b>Ground Level:</b>	5,280.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	4/19/2011	11.31	65.80	52,287

<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	222.75	

<b>Survey Program</b>	<b>Date</b>	9/15/2011			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
356.0	5,964.0	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	
<b>S-16-9-17 NO GO ZONE</b>										
356.0	1.10	140.80	356.0	-2.6	2.2	0.5	0.31	0.31	0.00	
386.0	1.10	140.80	386.0	-3.1	2.5	0.6	0.00	0.00	0.00	
417.0	1.10	140.80	417.0	-3.6	2.9	0.6	0.00	0.00	0.00	
447.0	1.20	135.00	447.0	-4.0	3.3	0.7	0.51	0.33	-19.33	
478.0	1.10	137.30	478.0	-4.4	3.7	0.7	0.36	-0.32	7.42	
508.0	1.10	145.30	507.9	-4.9	4.1	0.8	0.51	0.00	26.67	
538.0	1.20	147.80	537.9	-5.4	4.4	1.0	0.37	0.33	8.33	
569.0	1.10	164.50	568.9	-6.0	4.7	1.2	1.12	-0.32	53.87	
599.0	1.20	183.60	598.9	-6.6	4.7	1.6	1.31	0.33	63.67	
630.0	1.60	193.40	629.9	-7.3	4.6	2.2	1.50	1.29	31.61	
661.0	1.70	206.40	660.9	-8.1	4.3	3.0	1.25	0.32	41.94	



# Payzone Directional Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 16 T9S, R17E  
**Well:** S-16-9-17  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well S-16-9-17  
**TVD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**MD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

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)
691.0	1.90	207.40	690.9	-9.0	3.9	4.0	0.67	0.67	3.33
721.0	2.00	210.80	720.9	-9.9	3.4	4.9	0.51	0.33	11.33
752.0	2.30	219.10	751.9	-10.8	2.7	6.1	1.39	0.97	26.77
783.0	2.60	223.00	782.8	-11.8	1.8	7.4	1.11	0.97	12.58
813.0	2.60	223.70	812.8	-12.8	0.9	8.8	0.11	0.00	2.33
844.0	2.90	221.80	843.8	-13.9	-0.1	10.3	1.01	0.97	-6.13
874.0	3.10	220.00	873.7	-15.1	-1.1	11.8	0.74	0.67	-6.00
906.0	3.50	222.60	905.7	-16.5	-2.3	13.7	1.33	1.25	8.13
937.0	3.60	226.20	936.6	-17.8	-3.7	15.6	0.79	0.32	11.61
969.0	4.30	225.70	968.5	-19.4	-5.3	17.8	2.19	2.19	-1.56
1,001.0	4.80	226.90	1,000.4	-21.1	-7.1	20.3	1.59	1.56	3.75
1,033.0	5.00	227.80	1,032.3	-23.0	-9.1	23.1	0.67	0.63	2.81
1,064.0	5.50	226.30	1,063.2	-24.9	-11.2	25.9	1.67	1.61	-4.84
1,096.0	5.80	227.70	1,095.0	-27.0	-13.5	29.0	1.03	0.94	4.38
1,128.0	6.30	228.40	1,126.8	-29.3	-16.0	32.4	1.58	1.56	2.19
1,159.0	6.90	227.60	1,157.6	-31.7	-18.7	35.9	1.96	1.94	-2.58
1,191.0	7.50	226.30	1,189.4	-34.4	-21.6	39.9	1.94	1.88	-4.06
1,223.0	8.20	223.70	1,221.1	-37.5	-24.7	44.3	2.45	2.19	-8.13
1,254.0	8.90	219.80	1,251.7	-41.0	-27.7	48.9	2.93	2.26	-12.58
1,286.0	9.50	220.70	1,283.3	-44.9	-31.0	54.0	1.93	1.88	2.81
1,318.0	10.20	220.60	1,314.9	-49.0	-34.6	59.5	2.19	2.19	-0.31
1,350.0	10.90	220.00	1,346.3	-53.5	-38.4	65.3	2.21	2.19	-1.88
1,381.0	11.30	221.50	1,376.7	-58.0	-42.3	71.3	1.59	1.29	4.84
1,413.0	11.80	222.20	1,408.1	-62.8	-46.6	77.7	1.62	1.56	2.19
1,444.0	12.10	222.60	1,438.4	-67.5	-50.9	84.1	1.00	0.97	1.29
1,476.0	12.90	223.20	1,469.7	-72.6	-55.6	91.0	2.53	2.50	1.88
1,508.0	13.10	224.70	1,500.8	-77.8	-60.6	98.2	1.23	0.63	4.69
1,539.0	13.70	225.20	1,531.0	-82.9	-65.7	105.4	1.97	1.94	1.61
1,571.0	14.00	225.90	1,562.1	-88.2	-71.1	113.1	1.07	0.94	2.19
1,603.0	14.20	225.60	1,593.1	-93.7	-76.7	120.9	0.67	0.63	-0.94
1,635.0	14.10	226.30	1,624.1	-99.1	-82.4	128.7	0.62	-0.31	2.19
1,666.0	14.30	227.10	1,654.2	-104.3	-87.9	136.3	0.90	0.65	2.58
1,698.0	14.40	227.70	1,685.2	-109.7	-93.7	144.2	0.56	0.31	1.88
1,730.0	14.90	229.10	1,716.1	-115.1	-99.8	152.2	1.91	1.56	4.38
1,761.0	15.20	228.60	1,746.1	-120.3	-105.8	160.2	1.05	0.97	-1.61
1,793.0	15.80	228.10	1,776.9	-126.0	-112.2	168.7	1.92	1.88	-1.56
1,825.0	16.00	226.20	1,807.7	-132.0	-118.7	177.5	1.74	0.63	-5.94
1,856.0	16.30	225.80	1,837.5	-138.0	-124.9	186.1	1.03	0.97	-1.29
1,888.0	16.80	225.80	1,868.1	-144.3	-131.4	195.2	1.56	1.56	0.00
1,919.0	17.30	224.50	1,897.8	-150.8	-137.8	204.3	2.03	1.61	-4.19
1,951.0	17.40	224.50	1,928.3	-157.6	-144.5	213.8	0.31	0.31	0.00
1,983.0	17.30	224.20	1,958.9	-164.4	-151.2	223.3	0.42	-0.31	-0.94
2,015.0	17.40	223.70	1,989.4	-171.3	-157.8	232.9	0.56	0.31	-1.56
2,046.0	17.90	222.60	2,019.0	-178.1	-164.2	242.3	1.94	1.61	-3.55
2,078.0	18.10	221.90	2,049.4	-185.4	-170.9	252.2	0.92	0.63	-2.19
2,110.0	18.10	222.30	2,079.8	-192.8	-177.6	262.1	0.39	0.00	1.25
2,141.0	18.00	221.50	2,109.3	-200.0	-184.0	271.7	0.86	-0.32	-2.58
2,173.0	18.20	222.10	2,139.7	-207.4	-190.6	281.7	0.85	0.63	1.88
2,205.0	18.20	222.00	2,170.1	-214.8	-197.3	291.6	0.10	0.00	-0.31
2,236.0	18.00	221.10	2,199.6	-222.0	-203.7	301.3	1.11	-0.65	-2.90
2,268.0	17.80	221.00	2,230.0	-229.4	-210.1	311.1	0.63	-0.63	-0.31
2,300.0	17.40	221.30	2,260.5	-236.7	-216.5	320.8	1.28	-1.25	0.94
2,332.0	17.20	222.40	2,291.1	-243.8	-222.9	330.3	1.20	-0.63	3.44
2,363.0	17.20	221.60	2,320.7	-250.6	-229.0	339.5	0.76	0.00	-2.58



# Payzone Directional Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 16 T9S, R17E  
**Well:** S-16-9-17  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well S-16-9-17  
**TVD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**MD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**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)
2,395.0	17.10	221.50	2,351.3	-257.7	-235.2	348.9	0.33	-0.31	-0.31
2,427.0	17.00	221.90	2,381.9	-264.7	-241.5	358.3	0.48	-0.31	1.25
2,458.0	16.90	223.30	2,411.5	-271.3	-247.6	367.3	1.36	-0.32	4.52
2,490.0	17.00	224.70	2,442.1	-278.0	-254.1	376.6	1.31	0.31	4.38
2,522.0	18.00	224.80	2,472.6	-284.9	-260.9	386.3	3.13	3.13	0.31
2,554.0	19.20	225.00	2,503.0	-292.1	-268.1	396.5	3.76	3.75	0.63
2,585.0	20.20	224.90	2,532.1	-299.5	-275.4	406.9	3.23	3.23	-0.32
2,617.0	20.80	224.30	2,562.1	-307.5	-283.3	418.1	1.99	1.88	-1.88
2,649.0	21.00	222.40	2,592.0	-315.8	-291.1	429.5	2.21	0.63	-5.94
2,680.0	20.70	221.60	2,621.0	-324.0	-298.5	440.5	1.33	-0.97	-2.58
2,712.0	20.60	221.10	2,650.9	-332.4	-306.0	451.8	0.63	-0.31	-1.56
2,744.0	20.90	220.20	2,680.9	-341.0	-313.4	463.1	1.37	0.94	-2.81
2,776.0	20.80	220.10	2,710.8	-349.7	-320.7	474.5	0.33	-0.31	-0.31
2,807.0	21.00	220.10	2,739.7	-358.2	-327.8	485.6	0.65	0.65	0.00
2,839.0	20.00	218.80	2,769.7	-366.9	-335.0	496.8	3.43	-3.13	-4.06
2,871.0	18.90	217.00	2,799.9	-375.3	-341.5	507.4	3.91	-3.44	-5.63
2,902.0	18.40	216.60	2,829.2	-383.2	-347.4	517.2	1.66	-1.61	-1.29
2,934.0	18.50	217.10	2,859.6	-391.3	-353.5	527.3	0.58	0.31	1.56
2,966.0	18.50	216.40	2,889.9	-399.4	-359.6	537.4	0.69	0.00	-2.19
2,997.0	18.70	217.60	2,919.3	-407.3	-365.5	547.2	1.39	0.65	3.87
3,029.0	18.90	218.90	2,949.6	-415.4	-371.9	557.5	1.45	0.63	4.06
3,061.0	18.50	219.70	2,979.9	-423.4	-378.4	567.8	1.48	-1.25	2.50
3,092.0	18.10	219.70	3,009.4	-430.9	-384.6	577.5	1.29	-1.29	0.00
3,124.0	17.70	221.90	3,039.8	-438.3	-391.1	587.3	2.45	-1.25	6.88
3,156.0	17.40	224.90	3,070.3	-445.3	-397.7	597.0	2.98	-0.94	9.38
3,187.0	17.10	226.00	3,099.9	-451.8	-404.2	606.1	1.43	-0.97	3.55
3,219.0	17.00	227.90	3,130.5	-458.2	-411.1	615.5	1.77	-0.31	5.94
3,251.0	16.80	226.70	3,161.1	-464.5	-417.9	624.8	1.26	-0.63	-3.75
3,282.0	16.80	225.50	3,190.8	-470.7	-424.4	633.7	1.12	0.00	-3.87
3,314.0	16.50	224.70	3,221.5	-477.2	-430.9	642.9	1.18	-0.94	-2.50
3,346.0	16.30	224.50	3,252.2	-483.6	-437.2	651.9	0.65	-0.63	-0.63
3,377.0	16.00	223.40	3,281.9	-489.8	-443.2	660.5	1.38	-0.97	-3.55
3,409.0	15.30	224.30	3,312.8	-496.0	-449.2	669.2	2.32	-2.19	2.81
3,441.0	15.10	222.80	3,343.6	-502.1	-455.0	677.5	1.38	-0.63	-4.69
3,472.0	15.00	222.30	3,373.6	-508.0	-460.4	685.6	0.53	-0.32	-1.61
3,504.0	14.90	221.40	3,404.5	-514.2	-465.9	693.9	0.79	-0.31	-2.81
3,536.0	15.00	222.40	3,435.4	-520.3	-471.4	702.1	0.86	0.31	3.13
3,567.0	15.20	221.70	3,465.3	-526.3	-476.9	710.2	0.87	0.65	-2.26
3,599.0	15.60	221.80	3,496.2	-532.7	-482.5	718.7	1.25	1.25	0.31
3,631.0	15.70	221.10	3,527.0	-539.1	-488.2	727.3	0.67	0.31	-2.19
3,663.0	15.90	221.30	3,557.8	-545.7	-494.0	736.0	0.65	0.63	0.63
3,694.0	16.40	222.70	3,587.6	-552.1	-499.7	744.6	2.04	1.61	4.52
3,726.0	16.60	223.50	3,618.3	-558.7	-505.9	753.7	0.95	0.63	2.50
3,758.0	17.40	224.10	3,648.9	-565.5	-512.4	763.1	2.56	2.50	1.88
3,790.0	17.80	224.30	3,679.4	-572.4	-519.2	772.8	1.26	1.25	0.63
3,821.0	17.70	223.00	3,708.9	-579.3	-525.7	782.2	1.32	-0.32	-4.19
3,853.0	17.40	223.00	3,739.4	-586.3	-532.3	791.9	0.94	-0.94	0.00
3,885.0	17.30	222.20	3,769.9	-593.3	-538.7	801.4	0.81	-0.31	-2.50
3,917.0	16.70	222.20	3,800.5	-600.3	-545.0	810.7	1.88	-1.88	0.00
3,948.0	16.00	220.60	3,830.3	-606.8	-550.8	819.5	2.68	-2.26	-5.16
3,980.0	15.70	221.10	3,861.1	-613.4	-556.5	828.2	1.03	-0.94	1.56
4,012.0	15.70	220.60	3,891.9	-620.0	-562.2	836.9	0.42	0.00	-1.56
4,043.0	15.60	221.50	3,921.7	-626.3	-567.7	845.2	0.85	-0.32	2.90
4,075.0	15.60	221.90	3,952.5	-632.7	-573.4	853.8	0.34	0.00	1.25



# Payzone Directional

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 16 T9S, R17E  
**Well:** S-16-9-17  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well S-16-9-17  
**TVD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**MD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**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)	
4,107.0	16.10	222.40	3,983.3	-639.2	-579.2	862.6	1.62	1.56	1.56	
4,139.0	16.50	221.80	4,014.0	-645.8	-585.3	871.5	1.36	1.25	-1.88	
4,170.0	16.40	222.40	4,043.8	-652.4	-591.2	880.3	0.64	-0.32	1.94	
4,202.0	15.60	221.20	4,074.5	-658.9	-597.0	889.1	2.71	-2.50	-3.75	
4,234.0	15.90	221.00	4,105.3	-665.5	-602.7	897.8	0.95	0.94	-0.63	
4,265.0	16.80	221.40	4,135.1	-672.0	-608.5	906.5	2.93	2.90	1.29	
4,297.0	16.60	223.00	4,165.7	-678.9	-614.7	915.7	1.57	-0.63	5.00	
4,329.0	16.50	222.50	4,196.4	-685.6	-620.9	924.9	0.54	-0.31	-1.56	
4,361.0	16.10	221.80	4,227.1	-692.2	-626.9	933.8	1.39	-1.25	-2.19	
4,392.0	16.00	222.20	4,256.9	-698.6	-632.6	942.4	0.48	-0.32	1.29	
4,424.0	15.80	222.90	4,287.7	-705.0	-638.5	951.2	0.87	-0.63	2.19	
4,456.0	15.10	223.40	4,318.5	-711.3	-644.4	959.7	2.23	-2.19	1.56	
4,487.0	14.70	223.60	4,348.5	-717.0	-649.9	967.7	1.30	-1.29	0.65	
4,519.0	14.60	224.10	4,379.4	-722.9	-655.5	975.8	0.50	-0.31	1.56	
4,550.0	14.50	223.80	4,409.5	-728.5	-660.9	983.5	0.40	-0.32	-0.97	
4,582.0	14.70	223.30	4,440.4	-734.3	-666.4	991.6	0.74	0.63	-1.56	
4,613.0	14.90	223.70	4,470.4	-740.1	-671.9	999.5	0.72	0.65	1.29	
4,641.7	14.99	224.24	4,498.1	-745.4	-677.0	1,006.9	0.58	0.31	1.88	
<b>S-16-9-17 TGT</b>										
4,645.0	15.00	224.30	4,501.3	-746.0	-677.6	1,007.8	0.58	0.31	1.86	
4,708.0	15.10	225.80	4,562.1	-757.6	-689.2	1,024.1	0.64	0.16	2.38	
4,740.0	14.50	226.10	4,593.1	-763.3	-695.1	1,032.3	1.89	-1.88	0.94	
4,772.0	14.60	225.70	4,624.1	-768.8	-700.8	1,040.3	0.44	0.31	-1.25	
4,804.0	14.50	224.50	4,655.0	-774.5	-706.5	1,048.3	0.99	-0.31	-3.75	
4,835.0	14.60	225.60	4,685.0	-780.0	-712.0	1,056.1	0.95	0.32	3.55	
4,867.0	14.00	223.60	4,716.0	-785.6	-717.6	1,064.0	2.43	-1.88	-6.25	
4,898.0	14.00	223.40	4,746.1	-791.1	-722.8	1,071.5	0.16	0.00	-0.65	
4,930.0	14.50	223.30	4,777.1	-796.8	-728.2	1,079.4	1.56	1.56	-0.31	
4,962.0	15.00	224.60	4,808.1	-802.7	-733.8	1,087.5	1.87	1.56	4.06	
4,994.0	14.80	224.80	4,839.0	-808.5	-739.6	1,095.8	0.65	-0.63	0.63	
5,025.0	15.60	224.00	4,868.9	-814.3	-745.3	1,103.9	2.67	2.58	-2.58	
5,057.0	16.30	223.60	4,899.7	-820.7	-751.4	1,112.7	2.21	2.19	-1.25	
5,089.0	16.60	221.00	4,930.4	-827.4	-757.5	1,121.7	2.48	0.94	-8.13	
5,121.0	16.80	220.80	4,961.0	-834.3	-763.5	1,130.9	0.65	0.63	-0.63	
5,152.0	16.20	220.00	4,990.8	-841.0	-769.2	1,139.7	2.07	-1.94	-2.58	
5,184.0	15.90	220.00	5,021.5	-847.8	-774.9	1,148.6	0.94	-0.94	0.00	
5,215.0	15.50	222.00	5,051.4	-854.1	-780.4	1,157.0	2.17	-1.29	6.45	
5,247.0	15.30	222.00	5,082.2	-860.5	-786.1	1,165.5	0.63	-0.63	0.00	
5,279.0	15.10	222.80	5,113.1	-866.7	-791.7	1,173.8	0.91	-0.63	2.50	
5,311.0	14.50	221.80	5,144.0	-872.7	-797.2	1,182.0	2.04	-1.88	-3.13	
5,342.0	14.50	222.30	5,174.0	-878.5	-802.4	1,189.8	0.40	0.00	1.61	
5,374.0	15.10	223.10	5,205.0	-884.5	-808.0	1,197.9	1.98	1.88	2.50	
5,406.0	15.70	223.60	5,235.8	-890.7	-813.8	1,206.4	1.92	1.88	1.56	
5,437.0	16.10	222.80	5,265.6	-896.8	-819.6	1,214.9	1.47	1.29	-2.58	
5,469.0	16.30	221.50	5,296.4	-903.5	-825.6	1,223.9	1.29	0.63	-4.06	
5,500.0	16.80	222.30	5,326.1	-910.0	-831.5	1,232.7	1.77	1.61	2.58	
5,532.0	17.00	222.90	5,356.7	-916.9	-837.8	1,242.0	0.83	0.63	1.88	
5,564.0	16.90	224.00	5,387.3	-923.7	-844.2	1,251.3	1.05	-0.31	3.44	
5,595.0	17.00	224.50	5,417.0	-930.1	-850.5	1,260.4	0.57	0.32	1.61	
5,627.0	17.30	225.30	5,447.5	-936.8	-857.2	1,269.8	1.19	0.94	2.50	
5,659.0	17.10	227.40	5,478.1	-943.3	-864.0	1,279.2	2.04	-0.63	6.56	
5,690.0	17.30	225.80	5,507.7	-949.6	-870.7	1,288.4	1.66	0.65	-5.16	
5,722.0	17.10	224.10	5,538.3	-956.3	-877.4	1,297.8	1.69	-0.63	-5.31	
5,754.0	16.80	223.60	5,568.9	-963.1	-883.9	1,307.2	1.04	-0.94	-1.56	



# Payzone Directional

## Survey Report



**Company:** NEWFIELD EXPLORATION  
**Project:** USGS Myton SW (UT)  
**Site:** SECTION 16 T9S, R17E  
**Well:** S-16-9-17  
**Wellbore:** Wellbore #1  
**Design:** Actual

**Local Co-ordinate Reference:** Well S-16-9-17  
**TVD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**MD Reference:** S-16-9-17 @ 5292.0ft (Newfield Rig #2)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Database:** EDM 2003.21 Single User Db

### Survey

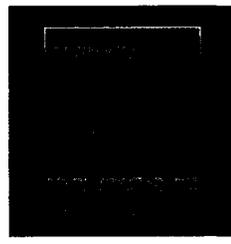
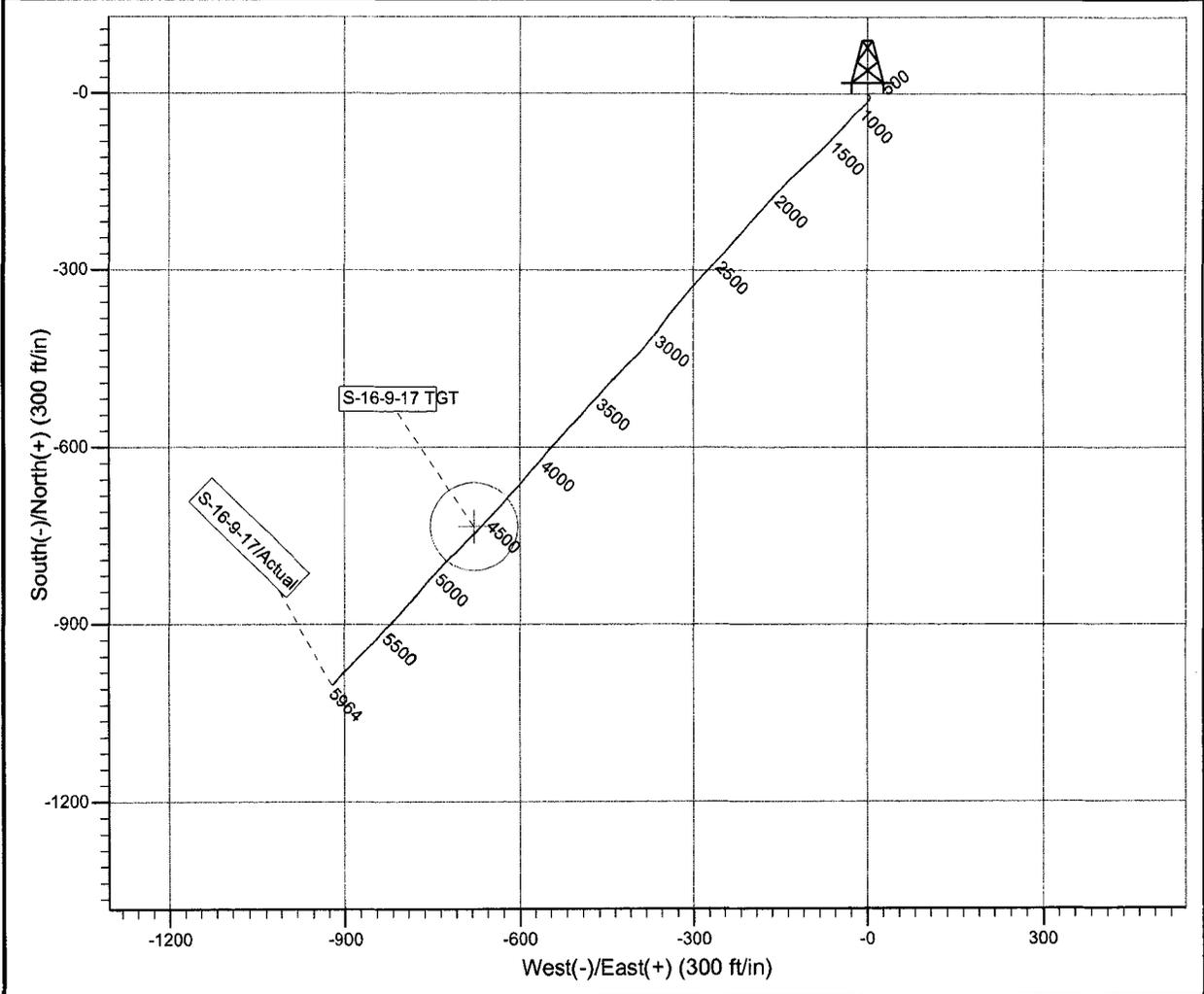
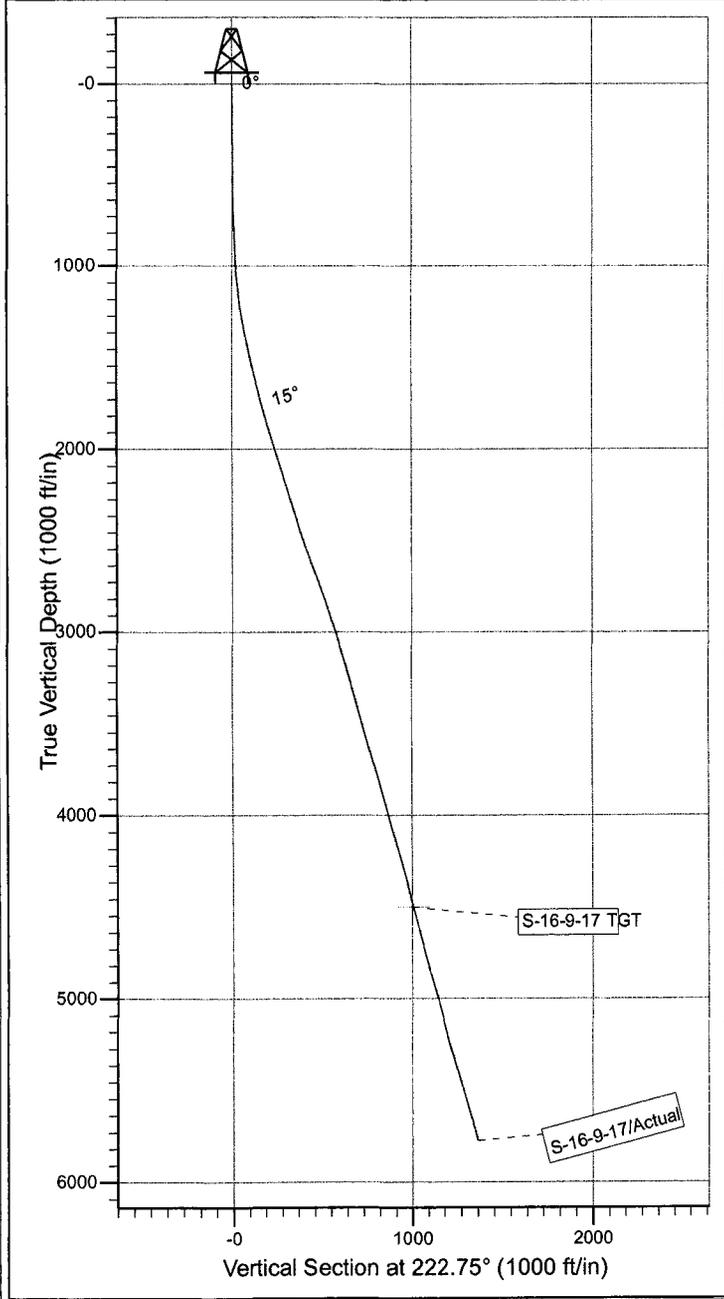
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,785.0	16.40	224.80	5,598.6	-969.4	-890.0	1,316.0	1.70	-1.29	3.87
5,817.0	15.80	224.00	5,629.4	-975.8	-896.2	1,324.9	2.00	-1.88	-2.50
5,849.0	15.50	223.90	5,660.2	-982.0	-902.2	1,333.5	0.94	-0.94	-0.31
5,881.0	15.20	224.00	5,691.0	-988.1	-908.1	1,342.0	0.94	-0.94	0.31
5,903.0	14.80	224.40	5,712.3	-992.1	-912.1	1,347.7	1.88	-1.82	1.82
5,963.0	14.80	224.40	5,770.3	-1,003.1	-922.8	1,363.0	0.00	0.00	0.00
5,964.0	14.80	224.40	5,771.3	-1,003.3	↔ -923.0	1,363.2	0.00	0.00	0.00

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



Project: USGS Myton SW (UT)  
 Site: SECTION 16 T9S, R17E  
 Well: S-16-9-17  
 Wellbore: Wellbore #1  
 Design: Actual

Azimuths to True North  
 Magnetic North: 11.31°  
 Magnetic Field  
 Strength: 52287.2snT  
 Dip Angle: 65.80°  
 Date: 4/19/2011  
 Model: IGRF2010



Design: Actual (S-16-9-17/Wellbore #1)

Created By: Sarah Webb Date: 16:20, January 12 2012

THIS SURVEY IS CORRECT TO THE BEST OF  
 MY KNOWLEDGE AND IS SUPPORTED  
 BY ACTUAL FIELD DATA

## Daily Activity Report

Format For Sundry

**GMBU S-16-9-17**

**6/1/2011 To 10/30/2011**

**GMBU S-16-9-17**

**Waiting on Cement**

**Date:** 8/22/2011

Ross #29 at 310. Days Since Spud - yield. Returned 5bbls to pit, bump plug to 475psi, BLM and State were notified of spud via email. - 310.92'KB. On 8/17/11 cement w/BJ w/160 sks of class G+2%kcl+.25#CF mixed @ 15.8ppg and 1.17 - On 8/15/11 Ross #29 spud and drilled 310' of 12 1/4" hole, P/U and run 7 jts of 8 5/8" casing set

**Daily Cost:** \$0

**Cumulative Cost:** \$58,492

**GMBU S-16-9-17**

**Rigging down**

**Date:** 8/28/2011

NDSI #2 at 310. 0 Days Since Spud - Notified State and BLM By E-mial of Rig Move 7:00 AM 8/28/11 and Bop Test 1:00 Pm 8/28/11 on 8/27/11 - Rigging Down - @ 3:00 PM

**Daily Cost:** \$0

**Cumulative Cost:** \$59,842

**GMBU S-16-9-17**

**Drill 7 7/8" hole with fresh water**

**Date:** 8/29/2011

NDSI #2 at 1474. 1 Days Since Spud - Drill 7 7/8" Hole From 265' To 1474',WOB 20,000 lbs,TRPM 160,GPM 400,AVG ROP 100.7 fph - No H2s Reported Last 24 Hrs - P/U Kelly Gain Circulation - 1x31' Monel DC,1x3.55' Single Gap,1x1.62' Index Sub,1x30' NMDC. Tag Cement @ 265' - 2000 psi for 10 mins,Test Surface Casing To 1500 For 30 mins. Everthing Tested Ok. - .Test Upper Kelly Valve,Safety Valve,Pipe Rams,Blind Rams,Choke Line & Manifold To - Accepted Rig @ 2:00 Pm On 8/28/11 R/U B&C Quick Test, - MIRU Set Surface Equipment W/Marcus Liddell Trucking (15' Skid From K-16-9-17) - P/U BHA as follows,Razorback M 616 U 7 7/8" PDC,Hunting 7/8 4.8 Stage 1.5 degree fixed Mud Motor,

**Daily Cost:** \$0

**Cumulative Cost:** \$107,127

**GMBU S-16-9-17**

**Drill 7 7/8" hole with fresh water**

**Date:** 8/30/2011

NDSI #2 at 3375. 2 Days Since Spud - Rig Service,Function Test Crown-A-Matic,& Bop's,Bop Drill Hands in place 1 min 38 sec. - Dreill 7 7/8" Hole From 2234' To 3375',WOB 18,000 lbs,TRPM 160,GPM 400,AVG ROP 69.1 fph - No H2s Reported Last 24 Hrs. - Drill 7 7/8" Hole From 1474' To 2234',WOB 16,000 lbs,TRPM 160,GPM 400,AVG ROP 116.9 fph

**Daily Cost:** \$0

**Cumulative Cost:** \$127,854

**GMBU S-16-9-17**

**Drill 7 7/8" hole with fresh water**

**Date:** 8/31/2011

NDSI #2 at 4580. 3 Days Since Spud - No H2s Reported Last 24 Hrs. - Drill 7 7/8" Hole From 3375' To 3914',WOB 20,000 lbs,TRPM 160,GPM 400,AVG Rop 59.8 FPH - Rig Service.Function Test Crown-A-Matic and Bop's - Drill 7 7/8" Hole from 3914' To 4580',WOB 20,000 lbs,TRPM 160,GPM 400,AVG ROP 46 fph

**Daily Cost:** \$0

**Cumulative Cost:** \$147,188

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**GMBU S-16-9-17****Drill 7 7/8" hole with fresh water****Date:** 9/1/2011

NDSI #2 at 5498. 4 Days Since Spud - C - No H2s Reported Last 24 Hrs - Gain Circ, Drill 7 7/8" Hole From 4801' To 5498', WOB 20,000 lbs, TRPM 160, GPM 400, AVG ROP 63.3 fph - Circ. Pump Pill - R/U Pipe Spinners, Trip In Hole - Change Out Bit - Trip Out Hole For Bit

**Daily Cost:** \$0**Cumulative Cost:** \$183,187

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**GMBU S-16-9-17****Running casing****Date:** 9/2/2011

NDSI #2 at 5964. 5 Days Since Spud - Rig up and run 146 jts of 5 1/2" 15.50# J55 casing set at 5964'/KB. - Test 5 1/2" pipe rams to 2000 psi. for ten minutes. Test good. - R/U PSI and log well. Run GR/DG/CN/CD suite. TD to 3200' 30'/hour. - Break kelly down and pipe spinners. - Lay down DP to BHA. - Circulate - Drill 7 7/8" Hole From 5498' To 5964', WOB 20,000 lbs, TRPM 160, GPM 400, AVG ROP 54.5 fph - Lay down BHA

**Daily Cost:** \$0**Cumulative Cost:** \$250,685

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**GMBU S-16-9-17****Waiting on Cement****Date:** 9/3/2011

NDSI #2 at 5964. 6 Days Since Spud - Set casing mandrell w/80,000# tension, circulate and rig up Baker Hughes hard lines. - Pump 250 sacks lead PL11+3% KCL+5#CSE+.5#CF+5#KOL+.5SMS+FP+SF. Mixed at 11ppg 3.43yield - Then 450 sks 50:50:2+3%KCL+.5%EC-1+.25#CF+.05#SF+.3SMS+FP-6L tail cmt. Mixed 14.4ppg - Clean mud tanks. Release rig at 1:00 PM on 9/2/2011. - and 1.24 yield. Returned 30 bbls of cement to reserve pit. - Finish running 5 1/2" casing **Finalized**

**Daily Cost:** \$0**Cumulative Cost:** \$359,071

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**Pertinent Files: Go to File List**