

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER GMBU 3-16-9-17H								
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT MONUMENT BUTTE								
4. TYPE OF WELL Oil Well <input checked="" type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						5. UNIT or COMMUNITIZATION AGREEMENT NAME GMBU (GRRV)								
6. NAME OF OPERATOR NEWFIELD PRODUCTION COMPANY						7. OPERATOR PHONE 435 646-4825								
8. ADDRESS OF OPERATOR Rt 3 Box 3630 , Myton, UT, 84052						9. OPERATOR E-MAIL mcrozier@newfield.com								
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) ML-3453B			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>								
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')								
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')								
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/>								
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN		
LOCATION AT SURFACE		205 FNL 2081 FWL		NENW		16		9.0 S		17.0 E		S		
Top of Uppermost Producing Zone		205 FNL 2081 FWL		NENW		16		9.0 S		17.0 E		S		
At Total Depth		100 FSL 100 FWL		S2SW		16		9.0 S		17.0 E		S		
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 100			23. NUMBER OF ACRES IN DRILLING UNIT 640								
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Approved For Drilling or Completed) 1020			26. PROPOSED DEPTH MD: 10893 TVD: 5603								
27. ELEVATION - GROUND LEVEL 5280			28. BOND NUMBER B001834			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 437478								
<b>Hole, Casing, and Cement Information</b>														
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement		Sacks	Yield	Weight			
SURF	12.25	8.625	0 - 500	24.0	J-55 ST&C	8.3	Class G		203	1.17	15.8			
							No Used		0	0.0	0.0			
PROD	7.875	5.5	0 - 6067	20.0	N-80 LT&C	9.0	Premium Lite High Strength		198	3.53	11.0			
			6067 - 10893	11.6	P-110 Other	9.0	50/50 Poz		278	1.24	14.3			
							No Used		0	0.0	0.0			
PROD	7.875	4.5	0 - 6067	20.0	N-80 LT&C	9.0	Premium Lite High Strength		198	3.53	11.0			
			6067 - 10893	11.6	P-110 Other	9.0	50/50 Poz		278	1.24	14.3			
							No Used		0	0.0	0.0			
<b>ATTACHMENTS</b>														
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES														
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN								
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER								
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP								
NAME Mandie Crozier				TITLE Regulatory Tech				PHONE 435 646-4825						
SIGNATURE				DATE 02/27/2012				EMAIL mcrozier@newfield.com						
API NUMBER ASSIGNED 43013512540000				APPROVAL   Permit Manager										

**Newfield Production Company**  
**GMBU 3-16-9-17H**  
**NE/NW Sec 16 T9S R17E**  
**Duchesne County, UT**

**Drilling Program**

**1. Formation Tops**

Uinta	surface	
Green River	1,234'	
Garden Gulch member	3,500'	
TD	5,603'	TVD / 10,893' MD

**2. Depth to Oil, Gas, Water, or Minerals**

Base of moderately saline	173'	(water)
Green River	3,500' - 5,603'	(oil)

**3. Pressure Control**

Section                      BOP Description

Surface                      No control

Production                The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc for a 2M system.

A 2M BOP system will consist of 2 ram preventers (double or two singles), and a rotating head. A choke manifold rated to at least 2,000 psi will be used.

**4. Casing**

Description	Interval		Weight (ppf)	Grade	Coup	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom (TVD/MD)							Burst	Collapse	Tension
Surface	0'	500'	24	J-55	STC	8.33	8.33	12	2,950	1,370	244,000
8 5/8									10.52	8.61	20.33
Production	0'	5,753'	20	N-80	LTC	8.33	9.0	--	9,190	8,830	428,000
5 1/2		6,067'							4.79	4.17	3.72
Production	6,067'	5,603'	11.6	P-110	BTC	8.33	9.0	--	10,690	7,560	279,000
4 1/2		10,893'							5.73	3.67	4.55

A tapered string of production casing will be run. A 7-7/8" hole will be drilled for the 5-1/2" casing in the vertical and curve sections of the well. A 6-1/8" hole will be drilled for the 4-1/2" casing in the lateral section of the well.

Assumptions:

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)

Production casing MASP = (reservoir pressure) - (gas gradient)

All collapse calculations assume fully evacuated casing with a gas gradient

All tension calculations assume air weight of casing

Gas gradient = 0.1 psi/ft

All casing shall be new.

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

## 5. Cement

Job	Hole Size	Fill	Slurry Description	ft <sup>3</sup>	OH excess	Weight (ppg)	Yield (ft <sup>3</sup> /sk)
				sacks			
Surface	12 1/4	500'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	237	15%	15.8	1.17
				203			
Production Lead	7 7/8	3,500'	Premium Lite II w/ 3% KCl + 10% bentonite	697	15%	11.0	3.53
				198			
Production Tail	7 7/8	1,732'	50/50 Poz/Class G w/ 3% KCl + 2% bentonite	345	15%	14.3	1.24
				278			

The surface casing will be cemented to surface. In the event that cement does not reach surface during the primary cement job, a remedial job will be performed.

A system of open hole packers will be used to isolate the frac stages in the lateral. Open hole packers will be used to isolate the vertical portion of the well from the lateral. A port collar will be used to cement the vertical portion of the well.

Actual cement volumes for the production casing string will be calculated from an open hole caliper log, plus 15% excess.

## 6. Type and Characteristics of Proposed Circulating Medium

<u>Interval</u>	<u>Description</u>
Surface - 500'	An air and/or fresh water system will be utilized. If an air rig is used, the blooie line discharge may be less than 100' from the wellbore in order to minimize location size. The blooie line is not equipped with an automatic igniter. The air compressor may be located less than 100' from the well bore due to the low possibility of combustion with the air/dust mixture. Water will be on location to be used as kill fluid, if necessary.
500' - TD	A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite. Anticipated maximum mud weight is 9.0 ppg.

## 7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run from TD to the base of the surface casing. A compensated neutron/formation density log will be run from TD to the

top of the Garden Gulch formation. A Gamma Ray log will be run from TD to surface. A cement bond log will be run from the port collar to the cement top behind the production casing. (cemented interval)

Cores: As deemed necessary.

DST: There are no DST's planned for this well.

### 8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.43 psi/ft gradient.

$$5,753' \times 0.43 \text{ psi/ft} = 2492 \text{ psi}$$

No abnormal temperature is expected. No H<sub>2</sub>S is expected.

### 9. Other Aspects

The well will be drilled vertically to a kick-off point of 5,232'. Directional tools will then be used to build to 1.78 degrees inclination. The hole size in the lateral will be reduced to 6-1/8". The lateral will be drilled to the bottomhole location shown on the plat.

A tapered string of production casing will be run in the well, with 5-1/2" casing in the vertical and curve portions and 4-1/2" casing in the lateral portion.

A system of open hole packers will be used to provide multi-stage frac isolation in the lateral.

A set of open hole packers will be placed at kick-off point to isolate the lateral. A port cementing collar will be placed above the packers and will be used to cement the vertical portion of the well bore.

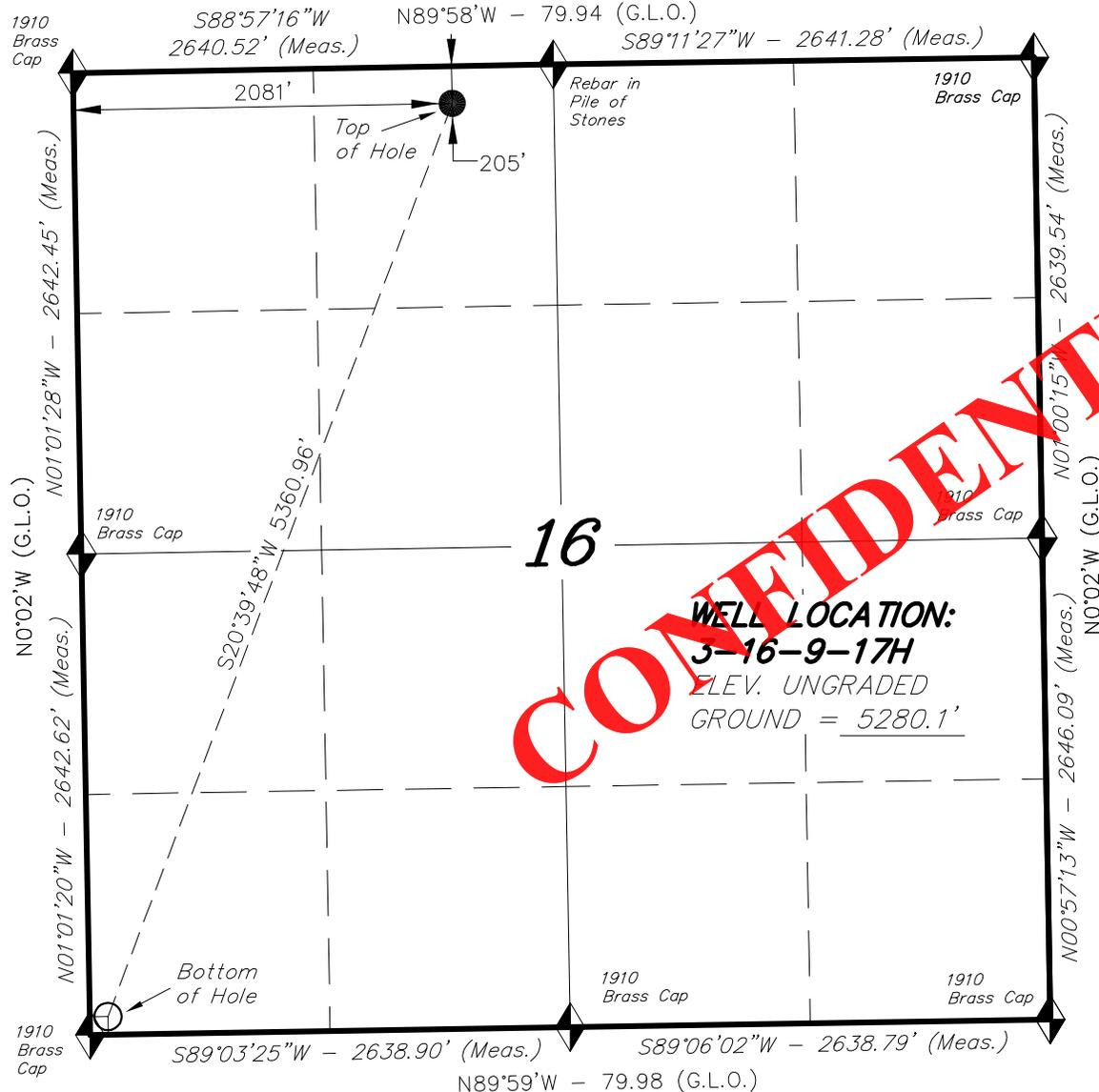
Newfield requests the following Variances from Onshore Order # 2:

- Variance from Onshore Order 2, III.E.1

Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0

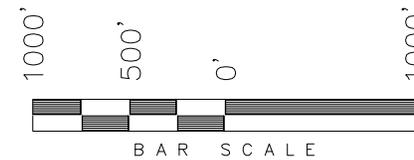
# T9S, R17E, S.L.B.&M.

## NEWFIELD EXPLORATION COMPANY



WELL LOCATION, 3-16-9-17H, LOCATED AS SHOWN IN THE NE 1/4 NW 1/4 OF SECTION 16, T9S, R17E, S.L.B.&M. DUCHESNE COUNTY, UTAH.

TARGET BOTTOM HOLE, 3-16-9-17H, LOCATED AS SHOWN IN THE SW 1/4 NW 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.
3. Bottom of Hole Footages are 100' FSL & 100' FWL

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

REGISTERED LAND SURVEYOR  
 No. 189377  
 02-29-12  
 STACY W. STEWART  
 REGISTERED LAND SURVEYOR  
 REGISTRATION No. 189377  
 STATE OF UTAH

◆ = SECTION CORNERS LOCATED

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

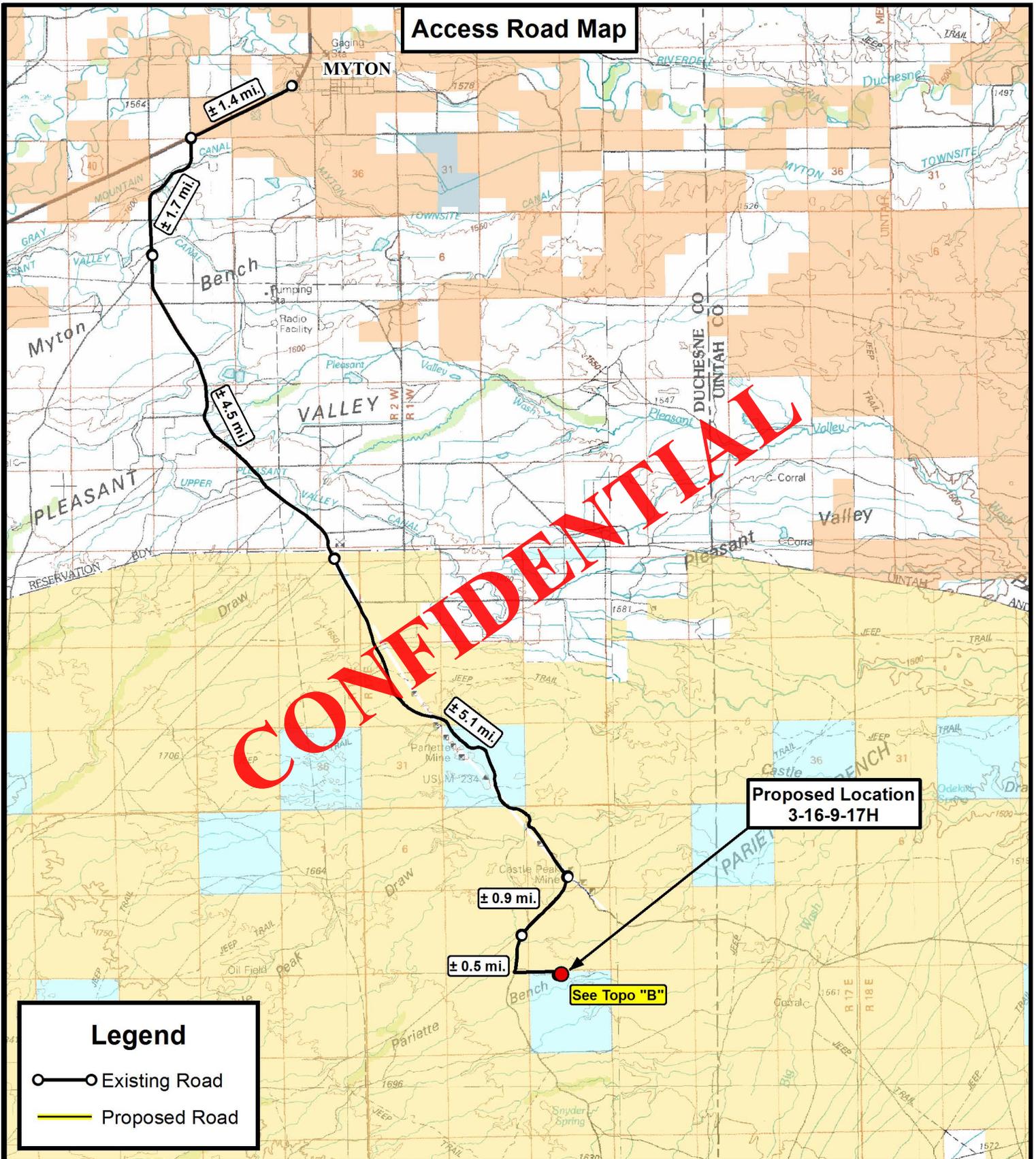
3-16-9-17H  
 (Surface Location) NAD 83  
 LATITUDE = 40° 02' 15.57"  
 LONGITUDE = 110° 00' 48.98"

**TRI STATE LAND SURVEYING & CONSULTING**

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

DATE SURVEYED: 10-04-11	SURVEYED BY: C.S.	VERSION:
DATE DRAWN: 10-09-11	DRAWN BY: F.T.M.	V1
REVISED: 02-29-12 R.V.C.	SCALE: 1" = 1000'	

**Access Road Map**



**Legend**

- Existing Road
- Proposed Road



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

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



**NEWFIELD EXPLORATION COMPANY**

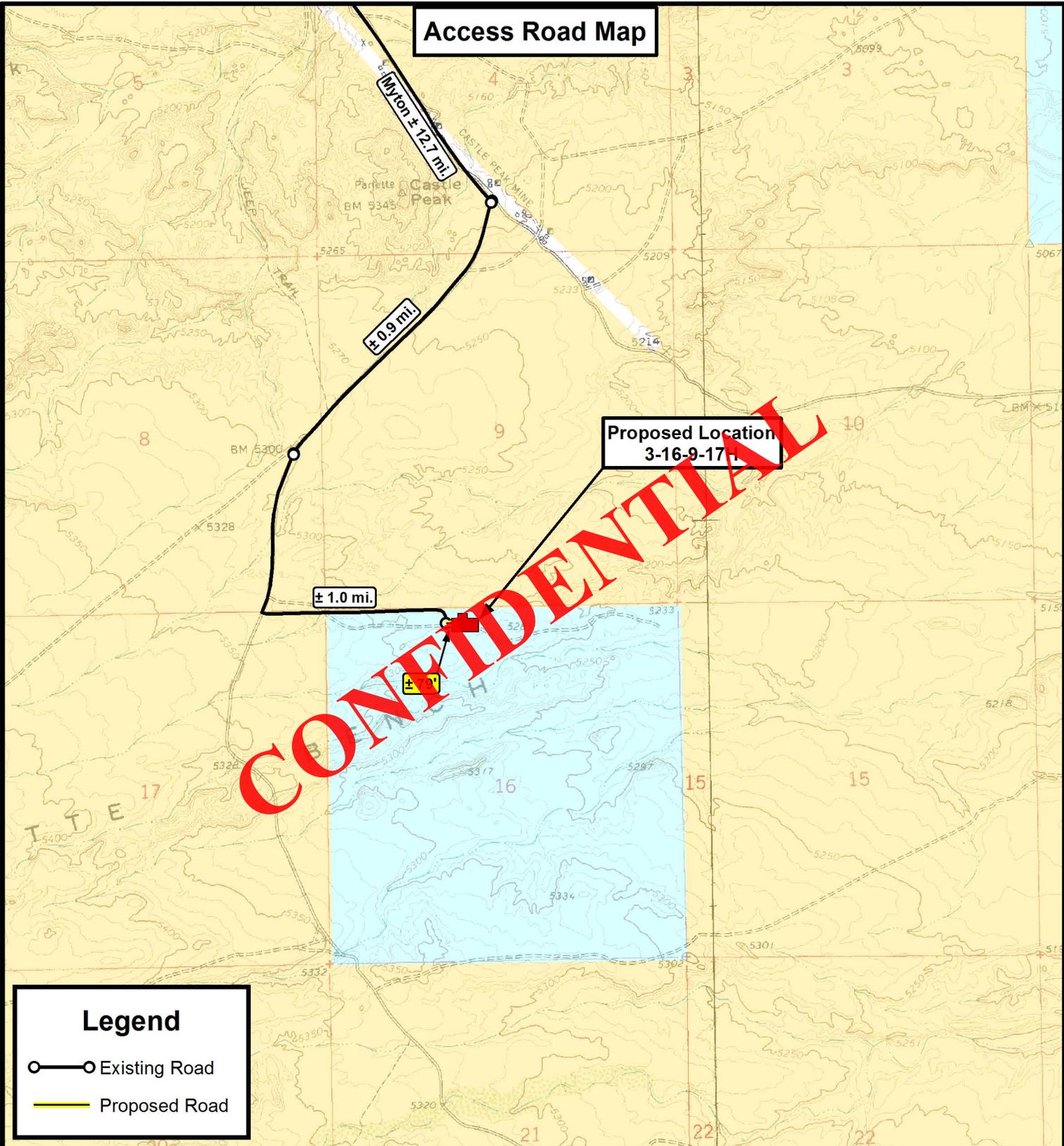
**3-16-9-17H  
SEC. 16, T9S, R17E, S.L.B.&M.  
Duchesne County, UT.**

DRAWN BY:	A.P.C.	REVISED:	02-29-12 D.C.R.	VERSION:
DATE:	10-10-2011			<b>V1</b>
SCALE:	1:100,000			

**TOPOGRAPHIC MAP**

SHEET  
**A**

**Access Road Map**



**Proposed Location  
3-16-9-17H**

**CONFIDENTIAL**

**Legend**

- Existing Road
- Proposed Road

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



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**NEWFIELD EXPLORATION COMPANY**

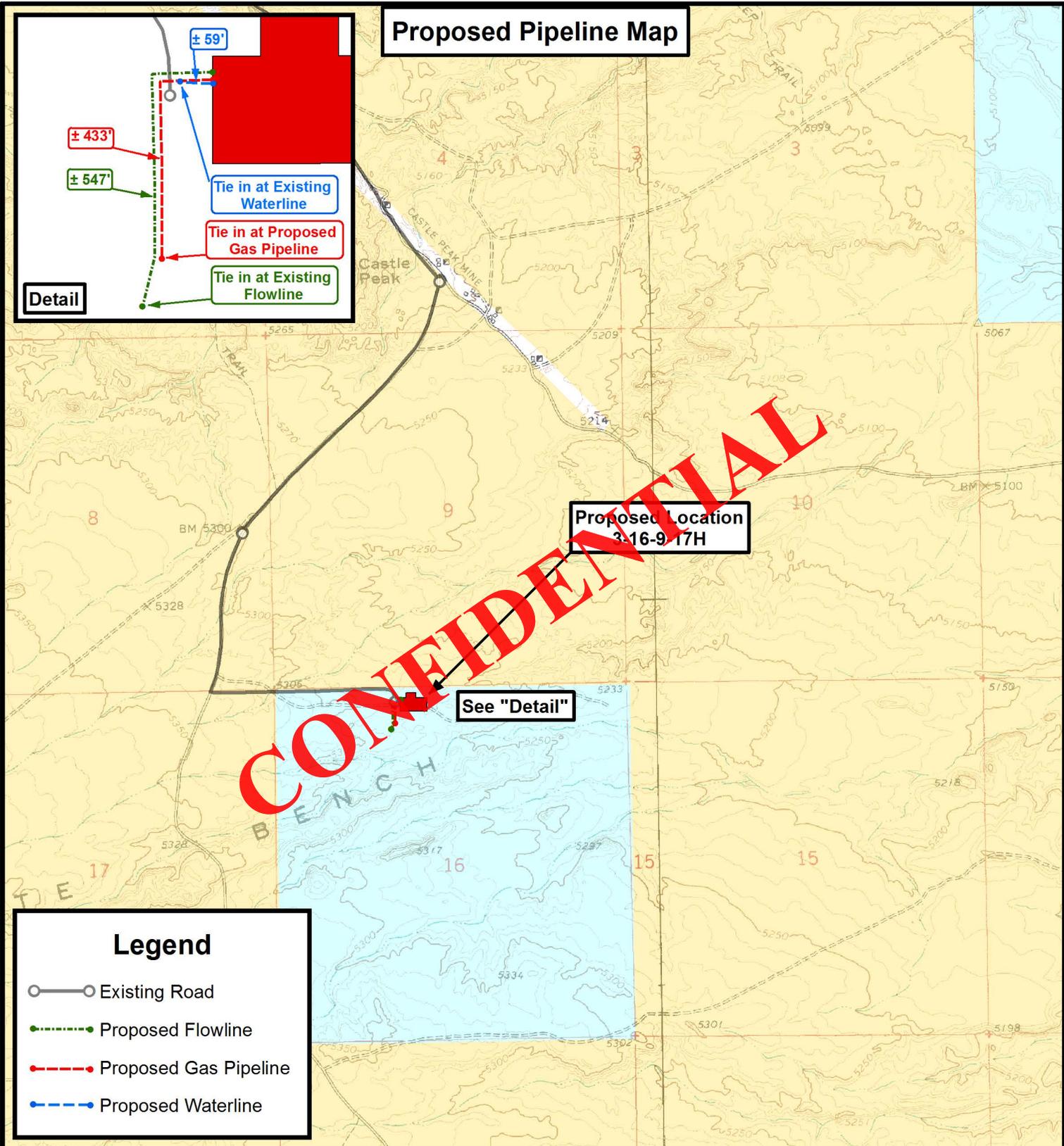
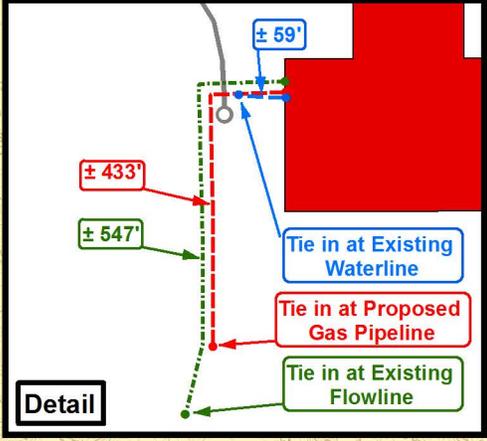
**3-16-9-17H**  
**SEC. 16, T9S, R17E, S.L.B.&M.**  
**Duchesne County, UT.**

DRAWN BY:	A.P.C.	REVISED:	02-29-12 D.C.R.	VERSION:
DATE:	10-10-2011			<b>V1</b>
SCALE:	1" = 2,000'			

**TOPOGRAPHIC MAP**

SHEET **B**

**Proposed Pipeline Map**



**Legend**

- Existing Road
- Proposed Flowline
- Proposed Gas Pipeline
- Proposed Waterline

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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DRAWN BY:	A.P.C.	REVISED:	02-29-12 D.C.R.	VERSION:
DATE:	10-10-2011			<b>V1</b>
SCALE:	1" = 2,000'			



**NEWFIELD EXPLORATION COMPANY**

**3-16-9-17H**  
**SEC. 16, T9S, R17E, S.L.B.&M.**  
**Duchesne County, UT.**

**TOPOGRAPHIC MAP**

SHEET **C**

**Exhibit "B" Map**

**Proposed Location  
3-16-9-17H**

**CONFIDENTIAL**

**Legend**

-  1 Mile Radius
-  Proposed Location

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**NEWFIELD EXPLORATION COMPANY**

**3-16-9-17H  
SEC. 16, T9S, R17E, S.L.B.&M.  
Duchesne County, UT.**

DRAWN BY:	A.P.C.	REVISED:	02-29-12 D.C.R.	VERSION:
DATE:	10-10-2011			<b>V1</b>
SCALE:	1" = 2,000'			

**TOPOGRAPHIC MAP**

SHEET  
**D**

# Newfield Production Company

Utah

GMBU 3-16-9-17H

GMBU 3-16-9-17H

Wellbore #1

Plan: Design #1

## Standard Planning Report

18 February 2012

**CONFIDENTIAL**

Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 3-16-9-17H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	WELL @ 5280.1ft (Original Well Elev)
<b>Project:</b>	Utah	<b>MD Reference:</b>	WELL @ 5280.1ft (Original Well Elev)
<b>Site:</b>	GMBU 3-16-9-17H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 3-16-9-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	Utah		
<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>	GMBU 3-16-9-17H				
<b>Site Position:</b>	<b>Northing:</b>	2,190,266.29 m	<b>Latitude:</b>	40° 2' 15.570 N	
<b>From:</b>	Lat/Long	<b>Easting:</b>	626,841.32 m	<b>Longitude:</b>	110° 0' 48.980 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b>	0.95 °

<b>Well</b>	GMBU 3-16-9-17H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	2,190,266.29 m	<b>Latitude:</b>	40° 2' 15.570 N
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	626,841.32 m	<b>Longitude:</b>	110° 0' 48.980 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	5,280.1 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</b>
	IGRF200510	2/18/2012	(°)	(°)	(nT)
			11.18	65.79	52,249

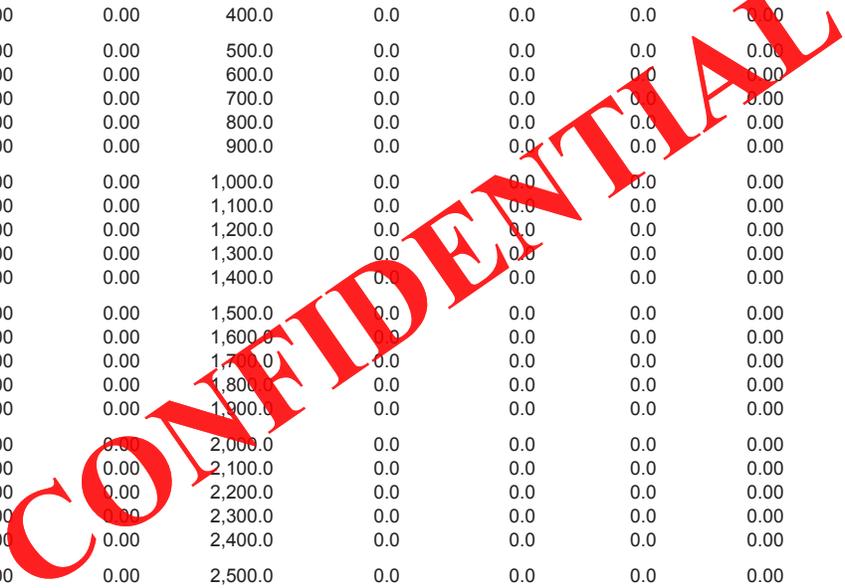
<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	200.66

<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	
5,232.3	0.00	0.00	5,232.3	0.0	0.0	0.00	0.00	0.00	0.00	
6,066.7	91.78	200.66	5,752.9	-502.5	-189.5	11.00	11.00	0.00	200.66	
10,892.9	91.78	200.66	5,603.0	-5,016.2	-1,891.5	0.00	0.00	0.00	0.00	3-16-9-17H

Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 3-16-9-17H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	WELL @ 5280.1ft (Original Well Elev)
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<b>Site:</b>	GMBU 3-16-9-17H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 3-16-9-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,232.3	0.00	0.00	5,232.3	0.0	0.0	0.0	0.00	0.00	0.00



Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 3-16-9-17H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	WELL @ 5280.1ft (Original Well Elev)
<b>Project:</b>	Utah	<b>MD Reference:</b>	WELL @ 5280.1ft (Original Well Elev)
<b>Site:</b>	GMBU 3-16-9-17H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 3-16-9-17H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
5,300.0	7.45	200.66	5,299.8	-4.1	-1.6	4.4	11.00	11.00	0.00	
5,400.0	18.45	200.66	5,397.1	-25.0	-9.4	26.8	11.00	11.00	0.00	
5,500.0	29.45	200.66	5,488.4	-63.0	-23.7	67.3	11.00	11.00	0.00	
5,600.0	40.45	200.66	5,570.2	-116.5	-43.9	124.5	11.00	11.00	0.00	
5,700.0	51.45	200.66	5,639.6	-183.6	-69.2	196.2	11.00	11.00	0.00	
5,800.0	62.45	200.66	5,694.1	-261.9	-98.8	279.9	11.00	11.00	0.00	
5,900.0	73.45	200.66	5,731.6	-348.5	-131.4	375.5	11.00	11.00	0.00	
6,000.0	84.45	200.66	5,750.7	-440.2	-166.0	470.5	11.00	11.00	0.00	
6,066.7	91.78	200.66	5,752.9	-502.5	-189.5	537.0	11.00	11.00	0.00	
6,100.0	91.78	200.66	5,751.9	-533.7	-201.2	570.4	0.00	0.00	0.00	
6,200.0	91.78	200.66	5,748.8	-627.2	-266.5	670.3	0.00	0.00	0.00	
6,300.0	91.78	200.66	5,745.7	-720.7	-271.8	770.3	0.00	0.00	0.00	
6,400.0	91.78	200.66	5,742.6	-814.3	-307.0	870.2	0.00	0.00	0.00	
6,500.0	91.78	200.66	5,739.5	-907.9	-342.3	970.2	0.00	0.00	0.00	
6,600.0	91.78	200.66	5,736.3	-1,001.3	-377.6	1,070.1	0.00	0.00	0.00	
6,700.0	91.78	200.66	5,733.2	-1,094.8	-412.8	1,170.1	0.00	0.00	0.00	
6,800.0	91.78	200.66	5,730.1	-1,188.4	-448.1	1,270.0	0.00	0.00	0.00	
6,900.0	91.78	200.66	5,727.0	-1,281.9	-483.4	1,370.0	0.00	0.00	0.00	
7,000.0	91.78	200.66	5,723.9	-1,375.4	-518.6	1,469.9	0.00	0.00	0.00	
7,100.0	91.78	200.66	5,720.8	-1,468.9	-553.9	1,569.9	0.00	0.00	0.00	
7,200.0	91.78	200.66	5,717.7	-1,562.5	-589.2	1,669.8	0.00	0.00	0.00	
7,300.0	91.78	200.66	5,714.6	-1,656.0	-624.4	1,769.8	0.00	0.00	0.00	
7,400.0	91.78	200.66	5,711.5	-1,749.5	-659.7	1,869.8	0.00	0.00	0.00	
7,500.0	91.78	200.66	5,708.4	-1,843.0	-695.0	1,969.7	0.00	0.00	0.00	
7,600.0	91.78	200.66	5,705.3	-1,936.6	-730.2	2,069.7	0.00	0.00	0.00	
7,700.0	91.78	200.66	5,702.2	-2,030.1	-765.5	2,169.6	0.00	0.00	0.00	
7,800.0	91.78	200.66	5,699.1	-2,123.6	-800.7	2,269.6	0.00	0.00	0.00	
7,900.0	91.78	200.66	5,696.0	-2,217.1	-836.0	2,369.5	0.00	0.00	0.00	
8,000.0	91.78	200.66	5,692.9	-2,310.7	-871.3	2,469.5	0.00	0.00	0.00	
8,100.0	91.78	200.66	5,689.8	-2,404.2	-906.5	2,569.4	0.00	0.00	0.00	
8,200.0	91.78	200.66	5,686.6	-2,497.7	-941.8	2,669.4	0.00	0.00	0.00	
8,300.0	91.78	200.66	5,683.5	-2,591.2	-977.1	2,769.3	0.00	0.00	0.00	
8,400.0	91.78	200.66	5,680.4	-2,684.7	-1,012.3	2,869.3	0.00	0.00	0.00	
8,500.0	91.78	200.66	5,677.3	-2,778.3	-1,047.6	2,969.2	0.00	0.00	0.00	
8,600.0	91.78	200.66	5,674.2	-2,871.8	-1,082.9	3,069.2	0.00	0.00	0.00	
8,700.0	91.78	200.66	5,671.1	-2,965.3	-1,118.1	3,169.1	0.00	0.00	0.00	
8,800.0	91.78	200.66	5,668.0	-3,058.8	-1,153.4	3,269.1	0.00	0.00	0.00	
8,900.0	91.78	200.66	5,664.9	-3,152.4	-1,188.7	3,369.0	0.00	0.00	0.00	
9,000.0	91.78	200.66	5,661.8	-3,245.9	-1,223.9	3,469.0	0.00	0.00	0.00	
9,100.0	91.78	200.66	5,658.7	-3,339.4	-1,259.2	3,568.9	0.00	0.00	0.00	
9,200.0	91.78	200.66	5,655.6	-3,432.9	-1,294.5	3,668.9	0.00	0.00	0.00	
9,300.0	91.78	200.66	5,652.5	-3,526.5	-1,329.7	3,768.8	0.00	0.00	0.00	
9,400.0	91.78	200.66	5,649.4	-3,620.0	-1,365.0	3,868.8	0.00	0.00	0.00	
9,500.0	91.78	200.66	5,646.3	-3,713.5	-1,400.3	3,968.7	0.00	0.00	0.00	
9,600.0	91.78	200.66	5,643.2	-3,807.0	-1,435.5	4,068.7	0.00	0.00	0.00	
9,700.0	91.78	200.66	5,640.1	-3,900.6	-1,470.8	4,168.6	0.00	0.00	0.00	
9,800.0	91.78	200.66	5,636.9	-3,994.1	-1,506.1	4,268.6	0.00	0.00	0.00	
9,900.0	91.78	200.66	5,633.8	-4,087.6	-1,541.3	4,368.5	0.00	0.00	0.00	
10,000.0	91.78	200.66	5,630.7	-4,181.1	-1,576.6	4,468.5	0.00	0.00	0.00	
10,100.0	91.78	200.66	5,627.6	-4,274.7	-1,611.8	4,568.4	0.00	0.00	0.00	
10,200.0	91.78	200.66	5,624.5	-4,368.2	-1,647.1	4,668.4	0.00	0.00	0.00	
10,300.0	91.78	200.66	5,621.4	-4,461.7	-1,682.4	4,768.4	0.00	0.00	0.00	
10,400.0	91.78	200.66	5,618.3	-4,555.2	-1,717.6	4,868.3	0.00	0.00	0.00	
10,500.0	91.78	200.66	5,615.2	-4,648.7	-1,752.9	4,968.3	0.00	0.00	0.00	



Planning Report

<b>Database:</b>	EDM 5000.1 Update	<b>Local Co-ordinate Reference:</b>	Site GMBU 3-16-9-17H
<b>Company:</b>	Newfield Production Company	<b>TVD Reference:</b>	WELL @ 5280.1ft (Original Well Elev)
<b>Project:</b>	Utah	<b>MD Reference:</b>	WELL @ 5280.1ft (Original Well Elev)
<b>Site:</b>	GMBU 3-16-9-17H	<b>North Reference:</b>	Grid
<b>Well:</b>	GMBU 3-16-9-17H	<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)	
10,600.0	91.78	200.66	5,612.1	-4,742.3	-1,788.2	5,068.2	0.00	0.00	0.00	
10,700.0	91.78	200.66	5,609.0	-4,835.8	-1,823.4	5,168.2	0.00	0.00	0.00	
10,800.0	91.78	200.66	5,605.9	-4,929.3	-1,858.7	5,268.1	0.00	0.00	0.00	
10,892.9	91.78	200.66	5,603.0	-5,016.2	-1,891.5	5,361.0	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude	
3-16-9-17H - hit/miss target - Shape - Point	0.00	0.00	5,603.0	-5,016.2	-1,891.5	2,188,737.36	626,264.80	40° 1' 26.311 N	110° 1' 14.364 W	

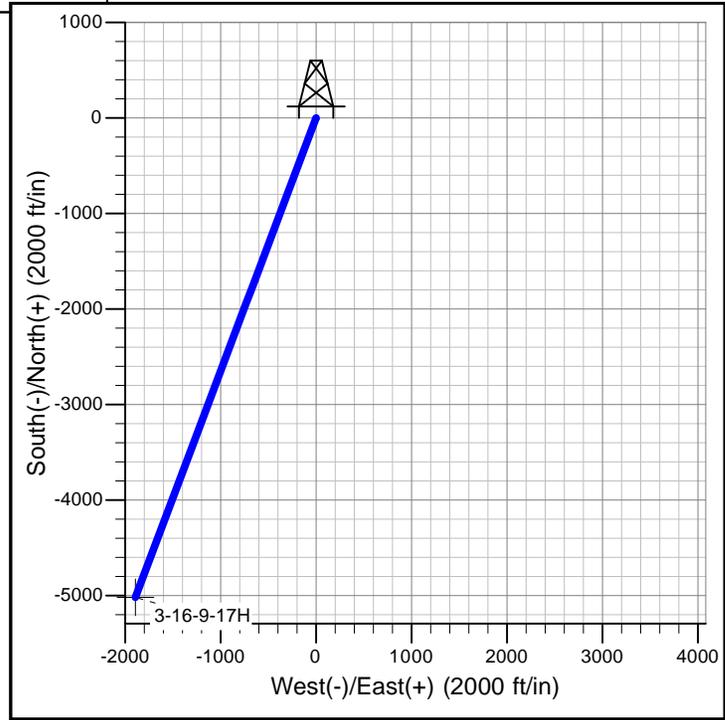
CONFIDENTIAL



# Newfield Production Company

**Project: Utah**  
**Site: GMBU 3-16-9-17H**  
**Well: GMBU 3-16-9-17H**  
**Wellbore: Wellbore #1**  
**Design: Design #1**

Azimuths to Grid North  
 True North:  $-0.95^\circ$   
 Magnetic North:  $10.23^\circ$   
  
 Magnetic Field  
 Strength: 52248.8snT  
 Dip Angle:  $65.79^\circ$   
 Date: 2/18/2012  
 Model: IGRF200510



CONFIDENTIAL

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	5232.3	0.00	0.00	5232.3	0.0	0.0	0.00	0.00	0.0	
3	6066.7	91.78	200.66	5752.9	-502.5	-189.5	11.00	200.66	537.0	
	410892.9	91.78	200.66	5603.0	-5016.2	-1891.5	0.00	0.00	5361.0	3-16-9-17H

**PROJECT DETAILS: Utah**

**Geodetic System: US State Plane 1983**  
**Datum: North American Datum 1983**  
**Ellipsoid: GRS 1980**  
**Zone: Utah Central Zone**

**System Datum: Mean Sea Level**

NEWFIELD PRODUCTION COMPANY  
GMBU 3-16-9-17H  
SHL: NE/NW SECTION 16, T9S, R17E  
BHL: SW/SW SECTION 16, T9S, R17E  
DUCHESNE COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. EXISTING ROADS

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site GMBU 3-16-9-17H located in the NE¼ NW¼ Section 16, T9S, R17E, S.L.B. & M., 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 its junction with an existing road to the southwest; proceed southwesterly - 1.4 miles ± to its junction with an existing road to the east; proceed in an easterly direction - 1.0 miles ± to its junction with the beginning of the proposed access road; proceed along the proposed access road - 79' ± to the proposed well location.

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

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

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

2. PLANNED ACCESS ROAD

Approximately 79' of access road is proposed. See attached **Topographic Map "B"**.

The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

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 for drilling purposes from the following water sources:

Johnson Water District  
Water Right: 43-7478

Neil Moon Pond  
Water Right: 43-11787

Maurice Harvey Pond  
Water Right: 47-11758

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. A 16 mil liner with felt will be required. Newfield requests approval that a flare pit be constructed and utilized on this location.

A portable toilet will be provided for human waste.

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

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

8. **ANCILLARY FACILITIES:**

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

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

**Fencing Requirements**

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

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

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

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

a) **Producing Location**

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

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from

the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

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

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

12. **OTHER ADDITIONAL INFORMATION:**

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. State of Utah Antiquities Project Permit #U-11-MQ-0964b,s 11/17/11. Paleontological Resource Survey prepared by, Wade E. Miller, 11/28/11.

Newfield Production Company requests 79' of planned access road be granted. **Refer to Topographic Map "B"**. Newfield Production Company requests 433' of surface gas line be granted. Newfield Production Company requests 59' of buried water line be granted.

It is proposed that the disturbed area will be 60' wide to allow for construction of the proposed access road, a 10" or smaller gas gathering line, a 4" poly fuel gas line, a buried 10" steel water injection line, a buried 3" poly water return line and a and a 14" surface flow line. The planned access road will consist of a 20' permanent running surface (10' either side of the centerline) crowned and ditched in order to handle any run-off from any precipitation events that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be turnouts as needed along this road to allow for increases in potential traffic issues. 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.

Both the proposed surface gas and buried water lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** The proposed water pipelines will be buried in a 4-5' deep trench constructed with a trencher or backhoe for the length of the proposal. The equipment will run on the surface and not be flat bladed to minimize surface impacts to precious topsoil in these High Desert environments. If possible, all proposed surface gas pipelines will be installed on the same side of the road as existing gas lines. The construction phase of the planned access road, proposed gas lines and proposed water lines will last approximately (5) days.

In the event that the proposed well is converted to a water injection well, a Sundry Notice form will be applied for through the State of Utah DOGM office.

**Surface Flow Line**

Newfield requests 547' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. Refer to Topographic Map "C" for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

**Clearing and Grading:** No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

Installation: The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

Termination and Final Reclamation: After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

- 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 3-16-9-17H, 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 3-16-9-17H Newfield will use, produce,

store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

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

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

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

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

Representative

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

Certification

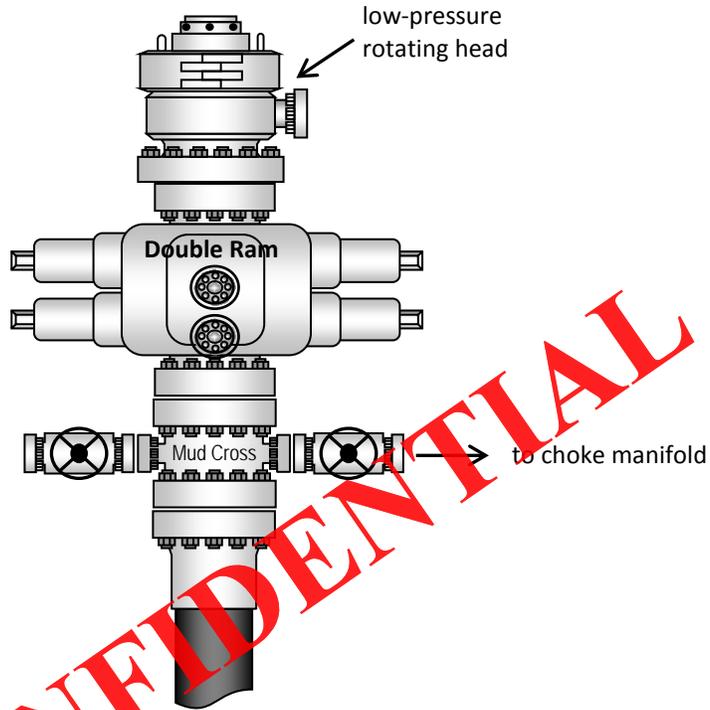
Please be advised that Newfield Production Company is considered to be the operator of well #3-16-9-17H, NE/NW Section 16, T9S, R17E, Duchesne County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Bond #B001804.

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.

2/27/12  
Date

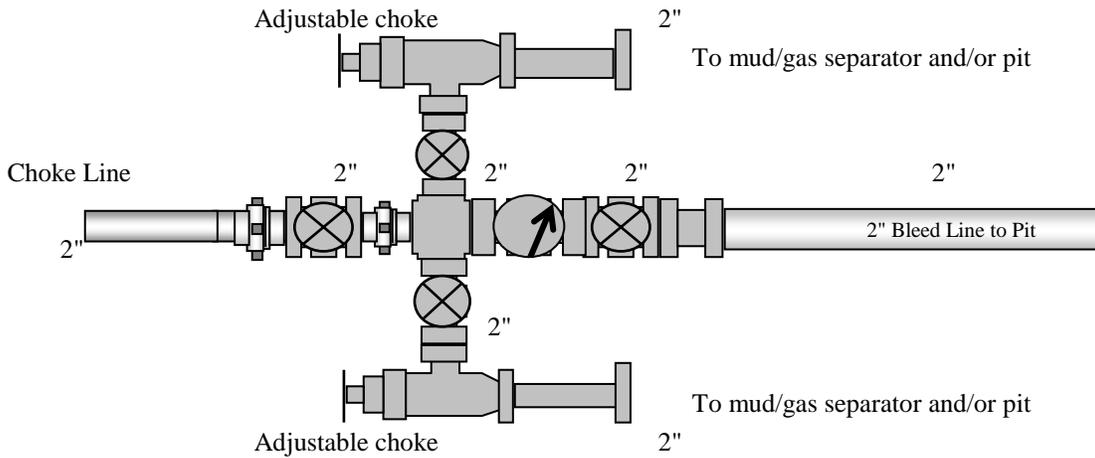
\_\_\_\_\_  
Mandie Crozier  
Regulatory Analyst  
Newfield Production Company

### Typical 2M BOP stack configuration



**CONFIDENTIAL**

### Typical 2M Choke Manifold Configuration



# NEWFIELD EXPLORATION COMPANY

## WELL PAD INTERFERENCE PLAT

**3-16-9-17H**

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

Section Line

Existing 2-Track Road

**TOP HOLE FOOTAGES**

3-16-9-17H (PROPOSED)  
205' FNL & 2081' FWL

**BOTTOM HOLE FOOTAGES**

3-16-9-17H (PROPOSED)  
100' FSL & 100' FWL

LATITUDE & LONGITUDE Surface position of Wells (NAD 83)		
WELL	LATITUDE	LONGITUDE
3-16-9-17H	40° 02' 15.57"	110° 00' 48.98"



Future Pit

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● 3-16-9-17H (PROPOSED)

S20°39'48"W 5360.96'  
(To Bottom Hole)

RELATIVE COORDINATES From Top Hole to Bottom Hole		
WELL	NORTH	EAST
3-16-9-17H	-5,016'	-1,892'

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

Existing Road

Existing Waterline  
Right-of-Way

Proposed Access

Edge of  
Proposed  
Pad

SURVEYED BY: C.S.	DATE SURVEYED: 10-04-11	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 10-09-11	V1
SCALE: 1" = 60'	REVISED: R.V.C. 02-29-12	

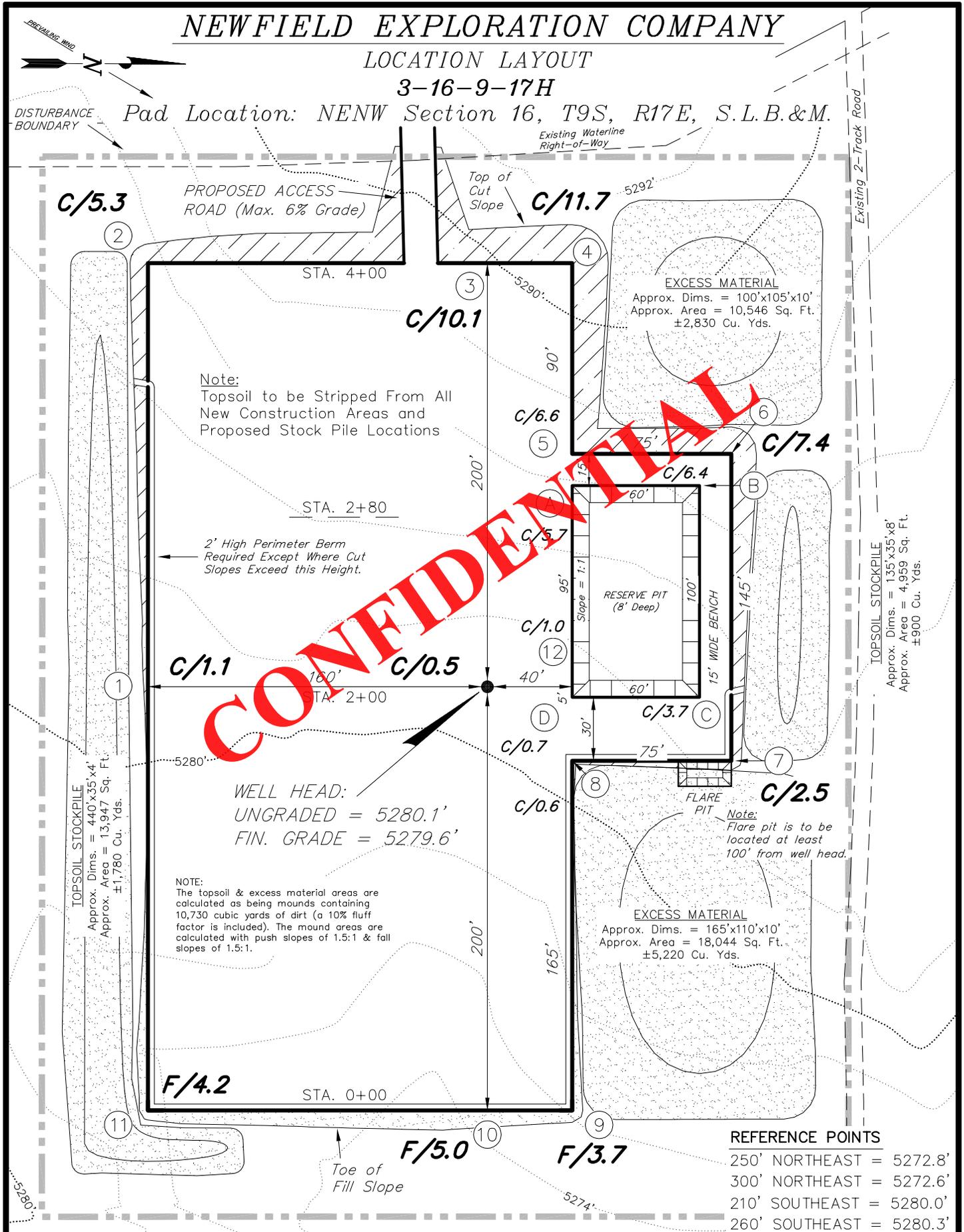
(435) 781-2501  
 180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD EXPLORATION COMPANY

## LOCATION LAYOUT

3-16-9-17H

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



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SURVEYED BY: C.S.	DATE SURVEYED: 10-04-11	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 10-09-11	V1
SCALE: 1" = 60'	REVISED: R.V.C. 02-29-12	

(435) 781-2501

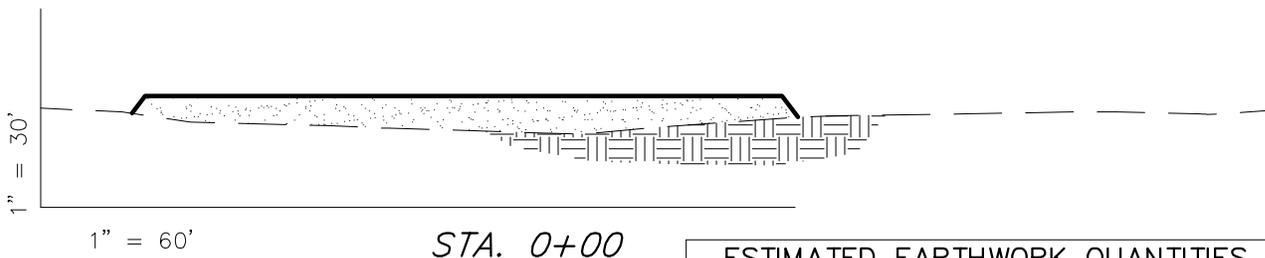
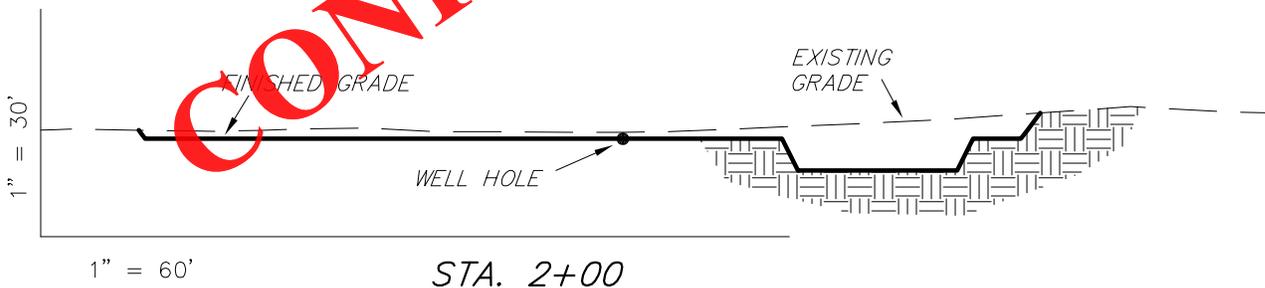
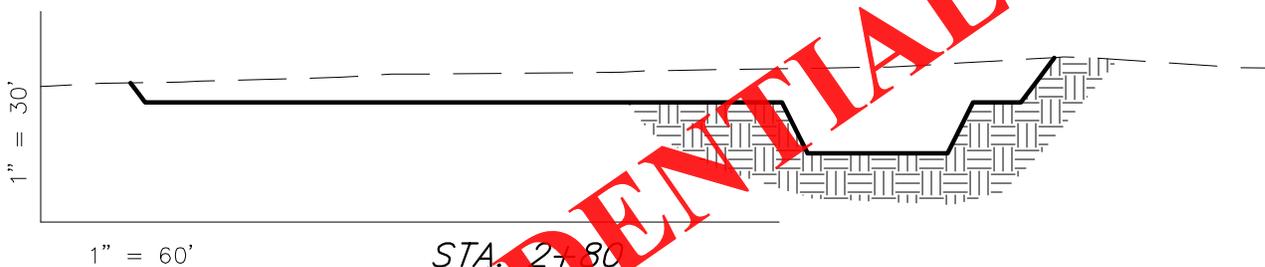
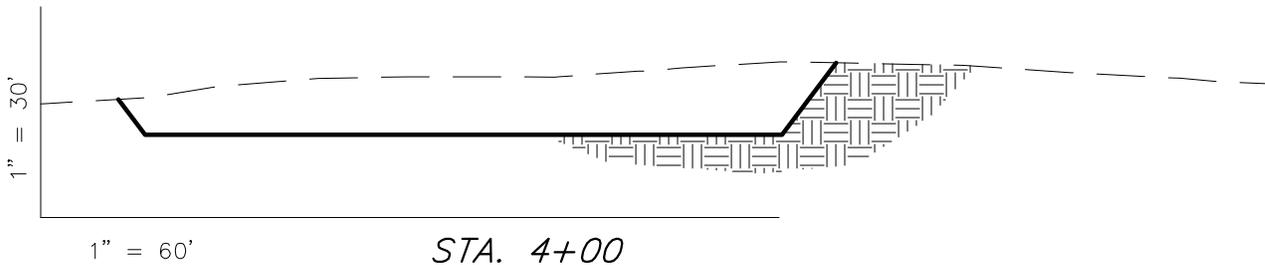
**Tri State**  
Land Surveying, Inc.  
180 NORTH VERNAL AVE. VERNAL, UTAH 84078

# NEWFIELD EXPLORATION COMPANY

## CROSS SECTIONS

**3-16-9-17H**

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



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ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)				
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	9,870	3,580	Topsoil is not included in Pad Cut	6,290
PIT	1,030	0		1,030
<b>TOTALS</b>	<b>10,900</b>	<b>3,580</b>	<b>2,430</b>	<b>7,320</b>

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

SURVEYED BY: C.S.	DATE SURVEYED: 10-04-11	VERSION: V1
DRAWN BY: F.T.M.	DATE DRAWN: 10-09-11	
SCALE: 1" = 60'	REVISED: R.V.C. 02-29-12	

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

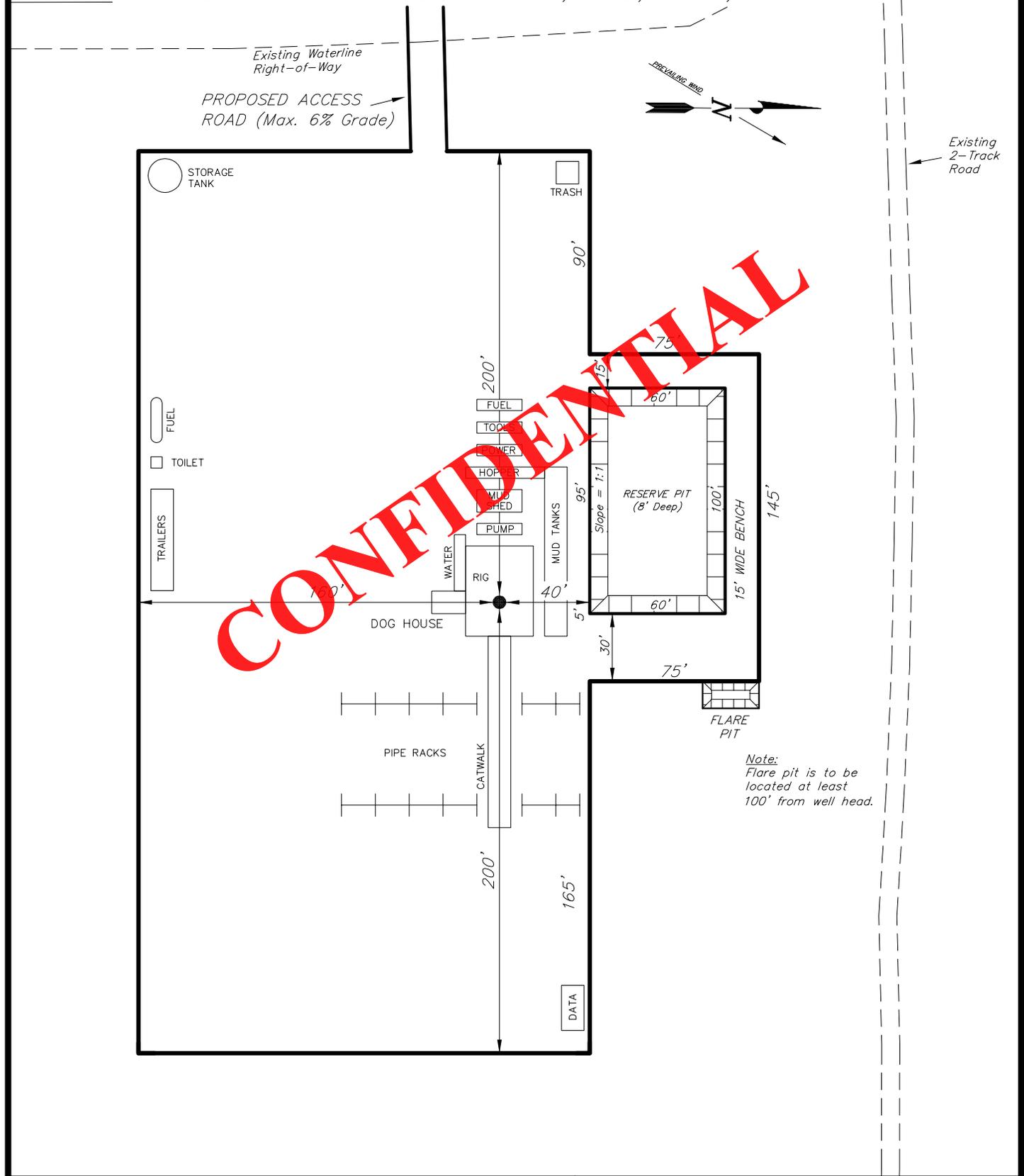
RECEIVED: February 27, 2012

# NEWFIELD EXPLORATION COMPANY

## TYPICAL RIG LAYOUT

3-16-9-17H

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



*Note:*  
Flare pit is to be located at least 100' from well head.

SURVEYED BY: C.S.	DATE SURVEYED: 10-04-11	VERSION:
DRAWN BY: F.T.M.	DATE DRAWN: 10-09-11	V1
SCALE: 1" = 60'	REVISED: R.V.C. 02-29-12	

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

# 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)

March 2, 2012

## Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2012 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 2012 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API#	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-047-52396	GMBU 3-32-8-18H	Sec 32 T08S R18E 0700 FNL 1525 FWL
	Lateral 1	Sec 32 T08S R18E 0100 FSL 0100 FWL
43-013-51254	GMBU 3-16-9-17H	Sec 16 T09S R17E 0205 FNL 2081 FWL
	Lateral 1	Sec 16 T09S R17E 0100 FSL 0100 FWL
43-013-51255	GMBU 2-16-9-16H	Sec 16 T09S R16E 0518 FNL 2358 FEL
	Lateral 1	Sec 16 T09S R16E 0100 FSL 1590 FWL
43-047-52397	GMBU 1-2-9-18H	Sec 02 T09S R18E 0489 FNL 0793 FEL
	Lateral 1	Sec 02 T09S R18E 0700 FSL 2550 FEL
43-047-52401	GMBU 1-32-8-18H	Sec 32 T08S R18E 0639 FNL 0658 FEL
	Lateral 1	Sec 32 T08S R18E 0100 FSL 2550 FEL
43-013-51263	GMBU X-10-9-17	Sec 15 T09S R17E 0625 FNL 1956 FWL
	BHL	Sec 10 T09S R17E 0092 FSL 1264 FWL
43-013-51264	GMBU L-10-9-17	Sec 10 T09S R17E 1845 FSL 0677 FEL
	BHL	Sec 10 T09S R17E 2469 FNL 1421 FEL
43-013-51265	GMBU W-10-9-17	Sec 15 T09S R17E 0642 FNL 1969 FWL
	BHL	Sec 10 T09S R17E 0189 FSL 2362 FEL

RECEIVED: March 06, 2012

API#	WELL NAME	LOCATION
(Proposed PZ GREEN RIVER)		
43-013-51266	GMBU V-10-9-17	Sec 15 T09S R17E 0492 FNL 0656 FEL
		BHL Sec 10 T09S R17E 0179 FSL 1523 FEL
43-013-51267	GMBU I-15-9-17	Sec 15 T09S R17E 0507 FNL 0671 FEL
		BHL Sec 15 T09S R17E 1487 FNL 1372 FEL
43-013-51268	GMBU S-10-9-17	Sec 10 T09S R17E 1831 FSL 0662 FEL
		BHL Sec 10 T09S R17E 0932 FSL 1475 FEL
43-013-51269	GMBU U-10-9-17	Sec 14 T09S R17E 0583 FNL 0495 FWL
		BHL Sec 10 T09S R17E 0188 FSL 0126 FEL
43-013-51270	GMBU X-11-9-17	Sec 14 T09S R17E 0568 FNL 0509 FWL
		BHL Sec 11 T09S R17E 0217 FSL 1627 FWL
43-047-52402	GMBU F-12-9-17	Sec 11 T09S R17E 0749 FNL 0477 FEL
		BHL Sec 12 T09S R17E 1475 FNL 0165 FWL
43-047-52403	GMBU V-2-9-17	Sec 11 T09S R17E 0731 FNL 0488 FEL
		BHL Sec 02 T09S R17E 0162 FSL 1523 FEL
43-047-52404	GMBU G-12-9-17	Sec 12 T09S R17E 0705 FNL 0680 FWL
		BHL Sec 12 T09S R17E 1408 FNL 1700 FWL
43-047-52405	GMBU X-1-9-17	Sec 12 T09S R17E 0690 FNL 0695 FWL
		BHL Sec 01 T09S R17E 0130 FSL 1412 FWL

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: 2012.03.02 14:46:13 -0700

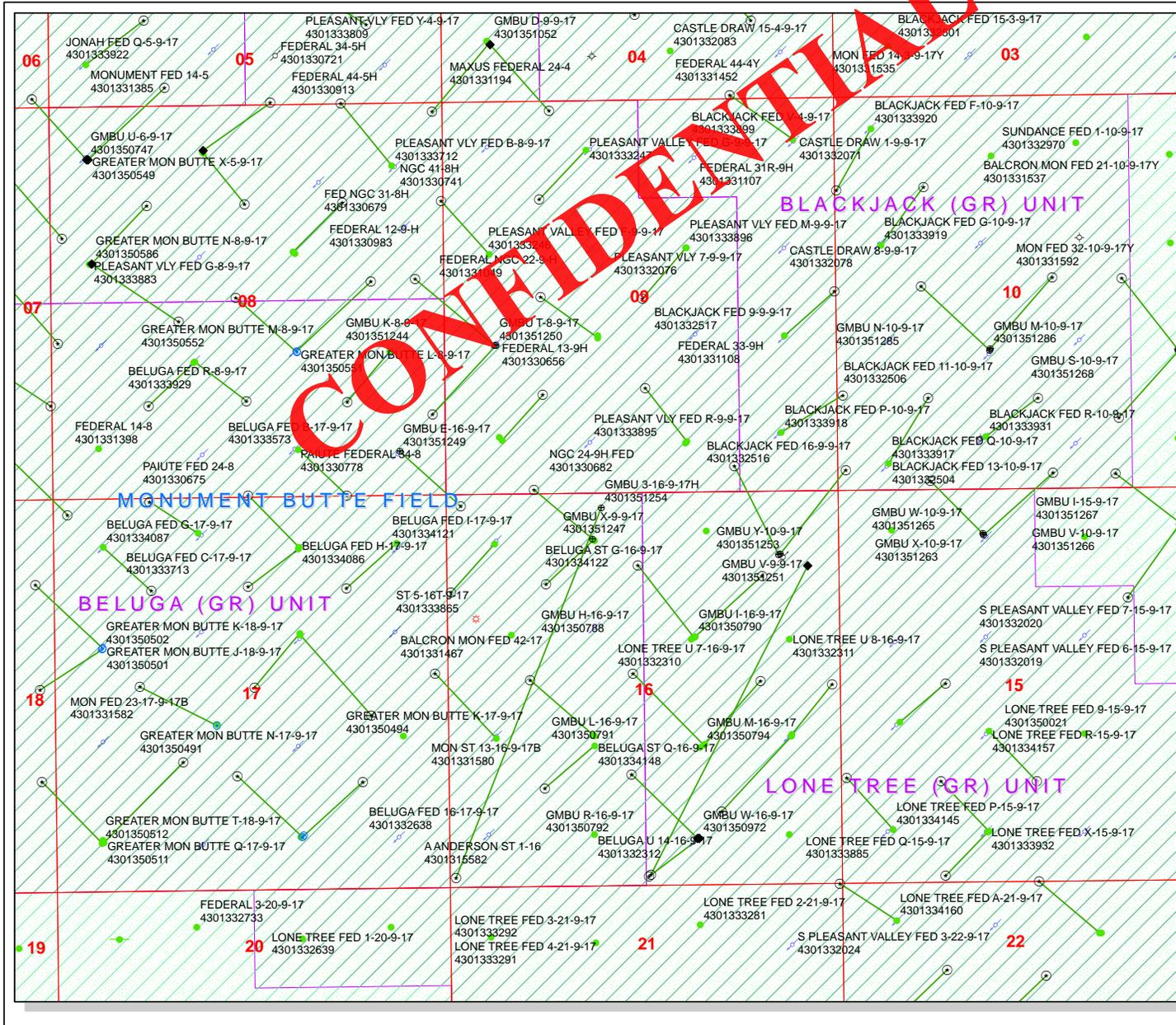
bcc: File - Greater Monument Butte Unit  
 Division of Oil Gas and Mining  
 Central Files  
 Agr. Sec. Chron  
 Fluid Chron

MCoulthard:mc:3-2-12

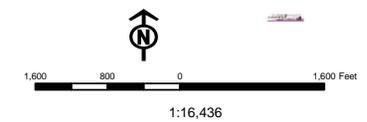
RECEIVED: March 06, 2012

API Number: 4301351254  
Well Name: GMBU 3-16-9-17H  
Township T0.9 . Range R1.7 . Section 16  
Meridian: SLBM  
Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:  
Map Produced by Diana Mason



Units Status	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 GEOTHERM.	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	WWI - Water Injection Well
TERMINATED	WSW - Water Supply Well



**From:** Jim Davis  
**To:** APD APPROVAL  
**CC:** Jensen, Chris; mcrozier@newfield.com; teaton@newfield.com  
**Date:** 3/22/2012 4:02 PM  
**Subject:** Newfield APD approvals

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

GMBU X-9-9-17 (4301351247)  
GMBU F-36-8-17 (4301351225)  
GMBU 3-16-9-17H (4301351254)  
GMBU 2-16-9-16H (4301351255)  
GMBU 3-32-8-18H (4304752396)  
GMBU 1-2-9-18H (4304752397)  
GMBU 1-32-8-18H (4304752401)  
GMBU 3-36-8-17H (4304752292)  
GMBU 3-2-9-18H (4304752291)  
GMBU Y-10-9-17 (4301351253)  
GMBU V-9-9-17 (4301351251)

Thanks.  
-Jim

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Well Name	NEWFIELD PRODUCTION COMPANY GMBU 3-16-9-17H 4301351254			
String	SURF	PROD	PROD	
Casing Size(")	8.625	5.500	4.500	
Setting Depth (TVD)	500	5753	5603	
Previous Shoe Setting Depth (TVD)	0	500	5753	
Max Mud Weight (ppg)	8.3	9.0	9.0	
BOPE Proposed (psi)	500	2000	2000	
Casing Internal Yield (psi)	2950	9190	10690	
Operators Max Anticipated Pressure (psi)	2492		8.6	

Calculations	<b>SURF String</b>	<b>8.625</b>	"
Max BHP (psi)	.052*Setting Depth*MW=	216	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	156	YES <input type="checkbox"/> air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	106	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)=	106	NO <input type="checkbox"/> OK
Required Casing/BOPE Test Pressure=		500	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

Calculations	<b>PROD String</b>	<b>5.500</b>	"
Max BHP (psi)	.052*Setting Depth*MW=	2622	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	2002	NO <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1426	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)=	1536	NO <input type="checkbox"/> Reasonable for area
Required Casing/BOPE Test Pressure=		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		500	psi *Assumes 1psi/ft frac gradient

Calculations	<b>PROD String</b>	<b>4.500</b>	"
Max BHP (psi)	.052*Setting Depth*MW=	2622	
			<b>BOPE Adequate For Drilling And Setting Casing at Depth?</b>
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	1950	YES <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1389	YES <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)=	2655	YES <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		2000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		5753	psi *Assumes 1psi/ft frac gradient

Calculations	<b>String</b>		"
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

# 43013512540000 GMBU 3-16-9-17H

## Casing Schematic

Surface

8-5/8"  
MW 8.3  
Frac 19.3

1276  
187  
Unita  
TOC @ 176.  
Surface  
500. MD  
500. TVD  
to 0' @ 4% w/p  
± BMSW (173' Newfield)  
1234' Green River \* Stip ✓

1/5 Stip cmts.

TOC @ 2042.  
to 43' @ 0% w/p, to 4077  
proposed to surface  
\* Stip ✓

350' Garden Gulch mbr.

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KOP 5232'

5232' KOP/Port Collar

4-1/2"  
MW 9.  
6200'

Production  
6067. MD  
5753. TVD  
6200'  
horizontal

4-1/2"  
MW 9.

Production Liner  
10893. MD  
5603. TVD

205NL	2081WL
-5016	-1892
5221	189 FWL ✓
5285	unit
64 FSL ✓	
SW SW Sec 16-95-17E	

Well name:	<b>43013512540000 GMBU 3-16-9-17H</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Surface	Project ID: 43-013-51254
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: 81 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 100 ft  
Cement top: 176 ft

**Burst**

Max anticipated surface pressure: 440 psi  
Internal gradient: 0.120 psi/ft  
Calculated BHP 500 psi

No backup mud specified.

**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: 437 ft

**Non directional string.**

**Re subsequent strings:**

Next setting depth: 5,753 ft  
Next mud weight: 9.000 ppg  
Next setting BHP: 2,690 psi  
Fracture mud wt: 19,250 ppg  
Fracture depth: 500 ft  
Injection pressure: 500 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	500	8.625	24.00	J-55	ST&C	500	500	7.972	2574
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	216	1370	6.332	500	2950	5.90	12	244	20.33 J

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

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

Date: April 2, 2012  
Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 500 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>43013512540000 GMBU 3-16-9-17H</b>		
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>		
String type:	Production	Project ID:	43-013-51254
Location:	DUCHESNE COUNTY		

**Design parameters:**

**Collapse**

Mud weight: 9.000 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: 155 °F  
 Temperature gradient: 1.40 °F/100ft  
 Minimum section length: 1,000 ft  
 Cement top: 2,042 ft

**Burst**

Max anticipated surface pressure: 1,424 psi  
 Internal gradient: 0.220 psi/ft  
 Calculated BHP 2,690 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: 4,969 ft

**Directional Info - Build & Hold**

Kick-off point: 5232 ft  
 Departure at shoe: 538 ft  
 Maximum dogleg: 11 °/100ft  
 Inclination at shoe: 91.78 °

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	6067	5.5	20.00	N-80	LT&C	5753	6067	4.653	40242
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	2690	8830	3.283	2690	9190	3.42	115.1	428	3.72 J

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

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

Date: April 2, 2012  
 Salt Lake City, Utah

**Remarks:**

Collapse is based on a vertical depth of 5753 ft, a mud weight of 9 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

Well name:	<b>43013512540000 GMBU 3-16-9-17H</b>	
Operator:	<b>NEWFIELD PRODUCTION COMPANY</b>	
String type:	Production Liner	Project ID: 43-013-51254
Location:	DUCHESNE COUNTY	

**Design parameters:**

**Collapse**

Mud weight: 9.000 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: 152 °F  
Temperature gradient: 1.40 °F/100ft  
Minimum section length: 1,000 ft

**Burst**

Max anticipated surface pressure: 1,387 psi  
Internal gradient: 0.220 psi/ft  
Calculated BHP 2,620 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: 0 ft

Liner top: 6,067 ft  
**Directional Info - Build & Hold**  
Kick-off point: 5232 ft  
Departure at shoe: 5361 ft  
Maximum dogleg: 0 °/100ft  
Inclination at shoe: 91.78 °

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	4793	4.5	11.60	P-110	Buttress	5603	10893	3.875	24706
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	2620	7580	2.894	2652	10690	4.03	-1.7	367.2	99.99 B

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

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

Date: April 2, 2012  
Salt Lake City, Utah

**Remarks:**

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 5603 ft, a mud weight of 9 ppg. The 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 3-16-9-17H  
**API Number** 43013512540000      **APD No** 5368    **Field/Unit** MONUMENT BUTTE  
**Location: 1/4,1/4** NENW    **Sec** 16    **Tw** 9.0S    **Rng** 17.0E    205 FNL 2081 FWL  
**GPS Coord (UTM)** 584149 4432399      **Surface Owner**

### Participants

T. Eaton, F. Bird, Z. Mc Intyre– Newfield; C. Jensen,– DOGM ; J. Davis- SITLA; A. Hansen- DWR;

### Regional/Local Setting & Topography

This location is on the Parriette Bench in the Monument Butte field 13 road miles south of Myton, Utah. The topography is relatively flat with slopes of around 5% or less. Erosion has created a network of draws and drainages that are deeply cut. Drainages in the area are eventual tributaries of Snyder reservoir. The surrounding lowlands south are generally uncharacteristically green. This is good habitat for Accipiters. The surrounding area has seen extensive development for the petroleum industry.

### Surface Use Plan

**Current Surface Use**  
Wildlfe Habitat

<b>New Road Miles</b>	<b>Well Pad Width Length</b>	<b>Src Const Material</b>	<b>Surface Formation</b>
0	300 400	Onsite	UNTA

**Ancillary Facilities** N

**Waste Management Plan Adequate?** Y

### Environmental Parameters

**Affected Floodplains and/or Wetlands** N

#### **Flora / Fauna**

Dominant vegetation;

Galletta, shadscale, halogeton, shadscale, rice grass and rabbit brush surround the proposed site.

Wildlife;

Habitat contains forbs that may be suitable browse for deer, antelope, Priarie dogs and rabbits, though none were observed.

DWR has placed restrictions to drilling or Construction activities for the period of March 1 through July 15 because of known Ferruginous Hawk nesting in the immediate area

#### **Soil Type and Characteristics**

gravelly sand with silts

#### **Erosion Issues** Y

Minor drainage south of hole

**Sedimentation Issues** Y**Site Stability Issues** N**Drainage Diversion Required?** N**Berm Required?** Y**Erosion Sedimentation Control Required?** N

berm will be sufficient to direct overland flows

**Paleo Survey Run?** Y **Paleo Potential Observed?** N **Cultural Survey Run?** Y **Cultural Resources?** N**Reserve Pit****Site-Specific Factors****Site Ranking**

<b>Distance to Groundwater (feet)</b>	100 to 200	5
<b>Distance to Surface Water (feet)</b>	300 to 1000	2
<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>	10 to 20	5
<b>Affected Populations</b>		
<b>Presence Nearby Utility Conduits</b>	Not Present	0
<b>Final Score</b>		47 1 Sensitivity Level

**Characteristics / Requirements**

Pit to be dug to a depth of 8'. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete.

**Closed Loop Mud Required?** N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** N**Other Observations / Comments**Chris Jensen  
Evaluator3/14/2012  
Date / Time

# Application for Permit to Drill Statement of Basis

## Utah Division of Oil, Gas and Mining

4/11/2012

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
5368	43013512540000	LOCKED	OW	S	No
<b>Operator</b>	NEWFIELD PRODUCTION COMPANY		<b>Surface Owner-APD</b>		
<b>Well Name</b>	GMBU 3-16-9-17H		<b>Unit</b>	GMBU (GRRV)	
<b>Field</b>	MONUMENT BUTTE		<b>Type of Work</b>	DRILL	
<b>Location</b>	NENW 16 9S 17E S 205 FNL (UTM) 584163E 4432402N		2081 FWL	GPS Coord	

### Geologic Statement of Basis

Newfield proposes to set 500' 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

4/2/2012  
Date / Time

### Surface Statement of Basis

The soil type and topography at present do not combine to pose a significant threat to erosion or sediment/ pollution transport in these regional climate conditions. Construction standards of the Operator appear to be adequate for the proposed purpose.

Alex Hansen - DWR was present and stipulates that drilling and construction activities be suspended during the nesting period of March 1 through July 15. Previous investigations have revealed nests used by ferruginous hawks in the immediate vicinity of the location. I recognize no other special flora or animal species or cultural resources on site that the proposed action may harm.

A representative from SITLA was invited and was in attendance for the pre-site inspection. The location should be bermed to prevent spills from leaving the confines of the pad. Fencing around the reserve pit will be necessary once the well is drilled to prevent wildlife and livestock from entering. A synthetic liner of 16 mils (minimum) should be utilized in the reserve pit.

Chris Jensen  
Onsite Evaluator

3/14/2012  
Date / Time

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

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.

RECEIVED: April 11, 2012

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 2/27/2012

API NO. ASSIGNED: 43013512540000

WELL NAME: GMBU 3-16-9-17H

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695)

PHONE NUMBER: 435 646-4825

CONTACT: Mandie Crozier

PROPOSED LOCATION: NENW 16 090S 170E

Permit Tech Review: 

SURFACE: 0205 FNL 2081 FWL

Engineering Review: 

BOTTOM: 0100 FSL 0100 FWL

Geology Review: 

COUNTY: DUCHESNE

LATITUDE: 40.03765

LONGITUDE: -110.01349

UTM SURF EASTINGS: 584163.00

NORTHINGS: 4432402.00

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

Commingling 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 - ddoucet  
27 - Other - bhill  
28 - Other2 - 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 3-16-9-17H

**API Well Number:** 43013512540000

**Lease Number:** ML-3453B

**Surface Owner:** STATE

**Approval Date:** 4/11/2012

### 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:

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).

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

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 as indicated in the submitted drilling plan.

In accordance with Utah Admin. R.649-3-21, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

### Additional Approvals:

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

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

**Notification Requirements:**

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

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

**Contact Information:**

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

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

**Reporting Requirements:**

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

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

**Approved by:**

A handwritten signature in black ink, appearing to read "J. Rogers", written in a cursive style.

For John Rogers  
Associate Director, Oil & Gas

<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>1. TYPE OF WELL</b> Oil Well	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> NEWFIELD PRODUCTION COMPANY	<b>7. UNIT or CA AGREEMENT NAME:</b> GMBU (GRRV)
<b>3. ADDRESS OF OPERATOR:</b> Rt 3 Box 3630 , Myton, UT, 84052	<b>8. WELL NAME and NUMBER:</b> GMBU 3-16-9-17H
<b>PHONE NUMBER:</b> 435 646-4825 Ext	<b>9. API NUMBER:</b> 43013512540000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 0205 FNL 2081 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NENW 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: 4/11/2013	<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 checked="" type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>

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

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

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

**Date:** March 12, 2013

**By:** 

<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> 3/5/2013	



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

- State of Utah  
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Request for Permit Extension Validation Well Number 43013512540000**

API: 43013512540000

Well Name: GMBU 3-16-9-17H

Location: 0205 FNL 2081 FWL QTR NENW SEC 16 TWNP 090S RNG 170E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

Date Original Permit Issued: 4/11/2012

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

- If located on private land, has the ownership changed, if so, has the surface agreement been updated?  Yes  No
  
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes  No
  
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes  No
  
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes  No
  
- Has the approved source of water for drilling changed?  Yes  No
  
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?  Yes  No
  
- Is bonding still in place, which covers this proposed well?  Yes  No

Signature: Mandie Crozier

Date: 3/5/2013

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

April 16, 2015

Newfield Production Company  
Rt. 3 Box 3630  
Myton, UT 84052

Re: APDs Rescinded Newfield Production Company,  
Uintah and Duchesne County

Ladies and Gentlemen:

Enclosed find the list of APDs that is being rescinded. No drilling activity at these locations has been reported to the division. Therefore, approval to drill these wells is hereby rescinded as of April 16, 2015.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason  
Environmental Scientist

cc: Well File  
SITLA, Ed Bonner  
Brad Hill, Technical Service Manager



43-013-51254 GMBU 3-16-9-17H

43-013-51255 GMBU 2-16-9-16H

43-047-52397 GMBU 1-2-9-18H

43-013-50996 STATE 11-34-3-3W

43-013-51311 PARKINSON 14-15-3-2W