API Well Number: 43013515080000

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

FORM 3

AMENDED REPORT ☑

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Peterson 3-20-3-2WH

2. TYPE OF WORK
DRILL NEW WELL ● REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
WILDCAT

4. TYPE OF WELL
Oil Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

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)
14-20-H62-5951

11. MINERAL OWNERSHIP
FEDERAL ● INDIAN ○ STATE ○ FEE ○

12. SURFACE OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ●

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
Dale Womack, et al.

14. SURFACE OWNER PHONE (if box 12 = 'fee')
435-789-4830

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
485 S. 250 W., Vernal , UT 84078

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 ○ (Submit Commingling Application) NO ●

19. SLANT
VERTICAL ● DIRECTIONAL ○ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	313 FSL 2057 FWL	SESW	17	3.0 S	2.0 W	U
Top of Uppermost Producing Zone	660 FNL 1980 FWL	NENW	20	3.0 S	2.0 W	U
At Total Depth	660 FSL 2057 FWL	SESW	20	3.0 S	2.0 W	U

21. COUNTY
DUCHESNE

22. DISTANCE TO NEAREST LEASE LINE (Feet)
613

23. NUMBER OF ACRES IN DRILLING UNIT
40

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
30

26. PROPOSED DEPTH
MD: 13292 TVD: 8342

27. ELEVATION - GROUND LEVEL
5150

28. BOND NUMBER
RLB00100473

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
437478

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
COND	17.5	14	0 - 60	37.0	H-40 ST&C	0.0	Class G	35	1.17	15.8
SURF	12.25	9.625	0 - 2500	36.0	J-55 ST&C	8.3	Premium Lite High Strength	204	3.53	11.0
							Class G	154	1.17	15.8
I1	8.75	7	0 - 9335	26.0	P-110 Other	10.5	Premium Lite High Strength	250	3.53	11.0
							50/50 Poz	450	1.24	14.3
L1	6.125	4.5	7939 - 13292	13.5	P-110 Other	10.5	No Used	0	0.0	0.0

ATTACHMENTS

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

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ COMPLETE DRILLING PLAN
- ☑ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ☑ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ☑ TOPOGRAPHICAL MAP

NAME Don Hamilton **TITLE** Permitting Agent **PHONE** 435 719-2018

SIGNATURE **DATE** 06/27/2012 **EMAIL** starpoint@etv.net

API NUMBER ASSIGNED
43013515080000

APPROVAL
Permit Manager

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RECEIVED: July 23, 2012

Newfield Production Company
Peterson 3-20-3-2WH
Surface Hole Location: 313' FSL, 2057' FWL, Section 17, T3S, R2W
Bottom Hole Location: 660' FSL, 2057' FWL, Section 20, T3S, R2W
Duchesne County, UT

Drilling Program

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1. Formation Tops

Uinta	surface
Green River	3,295'
Garden Gulch member	6,108'
Uteland Butte	8,458'
Lateral TD	8,342' TVD / 13,292' MD

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

Base of moderately saline	578'	(water)
Green River	6,108' - 8,342'	(oil)

3. Pressure Control

Section	BOP Description
Surface	12-1/4" diverter
Interm/Prod	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 5M system. A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 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
Conductor	0'	60'	37	H-40	Weld	--	--	--	--	--	--
14									--	--	--
Surface	0'	2,500'	36	J-55	LTC	8.33	8.33	12	3,520	2,020	453,000
9 5/8									2.51	2.54	5.03
Intermediate	0'	8,490'	26	P-110	BTC	10	10.5	15	9,960	6,210	830,000
7		9,335'							2.79	1.64	3.42
Production	7,939'	8,342'	13.5	P-110	BTC	10	10.5	--	12,410	10,670	422,000
4 1/2		13,292'							3.54	2.87	5.84

Assumptions:

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

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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^3 / sacks	OH excess	Weight (ppg)	Yield (ft^3/sk)
Conductor	17 1/2	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	41 / 35	15%	15.8	1.17
Surface Lead	12 1/4	2,000'	Premium Lite II w/ 3% KCl + 10% bentonite	720 / 204	15%	11.0	3.53
Surface Tail	12 1/4	500'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	180 / 154	15%	15.8	1.17
Intermediate Lead	8 3/4	5,108'	Premium Lite II w/ 3% KCl + 10% bentonite	853 / 250	15%	11.0	3.53
Intermediate Tail	8 3/4	3,227'	50/50 Poz/Class G w/ 3% KCl + 2% bentonite	558 / 450	15%	14.3	1.24
Production	6 1/8	--	Liner will not be cemented. It will be isolated with a liner top packer.	-- / --	--	--	--

CONFIDENTIAL

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.

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

The production liner will be left uncemented. Individual frac stages will be isolated with open hole packers. A liner top hanger and packer will be installed 50' above KOP.

6. Type and Characteristics of Proposed Circulating Medium

Interval	Description
Surface - 2,500'	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.
2,500' - 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.

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Anticipated maximum mud weight is 10.5 ppg.

7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run in the intermediate section from the top of the curve to the base of the surface casing. A compensated neutron/formation density log will be run in the intermediate section from the top of the curve to the top of the Garden Gulch formation. A cement bond log will be run from the top of the curve to the cement top behind the intermediate casing.

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 0.52 psi/ft gradient.

8,342' x 0.52 psi/ft = 4338 psi

No abnormal temperature is expected. No H_2S is expected.

9. Other Aspects

An 8-3/4" vertical hole will be drilled to a kick off point of 7,989' .
Directional tools will then be used to build to 92.15 degrees inclination.
The 7" intermediate casing string will be set once the well is landed horizontally in the target zone.

The lateral will be drilled to the bottomhole location shown on the plat.
A liner with a system of open hole packers will be used to provide multi-stage frac isolation in the lateral. The top of the liner will be place 50' above KOP and will be isolated with a liner top packer.

Newfield requests the following variances from Onshore Order #2:
- Variance from Onshoer Order #2, III.E.1
  Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0

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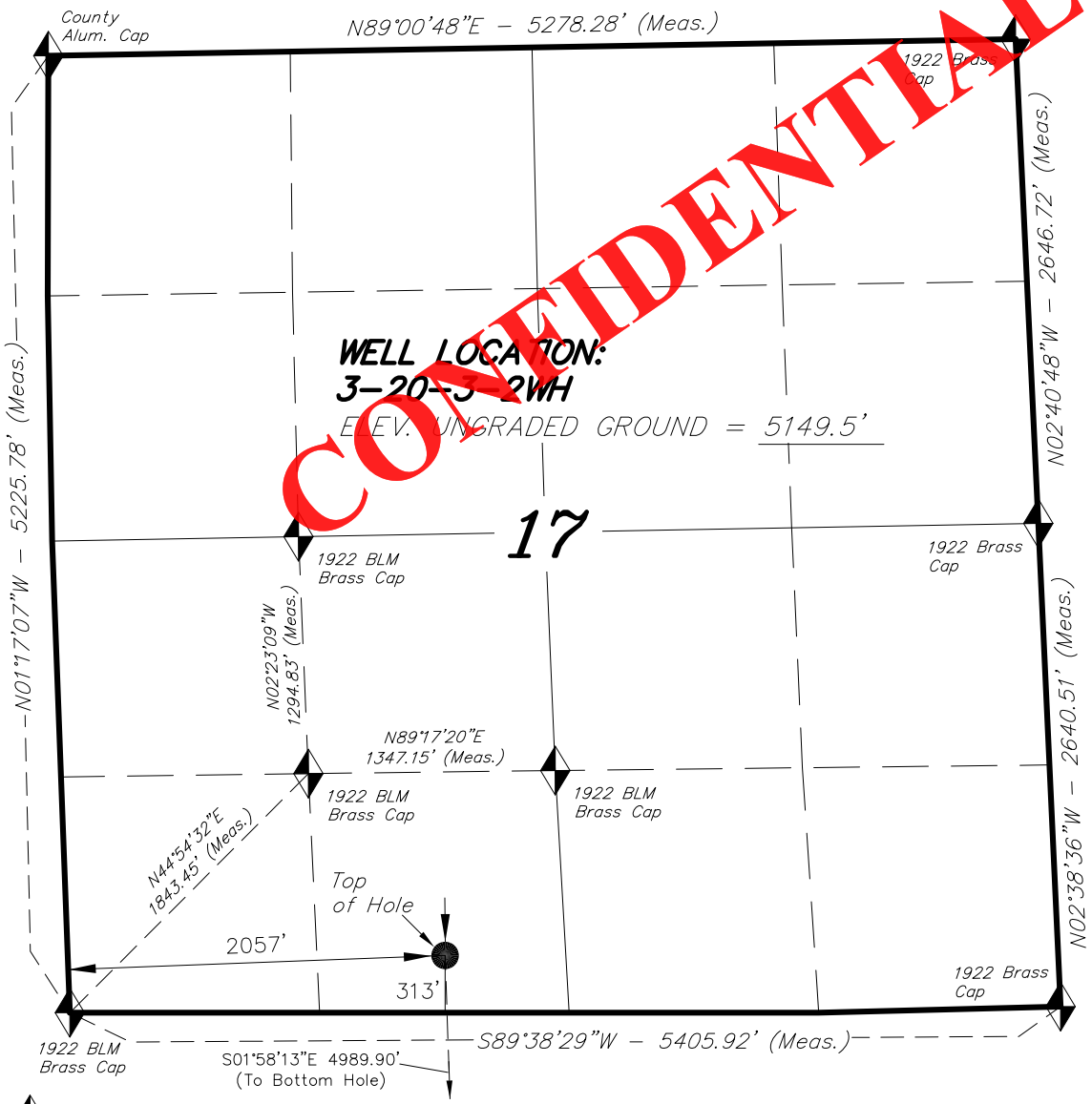
RECEIVED: June 27, 2012

API Well Number: 43013515080000

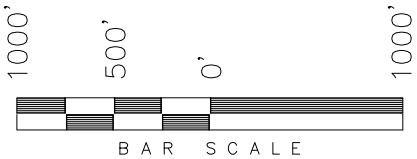
T3S, R2W, U.S.B.&M.

NEWFIELD EXPLORATION COMPANY

WELL LOCATION, 3-20-3-2WH, LOCATED AS SHOWN IN THE SE 1/4 SW 1/4 OF SECTION 17, T3S, R2W, U.S.B.&M. DUCHESNE COUNTY, UTAH.



CONFIDENTIAL



NOTES:

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

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

REGISTERED LAND SURVEYOR No.189377 05-09-12 STACY W. STEWART STATE OF UTAH

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

= SECTION CORNERS LOCATED

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

3-20-3-2WH (Surface Location) NAD 83
LATITUDE = 40° 12' 56.13"
LONGITUDE = 110° 08' 08.22"

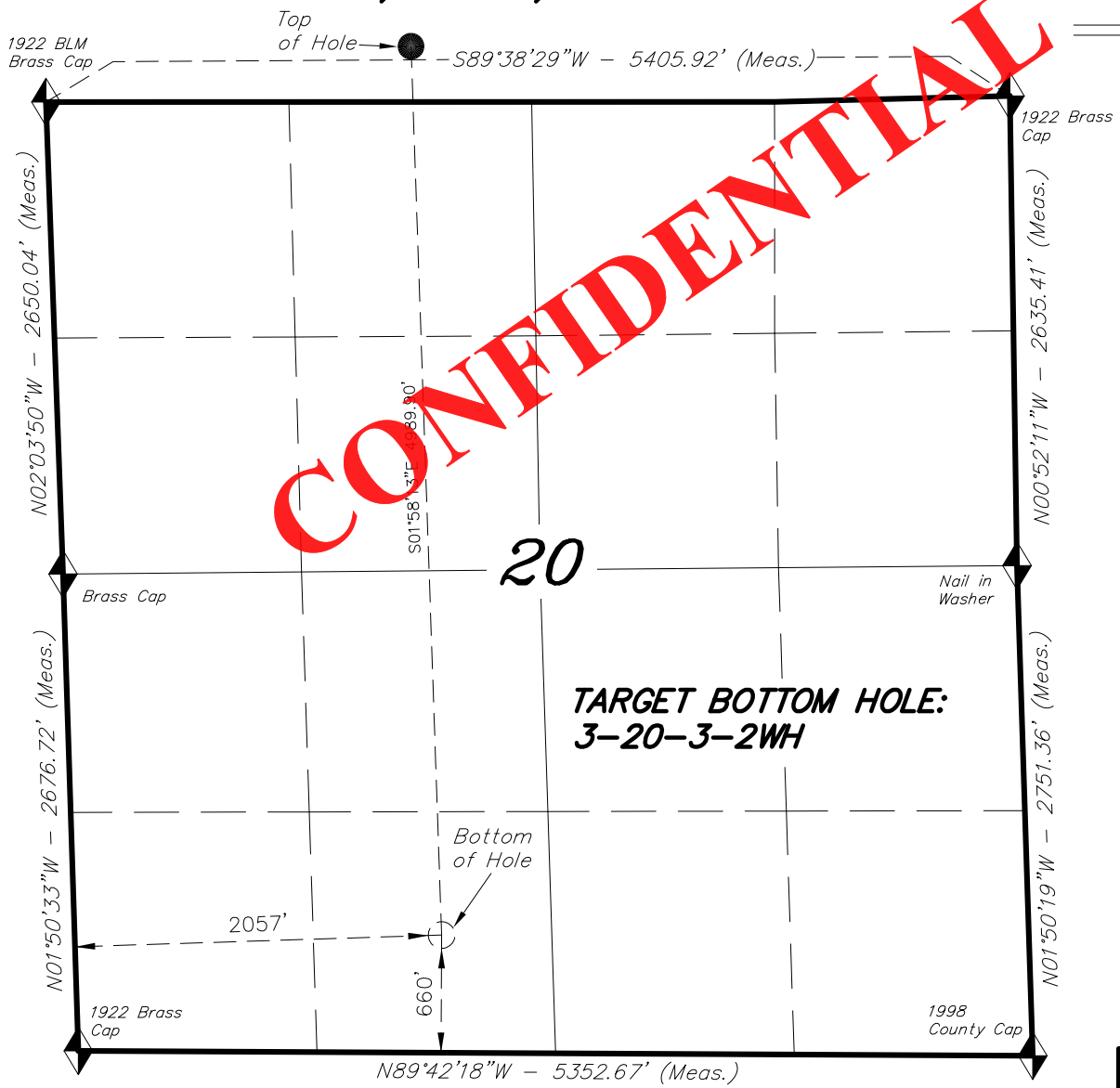
TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED: 05-08-12	SURVEYED BY: S.V.	VERSION:
DATE DRAWN: 05-08-12	DRAWN BY: R.B.T.	V1
REVISED:	SCALE: 1" = 1000'	

RECEIVED: June 27, 2012

API Well Number: 43013515080000

T3S, R2W, U.S.B.&M.



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= 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'

NEWFIELD EXPLORATION COMPANY

TARGET BOTTOM HOLE, 3-20-3-2WH, LOCATED AS SHOWN IN THE SE 1/4 SW 1/4 OF SECTION 20, T3S, R2W, U.S.B.&M. DUCHESNE COUNTY, UTAH.

1000' 500' 0' 1000'

BAR SCALE

N

NOTES:

1. Well footages are measured at right angles to the Section Lines.
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REGISTERED LAND SURVEYOR No.189377 05-09-12 STACY W. STEWART STATE OF UTAH

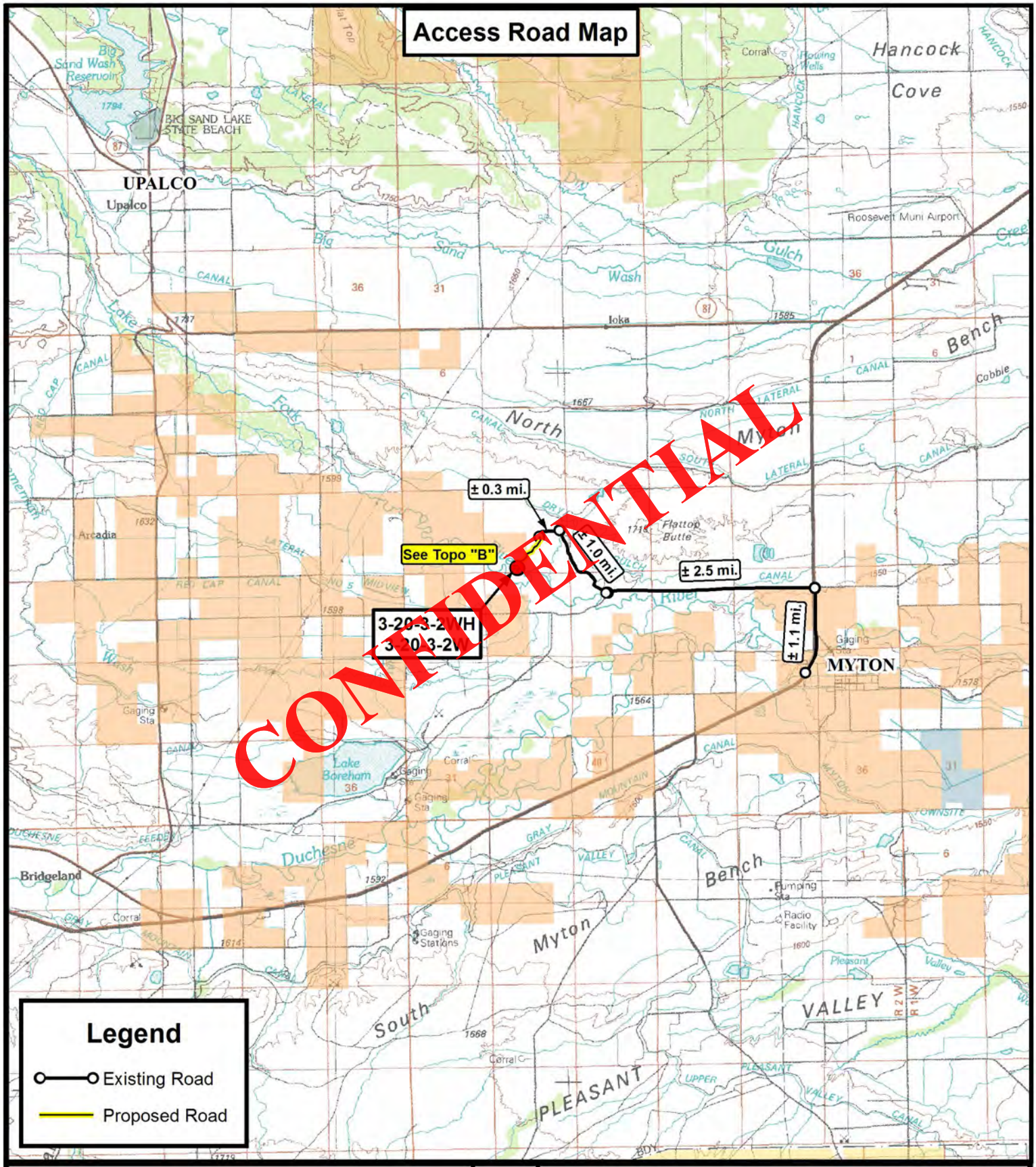
REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

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

DATE SURVEYED: 05-08-12	SURVEYED BY: S.V.	VERSION:
DATE DRAWN: 05-08-12	DRAWN BY: R.B.T.	V1
REVISED:	SCALE: 1" = 1000'	

RECEIVED: June 27, 2012

API Well Number: 43013515080000



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

N

NEWFIELD EXPLORATION COMPANY

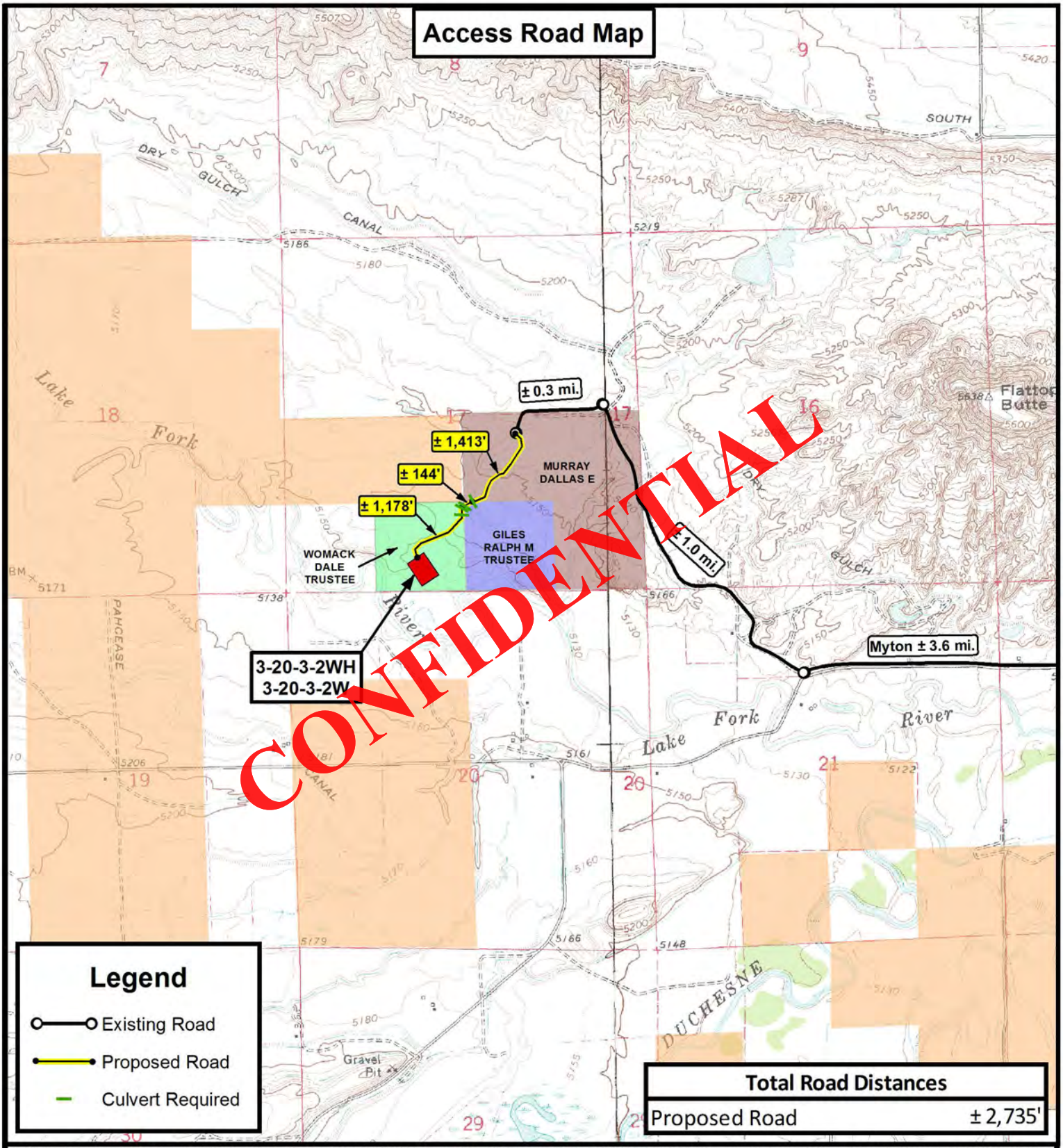
3-20-3-2WH
3-20-3-2W
SEC. 20, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY: D.C.R.	REVISED:	VERSION:	
DATE: 05-11-2012		V1	
SCALE: 1:100,000			

TOPOGRAPHIC MAP

SHEET A

API Well Number: 43013515080000



Total Road Distances	
Proposed Road	± 2,735'

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

N

NEWFIELD EXPLORATION COMPANY

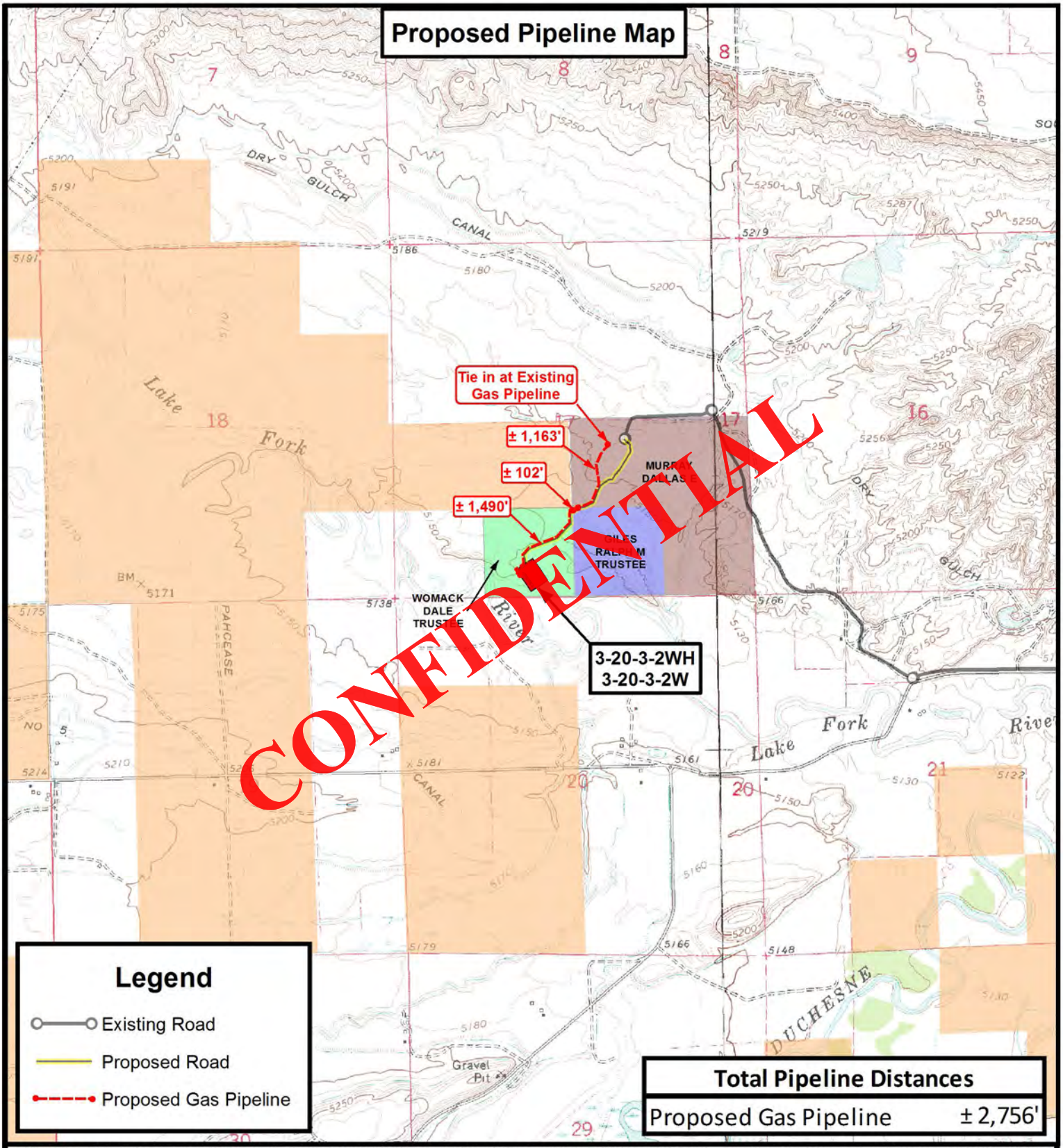
3-20-3-2WH
3-20-3-2W
SEC. 20, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY:	D.C.R.	REVISED:	VERSION:
DATE:	05-11-2012		V1
SCALE:	1 " = 2,000 '		

TOPOGRAPHIC MAP

SHEET B

API Well Number: 43013515080000



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

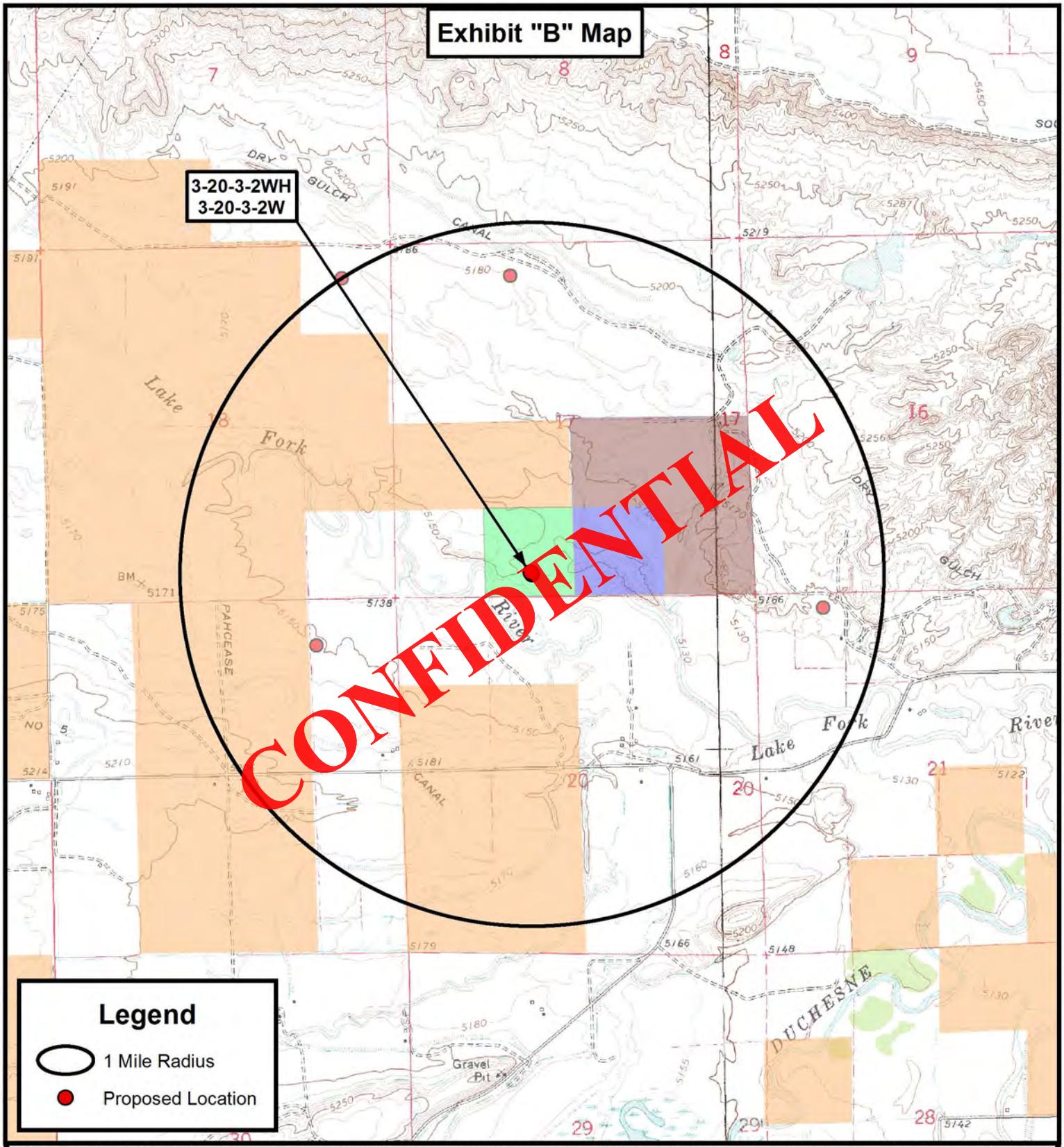
N

NEWFIELD EXPLORATION COMPANY

3-20-3-2WH
3-20-3-2W
SEC. 20, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY: D.C.R.	REVISED:	VERSION:	TOPOGRAPHIC MAP
DATE: 05-11-2012		V1	SHEET C
SCALE: 1 " = 2,000 '			

API Well Number: 43013515080000



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

N

NEWFIELD EXPLORATION COMPANY

3-20-3-2WH
3-20-3-2W
SEC. 20, T3S, R2W, U.S.B.&M.
Duchesne County, UT.

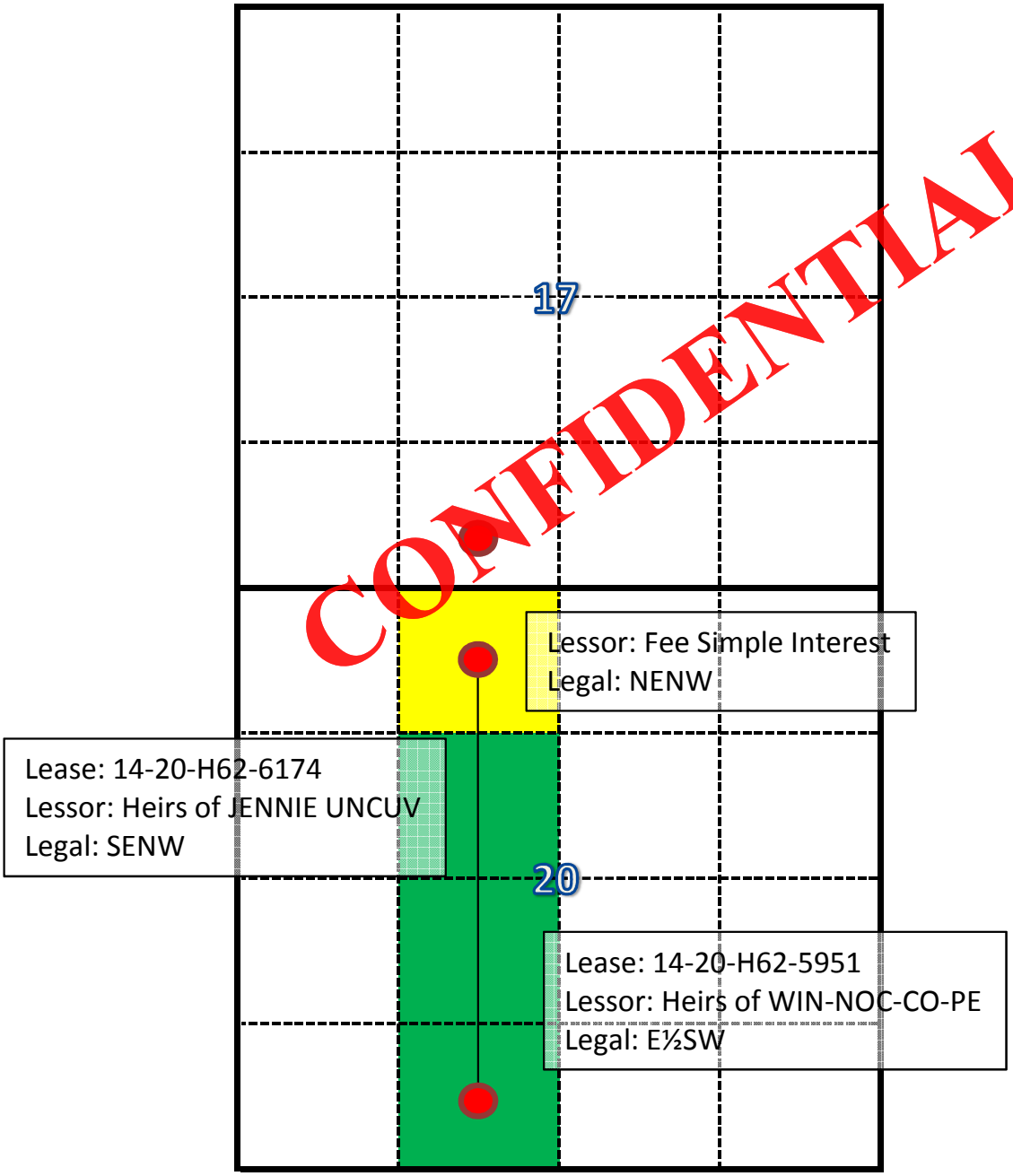
DRAWN BY: D.C.R.	REVISED:	VERSION:	
DATE: 05-11-2012		V1	
SCALE: 1 " = 2,000 '			

TOPOGRAPHIC MAP

SHEET D

Peterson 3-20-3-2WH

SHL 313' FSL & 2057' FWL of Section 17
Top of Producing Interval 660' FNL & 1980' FWL of Section 20
BHL 660' FSL & 2057' FWL of Section 20



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API Well Number: 43013515080000

NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT

PETERSON 3-20-3-2WH

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Plan: Design #1

Standard Survey Report

7 JUNE, 2012

Weatherford®

RECEIVED: June 27, 2012

API Well Number: 43013515080000

NEWFIELD

Project: DUCHESNE COUNTY, UT
Site: PETERSON 3-20-3-2WH
Well: PETERSON 3-20-3-2WH
Wellbore: PETERSON 3-20-3-2WH
Design: Design #1
Latitude: 40° 12' 56.130 N
Longitude: 110° 8' 8.220 W
GL: 5149.50
KB: WELL @ 5167.50ft (PIONEER 68)

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WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape Point
PBHL PETERSON 3-20-3-2WH	8342.00	-4999.97	168.46	40° 12' 6.716 N	110° 8' 6.049 W	

WELL DETAILS: PETERSON 3-20-3-2WH

Ground Level: 5149.50

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	7250161.13	2021416.61	40° 12' 56.130 N	110° 8' 8.220 W	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7988.84	0.00	0.00	7988.84	0.00	0.00	0.00	0.00	0.00	Start Build 11.00
8826.54	92.15	178.07	8509.34	-540.08	11.20	11.00	178.07	540.39	Start 4465.56 hold at 8826.54 MD
13292.10	92.15	178.07	8342.00	-4999.97	168.46	0.00	0.00	5002.81	TD at 13292.10

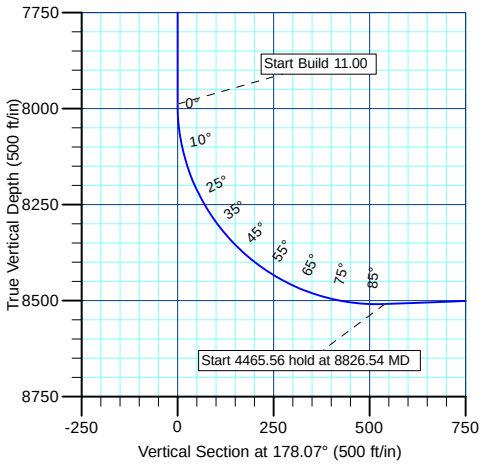
T M

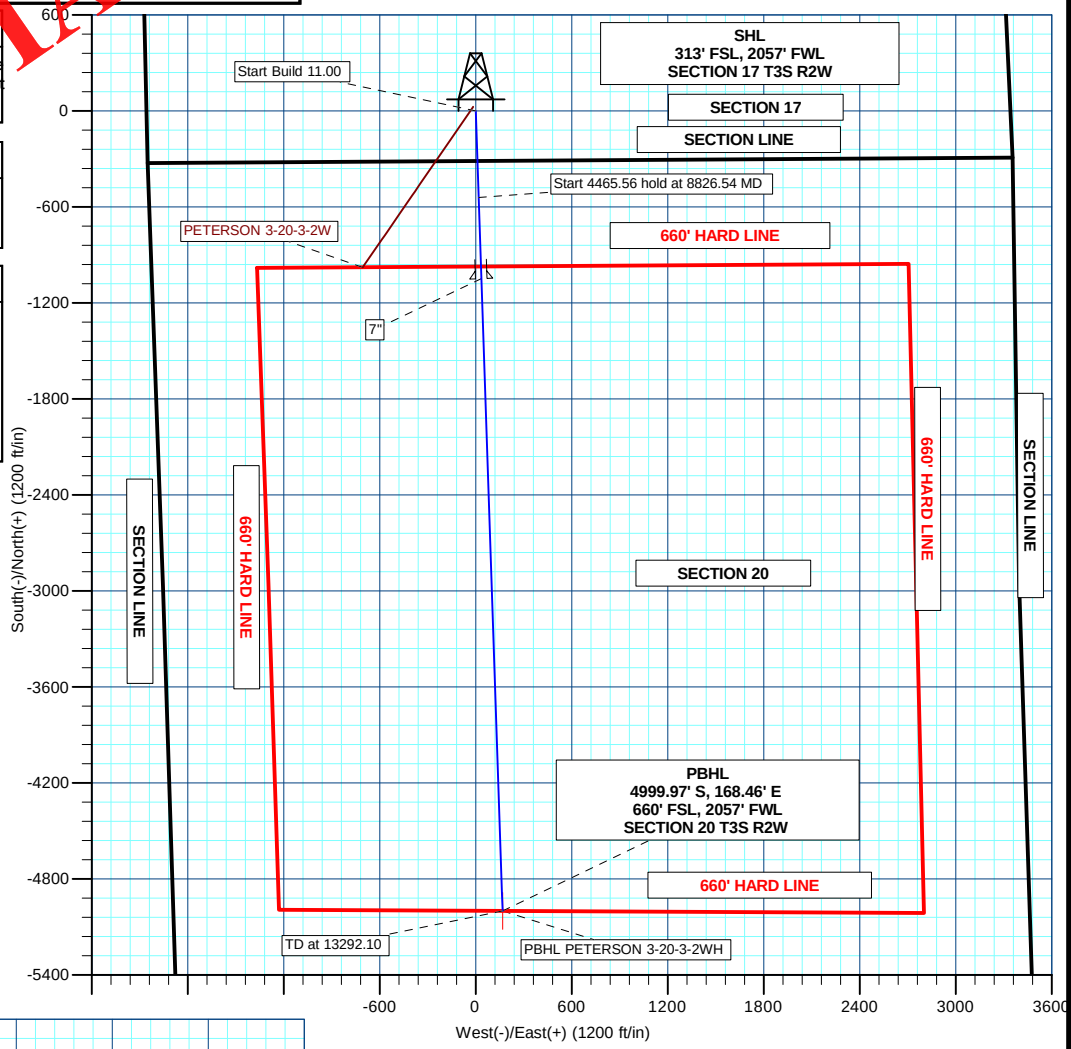
Azimuths to True North
Magnetic North: 11.28°

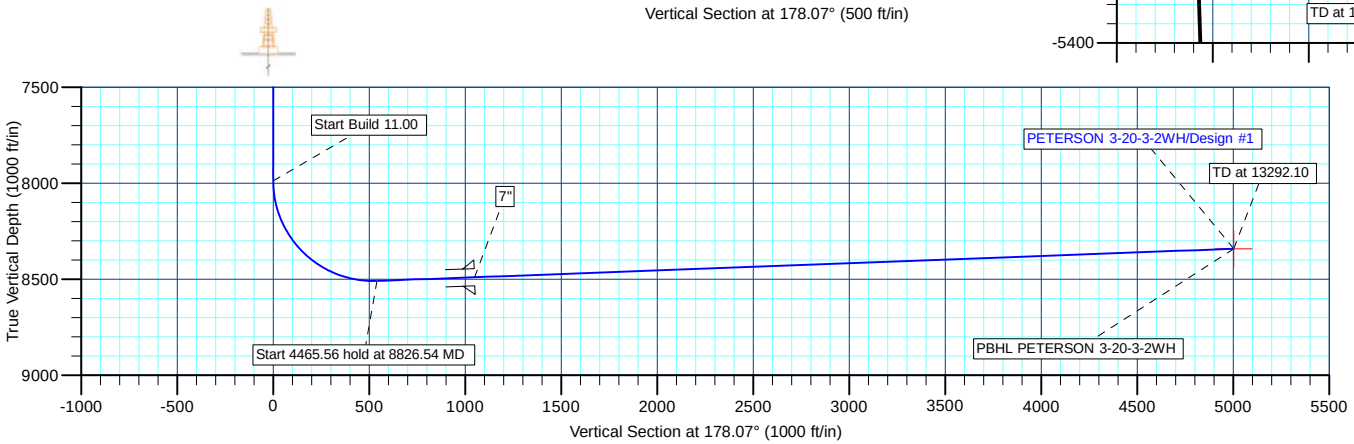
Magnetic Field
Strength: 52200.9snT
Dip Angle: 65.88°
Date: 6/7/2012
Model: BGGM2011

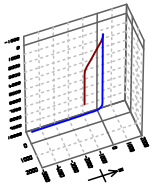
CASING DETAILS

TVD	MD	Name	Size
8490.28	9335.10	7"	7









Plan: Design #1 (PETERSON 3-20-3-2WH/PETERSON 3-20-3-2WH)

Created By: TRACY WILLIAMS Date: 14:00, June 07 2012

NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT
PETERSON 3-20-3-2WH
PETERSON 3-20-3-2WH

PETERSON 3-20-3-2WH

Plan: Design #1

CONFIDENTIAL

Standard Planning Report

07 June, 2012

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #1		

Project DUCHESNE COUNTY, UT

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site PETERSON 3-20-3-2WH

Site Position:		**Northing:**	7,250,161.13 ft	**Latitude:**	40° 12' 56.130 N
From:	Lat/Long	**Easting:**	2,021,416.61 ft	**Longitude:**	110° 8' 8.220 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	"	**Grid Convergence:**	0.87 °

Well PETERSON 3-20-3-2WH

Well Position	**+N/-S**	0.00 ft	**Northing:**	7,250,161.13 ft	**Latitude:**	40° 12' 56.130 N
	+E/-W	0.00 ft	**Easting:**	2,021,416.61 ft	**Longitude:**	110° 8' 8.220 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,149.50 ft

Wellbore PETERSON 3-20-3-2WH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2011	6/7/2012	11.28	65.88	52,201

Design Design #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	178.07

Plan Sections

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,988.84	0.00	0.00	7,988.84	0.00	0.00	0.00	0.00	0.00	0.00	
8,826.54	92.15	178.07	8,509.34	-540.08	18.20	11.00	11.00	0.00	178.07	
13,292.10	92.15	178.07	8,342.00	-4,999.97	168.46	0.00	0.00	0.00	0.00	PBHL PETERSON

CONFIDENTIAL

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

CONFIDENTIAL

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 11.00									
7,988.84	0.00	0.00	7,988.84	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	1.23	178.07	8,000.00	-0.12	0.00	0.12	11.00	11.00	0.00
8,050.00	6.73	178.07	8,049.86	-3.58	0.12	3.59	11.00	11.00	0.00
8,100.00	12.23	178.07	8,099.16	-11.81	0.40	11.82	11.00	11.00	0.00
8,150.00	17.73	178.07	8,147.44	-24.72	0.83	24.73	11.00	11.00	0.00
8,200.00	23.23	178.07	8,194.26	-42.20	1.42	42.22	11.00	11.00	0.00
8,250.00	28.73	178.07	8,239.19	-64.08	2.16	64.11	11.00	11.00	0.00
8,300.00	34.23	178.07	8,281.82	-90.16	3.04	90.21	11.00	11.00	0.00
8,350.00	39.73	178.07	8,321.75	-120.21	4.05	120.28	11.00	11.00	0.00
8,400.00	45.23	178.07	8,358.61	-153.94	5.19	154.03	11.00	11.00	0.00
8,450.00	50.73	178.07	8,392.07	-191.05	6.44	191.16	11.00	11.00	0.00
8,500.00	56.23	178.07	8,421.81	-231.19	7.79	231.32	11.00	11.00	0.00
8,550.00	61.73	178.07	8,447.57	-274.00	9.23	274.16	11.00	11.00	0.00
8,600.00	67.23	178.07	8,469.11	-319.08	10.75	319.26	11.00	11.00	0.00
8,650.00	72.73	178.07	8,486.22	-366.01	12.33	366.22	11.00	11.00	0.00
8,700.00	78.23	178.07	8,498.75	-414.37	13.96	414.60	11.00	11.00	0.00
8,750.00	83.73	178.07	8,506.59	-463.70	15.62	463.97	11.00	11.00	0.00
8,800.00	89.23	178.07	8,509.66	-513.56	17.30	513.85	11.00	11.00	0.00
Start 4465.56 hold at 8826.54 MD									
8,826.54	92.15	178.07	8,509.34	-540.08	18.20	540.39	11.00	11.00	0.00
8,900.00	92.15	178.07	8,506.59	-613.45	20.67	613.80	0.00	0.00	0.00
9,000.00	92.15	178.07	8,502.84	-713.32	24.03	713.73	0.00	0.00	0.00
9,100.00	92.15	178.07	8,499.09	-813.19	27.40	813.66	0.00	0.00	0.00
9,200.00	92.15	178.07	8,495.35	-913.07	30.76	913.59	0.00	0.00	0.00
9,300.00	92.15	178.07	8,491.60	-1,012.94	34.13	1,013.52	0.00	0.00	0.00
7"									

CONFIDENTIAL

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	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)
9,335.10	92.15	178.07	8,490.28	-1,048.00	35.31	1,048.59	0.00	0.00	0.00
9,400.00	92.15	178.07	8,487.85	-1,112.81	37.49	1,113.44	0.00	0.00	0.00
9,500.00	92.15	178.07	8,484.10	-1,212.69	40.86	1,213.37	0.00	0.00	0.00
9,600.00	92.15	178.07	8,480.36	-1,312.56	44.22	1,313.30	0.00	0.00	0.00
9,700.00	92.15	178.07	8,476.61	-1,412.43	47.59	1,413.23	0.00	0.00	0.00
9,800.00	92.15	178.07	8,472.86	-1,512.31	50.95	1,513.16	0.00	0.00	0.00
9,900.00	92.15	178.07	8,469.12	-1,612.18	54.32	1,613.09	0.00	0.00	0.00
10,000.00	92.15	178.07	8,465.37	-1,712.05	57.68	1,713.02	0.00	0.00	0.00
10,100.00	92.15	178.07	8,461.62	-1,811.93	61.05	1,812.95	0.00	0.00	0.00
10,200.00	92.15	178.07	8,457.87	-1,911.80	64.41	1,912.88	0.00	0.00	0.00
10,300.00	92.15	178.07	8,454.13	-2,011.67	67.78	2,012.81	0.00	0.00	0.00
10,400.00	92.15	178.07	8,450.38	-2,111.54	71.14	2,112.74	0.00	0.00	0.00
10,500.00	92.15	178.07	8,446.63	-2,211.42	74.51	2,212.67	0.00	0.00	0.00
10,600.00	92.15	178.07	8,442.88	-2,311.29	77.87	2,312.60	0.00	0.00	0.00
10,700.00	92.15	178.07	8,439.14	-2,411.16	81.24	2,412.53	0.00	0.00	0.00
10,800.00	92.15	178.07	8,435.39	-2,511.04	84.60	2,512.46	0.00	0.00	0.00
10,900.00	92.15	178.07	8,431.64	-2,610.91	87.97	2,612.39	0.00	0.00	0.00
11,000.00	92.15	178.07	8,427.89	-2,710.78	91.33	2,712.32	0.00	0.00	0.00
11,100.00	92.15	178.07	8,424.15	-2,810.66	94.69	2,812.25	0.00	0.00	0.00
11,200.00	92.15	178.07	8,420.40	-2,910.53	98.06	2,912.18	0.00	0.00	0.00
11,300.00	92.15	178.07	8,416.65	-3,010.40	101.42	3,012.11	0.00	0.00	0.00
11,400.00	92.15	178.07	8,412.90	-3,110.28	104.79	3,112.04	0.00	0.00	0.00
11,500.00	92.15	178.07	8,409.16	-3,210.15	108.15	3,211.97	0.00	0.00	0.00
11,600.00	92.15	178.07	8,405.41	-3,310.02	111.52	3,311.90	0.00	0.00	0.00
11,700.00	92.15	178.07	8,401.66	-3,409.89	114.88	3,411.83	0.00	0.00	0.00
11,800.00	92.15	178.07	8,397.91	-3,509.77	118.25	3,511.76	0.00	0.00	0.00
11,900.00	92.15	178.07	8,394.17	-3,609.64	121.61	3,611.69	0.00	0.00	0.00
12,000.00	92.15	178.07	8,390.42	-3,709.51	124.98	3,711.62	0.00	0.00	0.00
12,100.00	92.15	178.07	8,386.67	-3,809.39	128.34	3,811.55	0.00	0.00	0.00
12,200.00	92.15	178.07	8,382.93	-3,909.26	131.71	3,911.48	0.00	0.00	0.00
12,300.00	92.15	178.07	8,379.18	-4,009.13	135.07	4,011.41	0.00	0.00	0.00
12,400.00	92.15	178.07	8,375.43	-4,109.01	138.44	4,111.34	0.00	0.00	0.00
12,500.00	92.15	178.07	8,371.68	-4,208.88	141.80	4,211.27	0.00	0.00	0.00
12,600.00	92.15	178.07	8,367.94	-4,308.75	145.17	4,311.20	0.00	0.00	0.00
12,700.00	92.15	178.07	8,364.19	-4,408.63	148.53	4,411.13	0.00	0.00	0.00
12,800.00	92.15	178.07	8,360.44	-4,508.50	151.90	4,511.06	0.00	0.00	0.00
12,900.00	92.15	178.07	8,356.69	-4,608.37	155.26	4,610.99	0.00	0.00	0.00
13,000.00	92.15	178.07	8,352.95	-4,708.24	158.63	4,710.92	0.00	0.00	0.00
13,100.00	92.15	178.07	8,349.20	-4,808.12	161.99	4,810.85	0.00	0.00	0.00
13,200.00	92.15	178.07	8,345.45	-4,907.99	165.36	4,910.78	0.00	0.00	0.00
TD at 13292.10 - PBHL PETERSON 3-20-3-2WH									
13,292.10	92.15	178.07	8,342.00	-4,999.97	168.46	5,002.81	0.00	0.00	0.00

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Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL PETERSON 3-: - plan hits target center - Point	0.00	0.00	8,342.00	-4,999.97	168.46	7,245,164.32	2,021,661.32	40° 12' 6.716 N	110° 8' 6.049 W

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #1		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
9,335.10	8,490.28	7"	7	8-3/4

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
7,988.84	7,988.84	0.00	0.00	Start Build 11.00
8,826.54	8,509.34	-540.08	18.20	Start 4465.66 hold at 8826.54 MD
13,292.10	8,342.00	-4,999.97	168.46	TD at 13292.10

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RECEIVED: June 27, 2012

NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT
PETERSON 3-20-3-2WH
PETERSON 3-20-3-2WH

PETERSON 3-20-3-2WH
Design #1

CONFIDENTIAL

Anticollision Report

07 June, 2012

RECEIVED: June 27, 2012

API Well Number: 43013515080000

NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Design #1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 11,000.00ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 6/7/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	13,292.10	Design #1 (PETERSON 3-20-3-2WH)	MWD	MWD - Standard

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
PETERSON 3-20-3-2W						
PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - Desig	2,257.18	2,258.03	27.76	17.97	2.837	CC, ES
PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - Desig	2,300.00	2,300.61	28.07	18.11	2.819	SF

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Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.50	0.50	0.00	0.00	-32.78	25.30	-16.29	30.09				
100.00	100.00	100.50	100.50	0.09	0.09	-32.78	25.30	-16.29	30.09	29.90	0.19	162.259	
200.00	200.00	200.50	200.50	0.32	0.32	-32.78	25.30	-16.29	30.09	29.45	0.63	47.385	
300.00	300.00	300.50	300.50	0.54	0.54	-32.78	25.30	-16.29	30.09	29.00	1.08	27.744	
400.00	400.00	400.50	400.50	0.77	0.77	-32.78	25.30	-16.29	30.09	28.55	1.53	19.614	
500.00	500.00	500.50	500.50	0.99	0.99	-32.78	25.30	-16.29	30.09	28.10	1.98	15.169	
600.00	600.00	600.50	600.50	1.22	1.22	-32.78	25.30	-16.29	30.09	27.65	2.43	12.366	
700.00	700.00	700.50	700.50	1.44	1.44	-32.78	25.30	-16.29	30.09	27.21	2.88	10.438	
800.00	800.00	800.50	800.50	1.67	1.67	-32.78	25.30	-16.29	30.09	26.76	3.33	9.030	
900.00	900.00	900.50	900.50	1.89	1.89	-32.78	25.30	-16.29	30.09	26.31	3.78	7.956	
1,000.00	1,000.00	1,000.50	1,000.50	2.12	2.12	-32.78	25.30	-16.29	30.09	25.86	4.23	7.111	
1,100.00	1,100.00	1,100.50	1,100.50	2.34	2.34	-32.78	25.30	-16.29	30.09	25.41	4.68	6.428	
1,200.00	1,200.00	1,200.50	1,200.50	2.56	2.57	-32.78	25.30	-16.29	30.09	24.96	5.13	5.865	
1,300.00	1,300.00	1,300.50	1,300.50	2.79	2.79	-32.78	25.30	-16.29	30.09	24.51	5.58	5.392	
1,400.00	1,400.00	1,400.50	1,400.50	3.01	3.02	-32.78	25.30	-16.29	30.09	24.06	6.03	4.990	
1,500.00	1,500.00	1,500.50	1,500.50	3.24	3.24	-32.78	25.30	-16.29	30.09	23.61	6.48	4.644	
1,600.00	1,600.00	1,600.50	1,600.50	3.46	3.46	-32.78	25.30	-16.29	30.09	23.16	6.93	4.343	
1,700.00	1,700.00	1,700.50	1,700.50	3.69	3.69	-32.78	25.30	-16.29	30.09	22.71	7.38	4.078	
1,800.00	1,800.00	1,800.50	1,800.50	3.91	3.91	-32.78	25.30	-16.29	30.09	22.26	7.83	3.844	
1,900.00	1,900.00	1,900.50	1,900.50	4.14	4.14	-32.78	25.30	-16.29	30.09	21.81	8.28	3.635	
2,000.00	2,000.00	2,000.50	2,000.50	4.36	4.36	-32.78	25.30	-16.29	30.09	21.36	8.73	3.448	
2,100.00	2,100.00	2,100.87	2,100.85	4.59	4.56	-35.97	23.83	-17.30	29.45	20.30	9.15	3.219	
2,200.00	2,200.00	2,200.99	2,200.82	4.81	4.74	-46.14	19.49	-20.28	28.13	18.58	9.55	2.945	
2,257.18	2,257.18	2,258.03	2,257.68	4.94	4.85	-55.48	15.73	-22.87	27.76	17.97	9.78	2.837	CC, ES
2,300.00	2,300.00	2,300.61	2,300.06	5.04	4.92	-63.98	12.31	-25.22	28.07	18.11	9.96	2.819	SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,400.00	2,400.00	2,399.52	2,398.23	5.26	5.12	-85.75	2.38	-32.05	32.22	21.85	10.37	3.107	
2,500.00	2,500.00	2,497.48	2,494.98	5.49	5.33	-104.07	-10.20	-40.70	42.33	31.54	10.79	3.923	
2,600.00	2,600.00	2,594.27	2,590.02	5.71	5.57	-116.35	-25.31	-51.09	57.97	46.76	11.21	5.172	
2,700.00	2,700.00	2,689.71	2,683.07	5.94	5.84	-124.13	-42.78	-63.11	78.21	66.58	11.63	6.725	
2,800.00	2,800.00	2,783.61	2,773.88	6.16	6.14	-129.18	-62.46	-76.64	102.39	90.34	12.05	8.495	
2,900.00	2,900.00	2,875.82	2,862.24	6.39	6.48	-132.59	-84.16	-91.56	130.11	117.64	12.48	10.428	
3,000.00	3,000.00	2,966.19	2,947.98	6.61	6.87	-134.98	-107.68	-107.74	161.13	148.23	12.90	12.486	
3,100.00	3,100.00	3,054.61	3,030.95	6.84	7.29	-136.73	-132.85	-125.05	195.05	181.72	13.33	14.644	
3,200.00	3,200.00	3,140.97	3,111.04	7.06	7.75	-138.05	-159.45	-143.34	232.53	218.56	13.76	16.883	
3,300.00	3,300.00	3,230.54	3,193.32	7.28	8.28	-139.10	-188.63	-163.41	271.61	257.41	14.20	19.123	
3,400.00	3,400.00	3,322.34	3,277.58	7.51	8.85	-139.91	-218.63	-184.04	311.10	296.45	14.65	21.237	
3,500.00	3,500.00	3,414.13	3,361.85	7.73	9.44	-140.54	-248.64	-204.68	350.63	335.53	15.10	23.220	
3,600.00	3,600.00	3,505.93	3,446.11	7.96	10.05	-141.04	-278.64	-225.31	390.18	374.63	15.56	25.080	
3,700.00	3,700.00	3,597.72	3,530.37	8.18	10.67	-141.45	-308.65	-245.95	429.76	413.74	16.02	26.826	
3,800.00	3,800.00	3,689.52	3,614.64	8.41	11.31	-141.79	-338.65	-266.58	469.36	452.87	16.49	28.466	
3,900.00	3,900.00	3,781.31	3,698.90	8.63	11.96	-142.08	-368.65	-287.21	508.96	492.00	16.96	30.009	
4,000.00	4,000.00	3,873.11	3,783.16	8.86	12.62	-142.32	-398.66	-307.85	548.58	531.14	17.44	31.462	
4,100.00	4,100.00	3,964.90	3,867.43	9.08	13.28	-142.54	-428.66	-328.48	588.20	570.28	17.92	32.831	
4,200.00	4,200.00	4,056.70	3,951.69	9.31	13.95	-142.72	-458.67	-349.12	627.83	609.43	18.40	34.124	
4,300.00	4,300.00	4,148.49	4,035.95	9.53	14.63	-142.89	-488.67	-369.75	667.46	648.57	18.88	35.345	
4,400.00	4,400.00	4,240.29	4,120.22	9.76	15.31	-143.03	-518.68	-390.38	707.10	687.72	19.37	36.500	
4,500.00	4,500.00	4,332.08	4,204.48	9.98	16.00	-143.16	-548.68	-411.02	746.74	726.87	19.86	37.593	
4,600.00	4,600.00	4,423.88	4,288.74	10.21	16.69	-143.28	-578.68	-431.65	786.38	766.02	20.36	38.630	
4,700.00	4,700.00	4,515.67	4,373.01	10.43	17.38	-143.39	-608.69	-452.29	826.03	805.17	20.85	39.613	
4,800.00	4,800.00	4,607.47	4,457.27	10.66	18.07	-143.48	-638.69	-472.92	865.67	844.32	21.35	40.547	
4,900.00	4,900.00	4,699.26	4,541.53	10.88	18.77	-143.57	-668.70	-493.56	905.32	883.47	21.85	41.434	
5,000.00	5,000.00	4,791.06	4,625.80	11.11	19.47	-143.65	-698.70	-514.19	944.98	922.62	22.35	42.278	
5,100.00	5,100.00	4,882.85	4,710.06	11.33	20.18	-143.72	-728.71	-534.82	984.63	961.77	22.85	43.082	
5,200.00	5,200.00	4,974.65	4,794.32	11.56	20.88	-143.79	-758.71	-555.46	1,024.28	1,000.92	23.36	43.849	
5,300.00	5,300.00	5,076.11	4,887.51	11.78	21.64	-143.86	-791.79	-578.20	1,063.86	1,039.97	23.89	44.527	
5,400.00	5,400.00	5,225.76	5,026.87	12.00	22.47	-143.95	-836.68	-609.08	1,100.28	1,075.73	24.55	44.821	
5,500.00	5,500.00	5,381.28	5,174.50	12.23	23.24	-144.02	-876.92	-636.75	1,131.68	1,106.48	25.20	44.903	
5,600.00	5,600.00	5,542.04	5,329.66	12.45	23.94	-144.07	-911.51	-660.54	1,157.80	1,131.95	25.85	44.790	
5,700.00	5,700.00	5,707.26	5,491.32	12.68	24.54	-144.11	-939.53	-679.81	1,178.39	1,151.91	26.48	44.499	
5,800.00	5,800.00	5,875.99	5,658.15	12.90	25.03	-144.14	-960.17	-694.00	1,193.25	1,166.16	27.09	44.052	
5,900.00	5,900.00	6,047.13	5,828.58	13.13	25.40	-144.16	-972.81	-702.69	1,202.21	1,174.55	27.66	43.462	
6,000.00	6,000.00	6,219.51	6,000.86	13.35	25.64	-144.16	-977.04	-705.60	1,205.19	1,176.99	28.20	42.737	
6,001.65	6,001.65	6,222.36	6,003.71	13.36	25.64	-144.16	-977.04	-705.60	1,205.19	1,176.98	28.21	42.724	
6,100.00	6,100.00	6,218.65	6,000.00	13.58	25.64	-144.16	-977.04	-705.60	1,209.37	1,180.95	28.42	42.549	
6,200.00	6,200.00	6,218.65	6,000.00	13.80	25.64	-144.16	-977.04	-705.60	1,221.75	1,193.10	28.65	42.647	
6,300.00	6,300.00	6,218.65	6,000.00	14.03	25.64	-144.16	-977.04	-705.60	1,242.09	1,213.21	28.87	43.019	
6,400.00	6,400.00	6,218.65	6,000.00	14.25	25.64	-144.16	-977.04	-705.60	1,269.99	1,240.89	29.10	43.646	
6,500.00	6,500.00	6,218.65	6,000.00	14.48	25.64	-144.16	-977.04	-705.60	1,304.98	1,275.66	29.32	44.505	
6,600.00	6,600.00	6,218.65	6,000.00	14.70	25.64	-144.16	-977.04	-705.60	1,346.51	1,316.96	29.55	45.571	
6,700.00	6,700.00	6,218.65	6,000.00	14.93	25.64	-144.16	-977.04	-705.60	1,393.98	1,364.21	29.77	46.822	
6,800.00	6,800.00	6,218.65	6,000.00	15.15	25.64	-144.16	-977.04	-705.60	1,446.82	1,416.82	30.00	48.233	
6,900.00	6,900.00	6,218.65	6,000.00	15.38	25.64	-144.16	-977.04	-705.60	1,504.45	1,474.23	30.22	49.781	
7,000.00	7,000.00	6,218.65	6,000.00	15.60	25.64	-144.16	-977.04	-705.60	1,566.36	1,535.91	30.45	51.447	
7,100.00	7,100.00	6,218.65	6,000.00	15.83	25.64	-144.16	-977.04	-705.60	1,632.05	1,601.38	30.67	53.211	
7,200.00	7,200.00	6,218.65	6,000.00	16.05	25.64	-144.16	-977.04	-705.60	1,701.08	1,670.19	30.90	55.059	
7,300.00	7,300.00	6,218.65	6,000.00	16.28	25.64	-144.16	-977.04	-705.60	1,773.07	1,741.95	31.12	56.974	
7,400.00	7,400.00	6,218.65	6,000.00	16.50	25.64	-144.16	-977.04	-705.60	1,847.67	1,816.32	31.35	58.946	

CONFIDENTIAL

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,500.00	7,500.00	6,218.65	6,000.00	16.72	25.64	-144.16	-977.04	-705.60	1,924.57	1,893.00	31.57	60.962	
7,600.00	7,600.00	6,218.65	6,000.00	16.95	25.64	-144.16	-977.04	-705.60	2,003.52	1,971.72	31.79	63.014	
7,700.00	7,700.00	6,218.65	6,000.00	17.17	25.64	-144.16	-977.04	-705.60	2,084.27	2,052.25	32.02	65.094	
7,800.00	7,800.00	6,218.65	6,000.00	17.40	25.64	-144.16	-977.04	-705.60	2,166.63	2,134.38	32.24	67.194	
7,900.00	7,900.00	6,218.65	6,000.00	17.62	25.64	-144.16	-977.04	-705.60	2,250.42	2,217.95	32.47	69.309	
7,988.84	7,988.84	6,218.65	6,000.00	17.82	25.64	-144.16	-977.04	-705.60	2,325.93	2,293.26	32.67	71.197	
8,000.00	8,000.00	6,218.65	6,000.00	17.85	25.64	36.56	-977.04	-705.60	2,335.43	2,302.74	32.70	71.429	
8,050.00	8,049.86	6,218.65	6,000.00	17.93	25.64	31.97	-977.04	-705.60	2,376.89	2,343.89	33.00	72.020	
8,100.00	8,099.16	6,218.65	6,000.00	18.01	25.64	28.41	-977.04	-705.60	2,416.53	2,383.13	33.20	72.780	
8,150.00	8,147.44	6,218.65	6,000.00	18.10	25.64	25.64	-977.04	-705.60	2,453.49	2,420.31	33.18	73.950	
8,200.00	8,194.26	6,218.65	6,000.00	18.19	25.64	23.44	-977.04	-705.60	2,488.13	2,455.24	32.90	75.637	
8,250.00	8,239.19	6,218.65	6,000.00	18.27	25.64	21.69	-977.04	-705.60	2,520.05	2,487.70	32.35	77.892	
8,300.00	8,281.82	6,218.65	6,000.00	18.35	25.64	20.29	-977.04	-705.60	2,549.06	2,517.49	31.57	80.749	
8,350.00	8,321.75	6,218.65	6,000.00	18.46	25.64	19.16	-977.04	-705.60	2,574.99	2,544.42	30.57	84.231	
8,400.00	8,358.61	6,218.65	6,000.00	18.59	25.64	18.26	-977.04	-705.60	2,597.71	2,568.31	29.40	88.353	
8,450.00	8,392.07	6,218.65	6,000.00	18.75	25.64	17.55	-977.04	-705.60	2,617.09	2,588.98	28.11	93.098	
8,500.00	8,421.81	6,218.65	6,000.00	18.94	25.64	17.00	-977.04	-705.60	2,633.02	2,606.26	26.76	98.394	
8,550.00	8,447.57	6,218.65	6,000.00	19.16	25.64	16.59	-977.04	-705.60	2,645.43	2,620.01	25.42	104.067	
8,600.00	8,469.11	6,218.65	6,000.00	19.43	25.64	16.31	-977.04	-705.60	2,654.25	2,630.07	24.18	109.779	
8,650.00	8,486.22	6,218.65	6,000.00	19.73	25.64	16.15	-977.04	-705.60	2,659.43	2,636.30	23.13	114.978	
8,700.00	8,498.75	6,218.65	6,000.00	20.08	25.64	16.10	-977.04	-705.60	2,660.95	2,638.57	22.38	118.905	
8,750.00	8,506.59	6,218.65	6,000.00	20.46	25.64	16.17	-977.04	-705.60	2,658.79	2,636.77	22.02	120.742	
8,800.00	8,509.66	6,218.65	6,000.00	20.87	25.64	16.35	-977.04	-705.60	2,652.98	2,630.86	22.12	119.916	
8,826.54	8,509.34	6,218.65	6,000.00	21.10	25.64	16.49	-977.04	-705.60	2,648.42	2,626.04	22.38	118.357	
8,900.00	8,506.59	6,218.65	6,000.00	21.80	25.64	16.49	-977.04	-705.60	2,635.37	2,612.76	22.61	116.553	
9,000.00	8,502.84	6,218.65	6,000.00	22.86	25.64	16.49	-977.04	-705.60	2,620.81	2,597.83	22.98	114.060	
9,100.00	8,499.09	6,218.65	6,000.00	24.03	25.64	16.49	-977.04	-705.60	2,610.00	2,586.61	23.39	111.564	
9,200.00	8,495.35	6,218.65	6,000.00	25.30	25.64	16.49	-977.04	-705.60	2,602.99	2,579.14	23.86	109.105	
9,300.00	8,491.60	6,218.65	6,000.00	26.64	25.64	16.49	-977.04	-705.60	2,599.82	2,575.46	24.36	106.715	
9,332.64	8,490.38	6,218.65	6,000.00	27.10	25.64	16.49	-977.04	-705.60	2,599.61	2,575.07	24.54	105.939	
9,400.00	8,487.85	6,218.65	6,000.00	28.06	25.64	16.49	-977.04	-705.60	2,600.48	2,575.58	24.90	104.422	
9,500.00	8,484.10	6,218.65	6,000.00	29.53	25.64	16.49	-977.04	-705.60	2,604.99	2,579.52	25.48	102.244	
9,600.00	8,480.36	6,218.65	6,000.00	31.05	25.64	16.49	-977.04	-705.60	2,613.32	2,587.24	26.08	100.195	
9,700.00	8,476.61	6,218.65	6,000.00	32.62	25.64	16.49	-977.04	-705.60	2,625.44	2,598.73	26.71	98.284	
9,800.00	8,472.86	6,218.65	6,000.00	34.23	25.64	16.49	-977.04	-705.60	2,641.29	2,613.92	27.37	96.516	
9,900.00	8,469.12	6,218.65	6,000.00	35.87	25.64	16.49	-977.04	-705.60	2,660.80	2,632.76	28.04	94.891	
10,000.00	8,465.37	6,218.65	6,000.00	37.53	25.64	16.49	-977.04	-705.60	2,683.91	2,655.17	28.73	93.407	
10,100.00	8,461.62	6,218.65	6,000.00	39.22	25.64	16.49	-977.04	-705.60	2,710.50	2,681.06	29.44	92.060	
10,200.00	8,457.87	6,218.65	6,000.00	40.94	25.64	16.49	-977.04	-705.60	2,740.49	2,710.33	30.17	90.845	
10,300.00	8,454.13	6,218.65	6,000.00	42.67	25.64	16.49	-977.04	-705.60	2,773.76	2,742.86	30.90	89.755	
10,400.00	8,450.38	6,218.65	6,000.00	44.42	25.64	16.49	-977.04	-705.60	2,810.20	2,778.55	31.65	88.782	
10,500.00	8,446.63	6,218.65	6,000.00	46.18	25.64	16.49	-977.04	-705.60	2,849.69	2,817.27	32.41	87.920	
10,600.00	8,442.88	6,218.65	6,000.00	47.96	25.64	16.49	-977.04	-705.60	2,892.09	2,858.91	33.18	87.161	
10,700.00	8,439.14	6,218.65	6,000.00	49.75	25.64	16.49	-977.04	-705.60	2,937.29	2,903.33	33.96	86.496	
10,800.00	8,435.39	6,218.65	6,000.00	51.55	25.64	16.49	-977.04	-705.60	2,985.15	2,950.41	34.74	85.918	
10,900.00	8,431.64	6,218.65	6,000.00	53.36	25.64	16.49	-977.04	-705.60	3,035.56	3,000.02	35.54	85.421	
11,000.00	8,427.89	6,218.65	6,000.00	55.18	25.64	16.49	-977.04	-705.60	3,088.38	3,052.04	36.34	84.997	
11,100.00	8,424.15	6,218.65	6,000.00	57.01	25.64	16.49	-977.04	-705.60	3,143.49	3,106.35	37.14	84.639	
11,200.00	8,420.40	6,218.65	6,000.00	58.84	25.64	16.49	-977.04	-705.60	3,200.78	3,162.83	37.95	84.342	
11,300.00	8,416.65	6,218.65	6,000.00	60.68	25.64	16.49	-977.04	-705.60	3,260.14	3,221.37	38.76	84.101	
11,400.00	8,412.90	6,218.65	6,000.00	62.53	25.64	16.49	-977.04	-705.60	3,321.44	3,281.86	39.58	83.909	
11,500.00	8,409.16	6,218.65	6,000.00	64.38	25.64	16.49	-977.04	-705.60	3,384.59	3,344.18	40.41	83.762	

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CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - Design #1

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,600.00	8,405.41	6,218.65	6,000.00	66.23	25.64	16.49	-977.04	-705.60	3,449.48	3,408.24	41.23	83.655	
11,700.00	8,401.66	6,218.65	6,000.00	68.09	25.64	16.49	-977.04	-705.60	3,516.02	3,473.95	42.07	83.585	
11,800.00	8,397.91	6,218.65	6,000.00	69.96	25.64	16.49	-977.04	-705.60	3,584.11	3,541.21	42.90	83.548	
11,900.00	8,394.17	6,218.65	6,000.00	71.83	25.64	16.49	-977.04	-705.60	3,653.67	3,609.94	43.74	83.540	
12,000.00	8,390.42	6,218.65	6,000.00	73.70	25.64	16.49	-977.04	-705.60	3,724.62	3,680.04	44.58	83.558	
12,100.00	8,386.67	6,218.65	6,000.00	75.57	25.64	16.49	-977.04	-705.60	3,796.88	3,751.46	45.42	83.600	
12,200.00	8,382.93	6,218.65	6,000.00	77.45	25.64	16.49	-977.04	-705.60	3,870.37	3,824.10	46.26	83.662	
12,300.00	8,379.18	6,218.65	6,000.00	79.33	25.64	16.49	-977.04	-705.60	3,945.02	3,897.91	47.11	83.743	
12,400.00	8,375.43	6,218.65	6,000.00	81.22	25.64	16.49	-977.04	-705.60	4,020.78	3,972.82	47.96	83.841	
12,500.00	8,371.68	6,218.65	6,000.00	83.10	25.64	16.49	-977.04	-705.60	4,097.58	4,048.77	48.81	83.953	
12,600.00	8,367.94	6,218.65	6,000.00	84.99	25.64	16.49	-977.04	-705.60	4,175.36	4,125.70	49.66	84.078	
12,700.00	8,364.19	6,218.65	6,000.00	86.88	25.64	16.49	-977.04	-705.60	4,254.07	4,203.55	50.51	84.215	
12,800.00	8,360.44	6,218.65	6,000.00	88.77	25.64	16.49	-977.04	-705.60	4,333.66	4,282.28	51.37	84.361	
12,900.00	8,356.69	6,218.65	6,000.00	90.67	25.64	16.49	-977.04	-705.60	4,414.07	4,361.85	52.23	84.516	
13,000.00	8,352.95	6,218.65	6,000.00	92.56	25.64	16.49	-977.04	-705.60	4,495.28	4,442.19	53.09	84.679	
13,100.00	8,349.20	6,218.65	6,000.00	94.46	25.64	16.49	-977.04	-705.60	4,577.22	4,523.28	53.95	84.848	
13,200.00	8,345.45	6,218.65	6,000.00	96.36	25.64	16.49	-977.04	-705.60	4,659.88	4,605.07	54.81	85.023	
13,292.10	8,342.00	6,218.65	6,000.00	98.11	25.64	16.49	-977.04	-705.60	4,736.59	4,680.99	55.60	85.188	

CONFIDENTIAL

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

RECEIVED: June 27, 2012

NEWFIELD

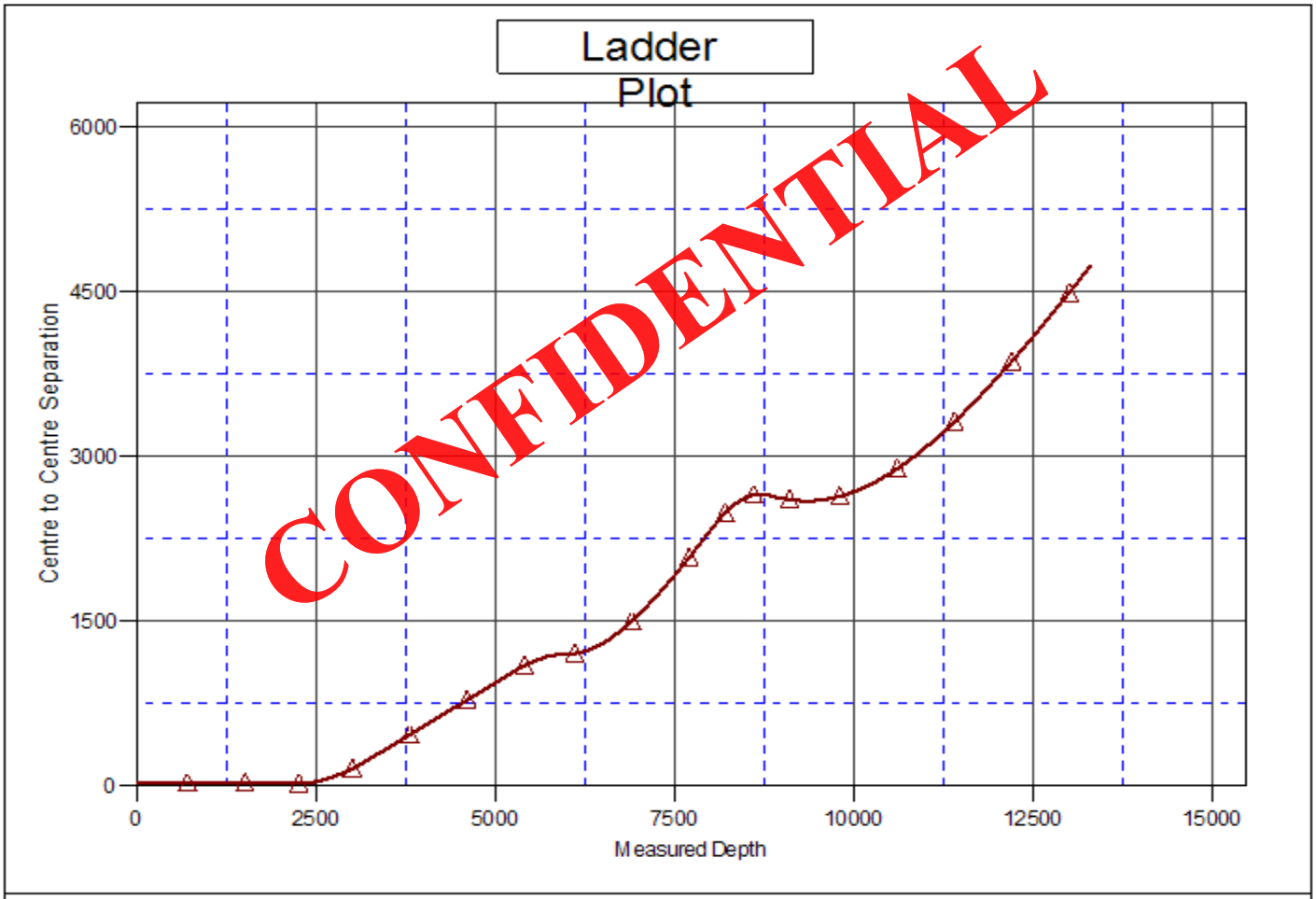
Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5167.50ft (PIONEER 68)	Coordinates are relative to: PETERSON 3-20-3-2WH
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Utah Central Zone
Central Meridian is 111° 30' 0.000 W °	Grid Convergence at Surface is: 0.87°



LEGEND

3-20-3-2W, PETERSON 3-20-3-2W, Design #1 V0

RECEIVED: June 27, 2012

NEWFIELD

Weatherford International Ltd.

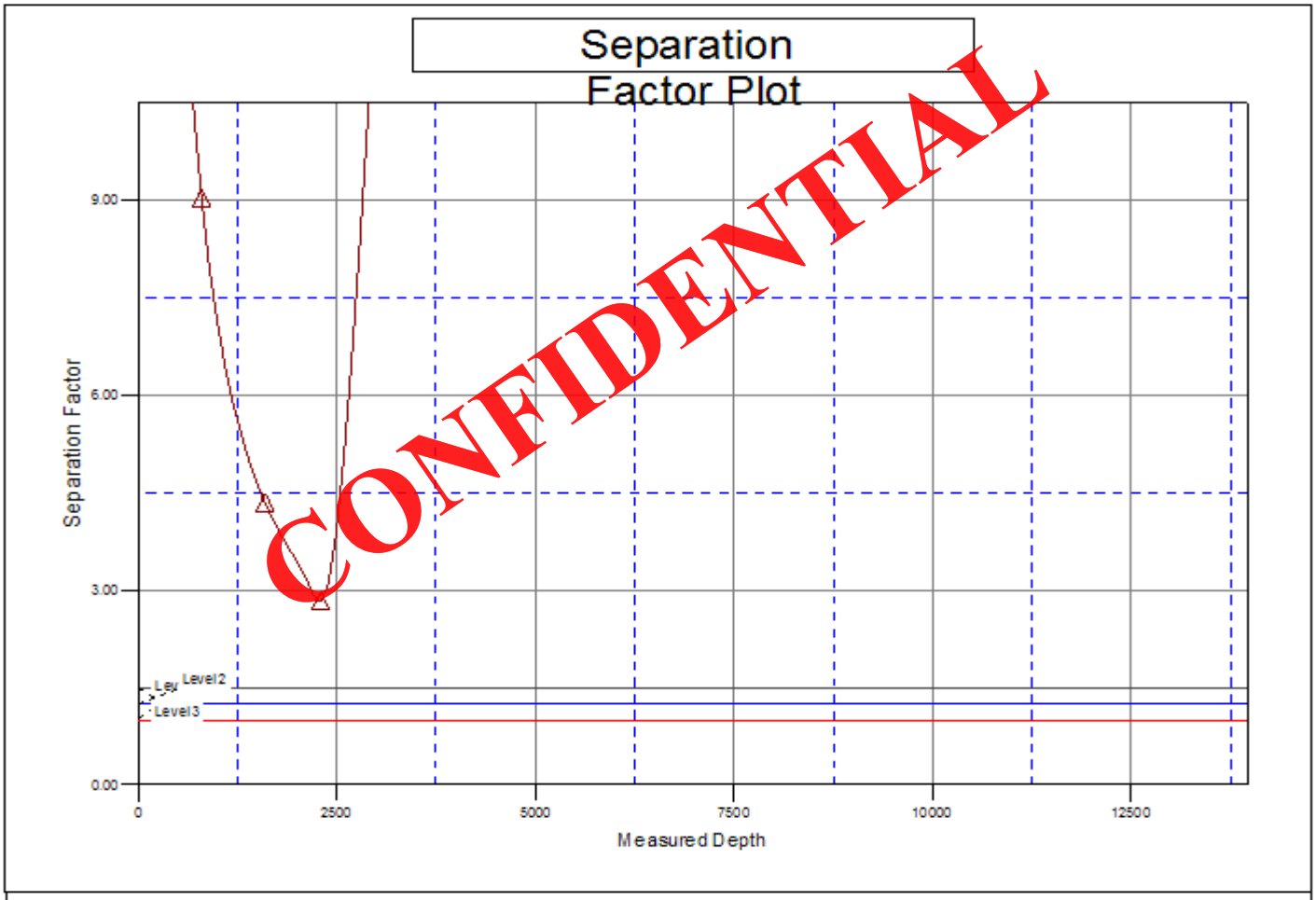
Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 2003.21 Single User Db
Reference Design:	Design #1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5167.50ft (PIONEER 68)
Offset Depths are relative to Offset Datum
Central Meridian is 111° 30' 0.000 W °

Coordinates are relative to: PETERSON 3-20-3-2WH
Coordinate System is US State Plane 1983, Utah Central Zone
Grid Convergence at Surface is: 0.87°



LEGEND

3-20-3-2W, PETERSON 3-20-3-2W, Design #1 V0

RECEIVED: June 27, 2012

AFFIDAVIT OF EASEMENT, RIGHT-OF-WAY AND SURFACE USE AGREEMENT

Greg Boggs personally appeared before me, being duly sworn, deposes and with respect to State of Utah R649-3-34.7 says:

1. My name is Greg Boggs. I am a Landman for Newfield Production Company, whose address is 1001 17th Street, Suite 2000, Denver, CO 80202 ("Newfield").

2. Newfield is the Operator of the proposed Peterson 3-20-3-2WH well with a surface location to be positioned in the SESW of Section 17, Township 3 South, Range 2 West, Duchesne County, Utah (the "Drillsite Location"), a wellbore point of entry in the NENW of Section 20, Township 3 South, Range 2 West and a bottom hole location to be positioned in the SESW of Section 20, Township 3 South, Range 2 West, Duchesne County, Utah. The surface owner of the Drillsite Location is Dale Womack, Individually and as Trustee for the Benefit of Harold Womack Estate, Dorothy McClellan, Gordon Womack, The Margaret Birchell Estate, Stanley Womack, Glen Womack, and Dale Womack as Beneficiaries; and Dale Womack as Agent and Attorney-in-Fact for Dorothy McClellan, whose address is 485 W. 250 S., Vernal, UT 84078 ("Surface Owner").

3. Newfield and the Surface Owner have agreed upon an Easement, Right-of-Way and Surface Use Agreement dated April 18, 2012 covering the Drillsite Location and access to the Drillsite Location.

CONFIDENTIAL

FURTHER AFFIANT SAYETH NOT.

ACKNOWLEDGEMENT

STATE OF COLORADO §
§
COUNTY OF DENVER §

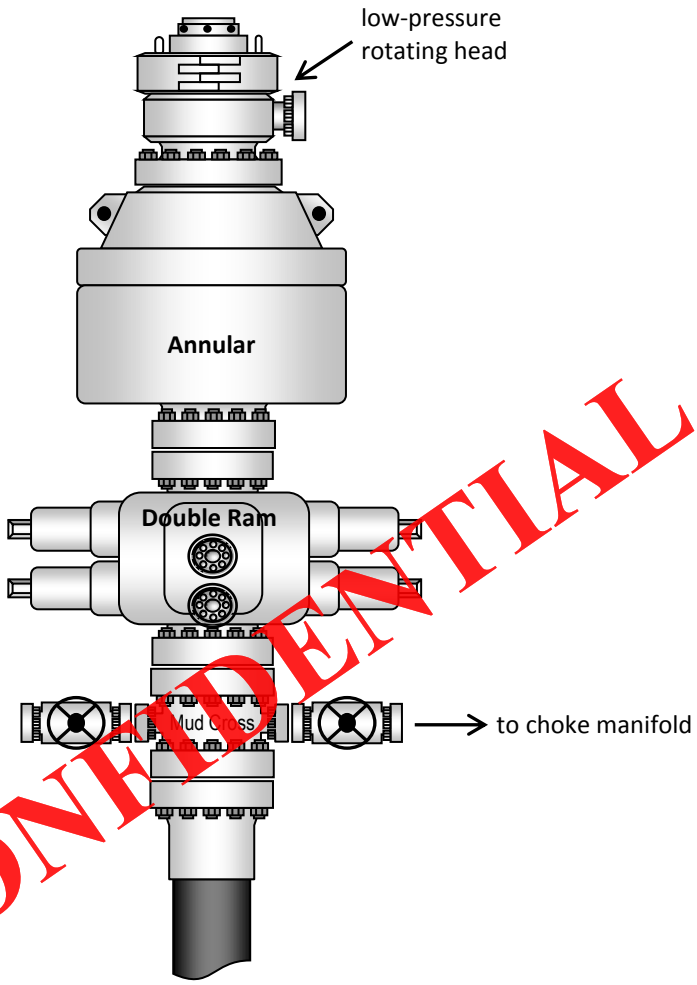
Before me, a Notary Public, in and for the State, on this 15th day of June, 2012, personally appeared Greg Boggs, to me known to be the identical person who executed the foregoing instrument, and acknowledged to me that he executed the same as his own free and voluntary act and deed for the uses and purposes therein set forth.

NOTARY PUBLIC

My Commission Expires:

PETER BURNS
NOTARY PUBLIC
STATE OF COLORADO
My Commission Expires 8/09/2015

Typical 5M BOP stack configuration



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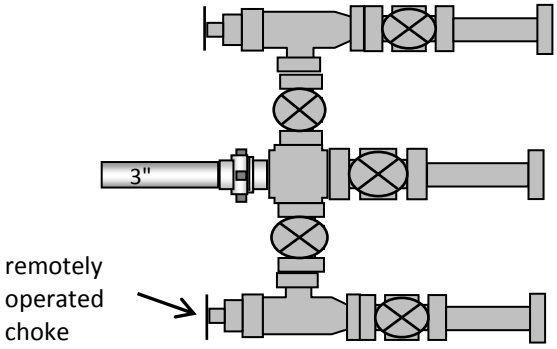
Typical 5M choke manifold configuration



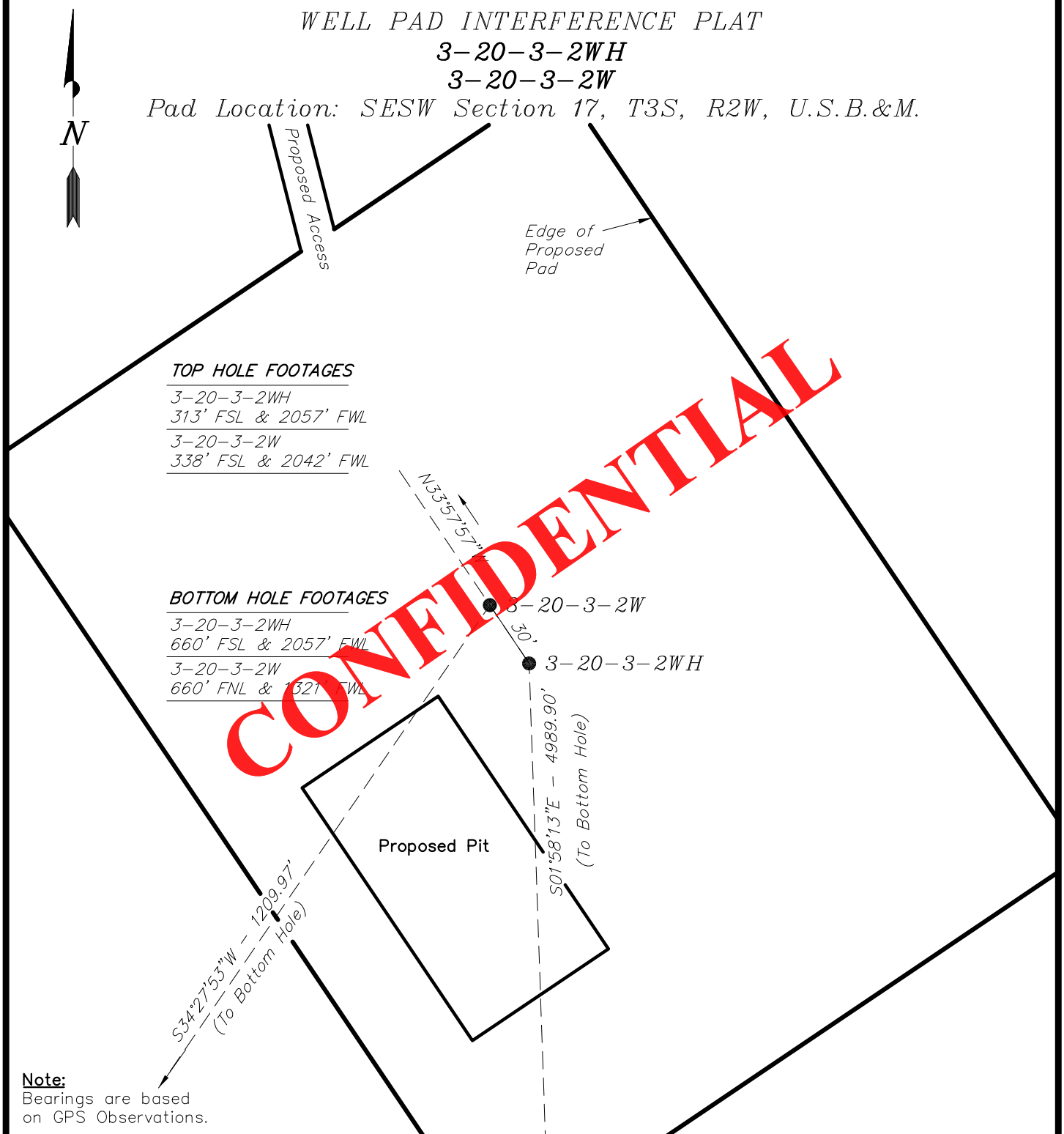
RECEIVED: June 27, 2012

NEWFIELD EXPLORATION COMPANY

WELL PAD INTERFERENCE PLAT

3-20-3-2WH
3-20-3-2W

Pad Location: SESW Section 17, T3S, R2W, U.S.B.&M.



Note:
Bearings are based on GPS Observations.

RELATIVE COORDINATES
From Top Hole to Bottom Hole

WELL	NORTH	EAST
3-20-3-2WH	-4,987'	172'
3-20-3-2W	-998'	-685'

LATITUDE & LONGITUDE
Surface position of Wells (NAD 83)

WELL	LATITUDE	LONGITUDE
3-20-3-2WH	40° 12' 56.13"	110° 08' 08.22"
3-20-3-2W	40° 12' 56.38"	110° 08' 08.43"

SURVEYED BY: S.V.	DATE SURVEYED: 05-08-12	VERSION:	Tri State Land Surveying, Inc. (435) 781-2501
DRAWN BY: R.B.T.	DATE DRAWN: 05-08-12	V1	180 NORTH VERNAL AVE. VERNAL, UTAH 84078
SCALE: 1" = 60'	REVISED:		

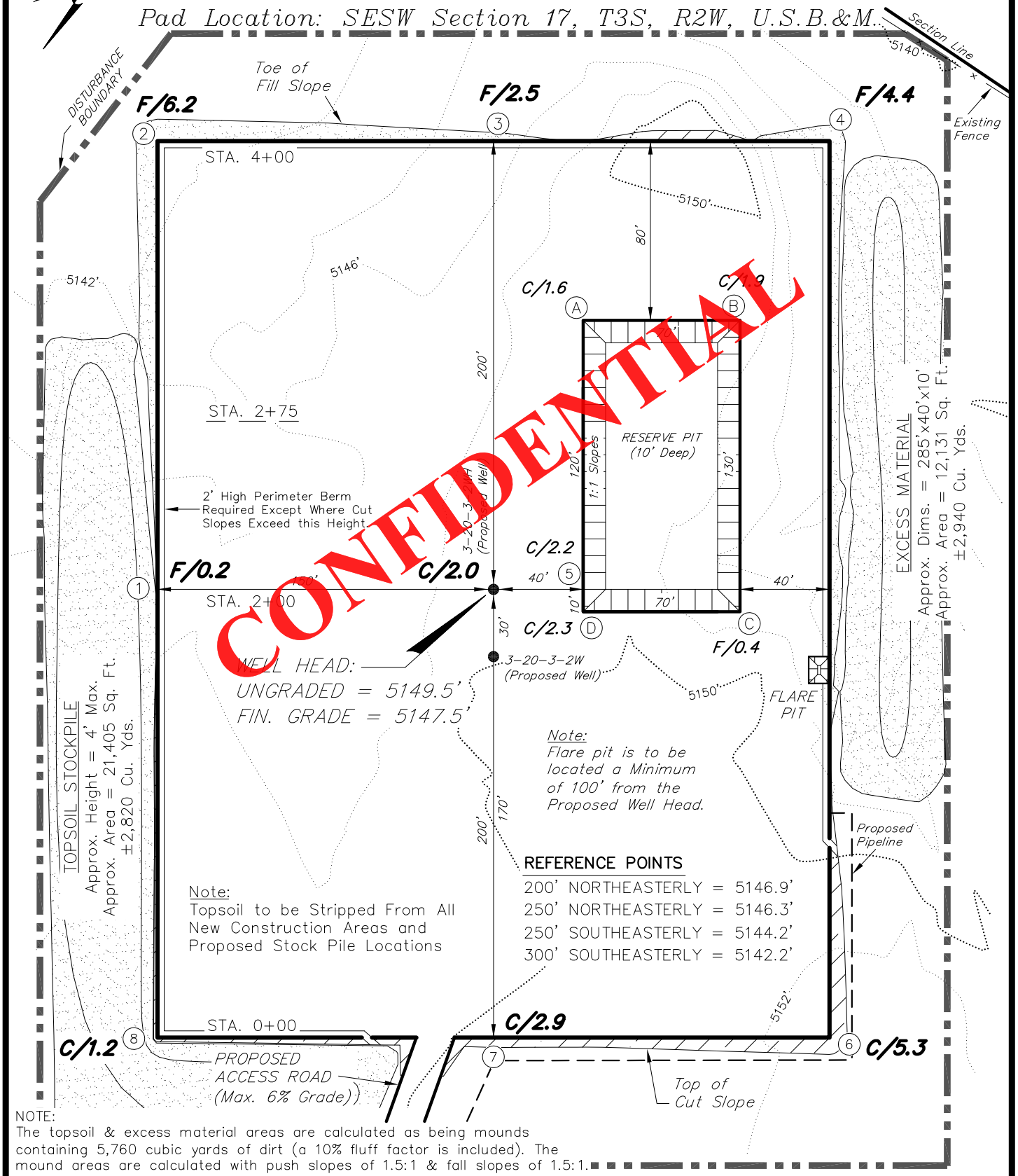
RECEIVED: June 27, 2012

NEWFIELD EXPLORATION COMPANY

PROPOSED LOCATION LAYOUT

3-20-3-2WH
3-20-3-2W

Pad Location: SESW Section 17, T3S, R2W, U.S.B.&M.



NOTE:
The topsoil & excess material areas are calculated as being mounds containing 5,760 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.

SURVEYED BY: S.V.	DATE SURVEYED: 05-08-12	VERSION:	Tri State Land Surveying, Inc. (435) 781-2501
DRAWN BY: R.B.T.	DATE DRAWN: 05-08-12	V1	180 NORTH VERNAL AVE. VERNAL, UTAH 84078
SCALE: 1" = 60'	REVISED:		

RECEIVED: June 27, 2012

NEWFIELD EXPLORATION COMPANY

CROSS SECTIONS

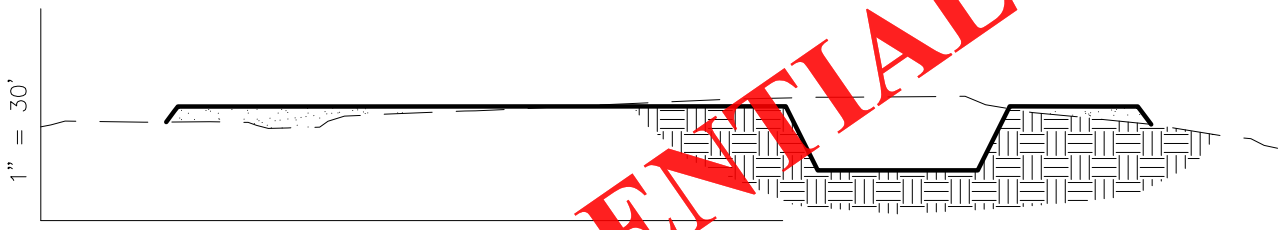
3-20-3-2WH

3-20-3-2W

Pad Location: SESW Section 17, T3S, R2W, U.S.B.&M.

1" = 60'

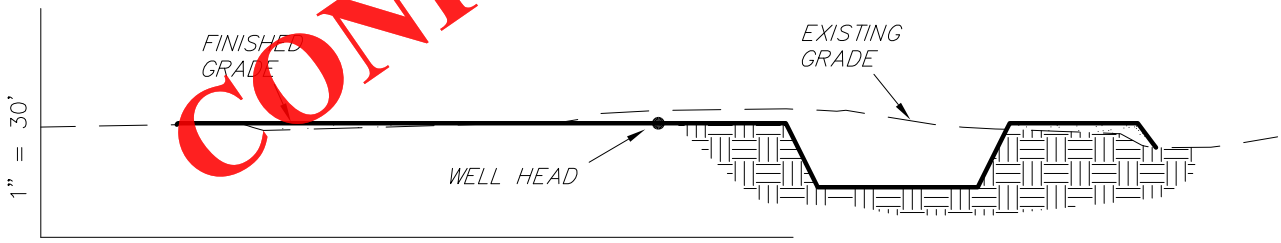
STA. 4+00



1" = 60'

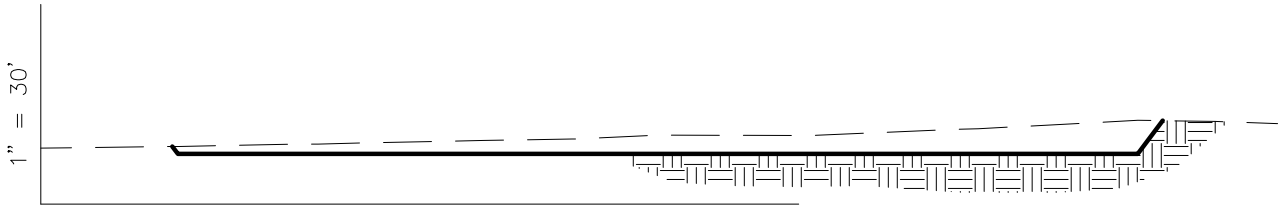
STA. 2+75

CONFIDENTIAL



1" = 60'

STA. 2+00



1" = 60'

STA. 0+00

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	4,150	4,150	Topsoil is not included in Pad Cut Volume	0
PIT	2,670	0		2,670
TOTALS	6,820	4,150	2,560	2,670

SURVEYED BY: S.V.	DATE SURVEYED: 05-08-12	VERSION:	Tri State Land Surveying, Inc. (435) 781-2501
DRAWN BY: R.B.T.	DATE DRAWN: 05-08-12	V1	180 NORTH VERNAL AVE. VERNAL, UTAH 84078
SCALE: 1" = 60'	REVISED:		

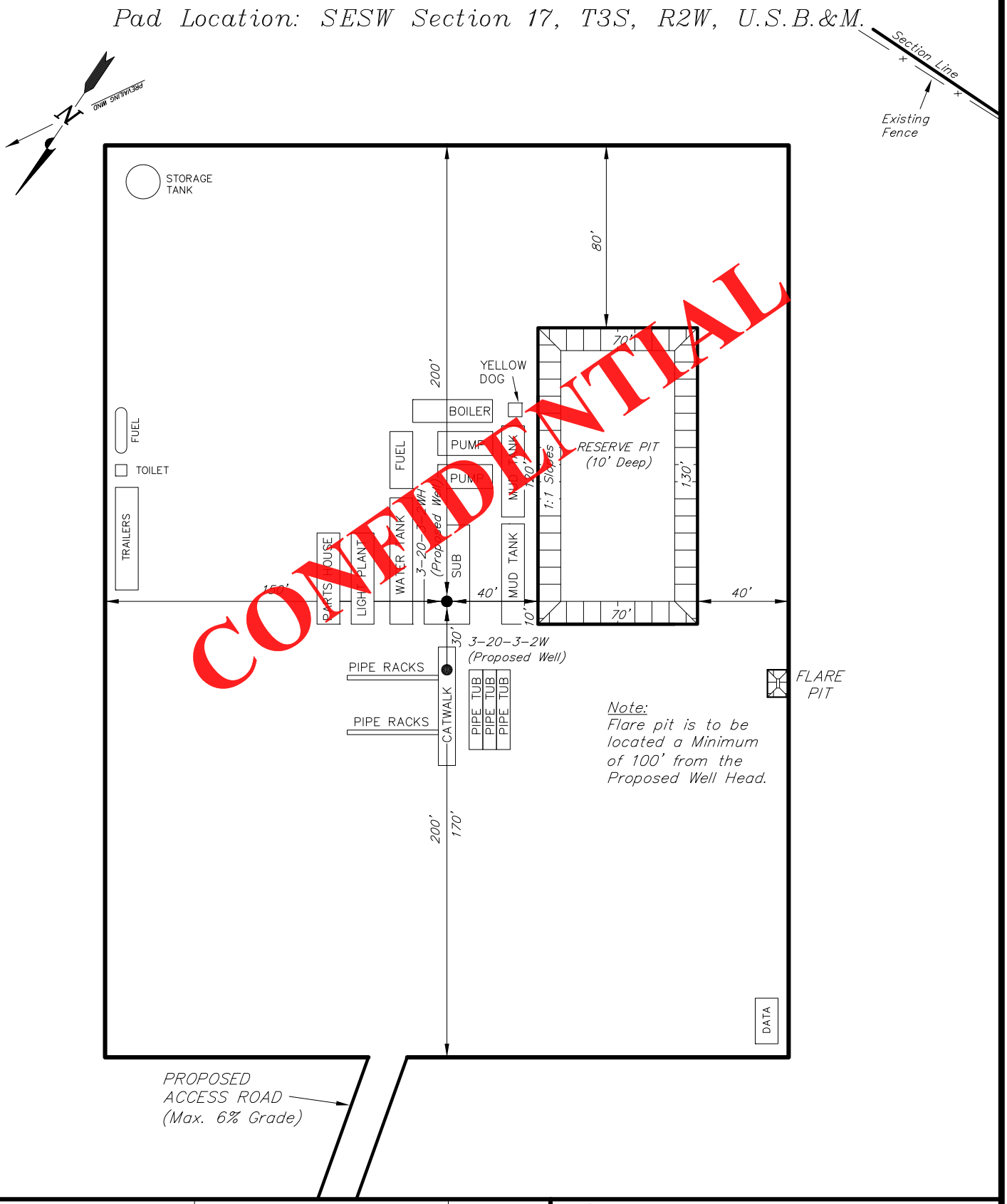
RECEIVED: June 27, 2012

NEWFIELD EXPLORATION COMPANY

TYPICAL RIG LAYOUT

3-20-3-2WH
3-20-3-2W

Pad Location: SESW Section 17, T3S, R2W, U.S.B.&M.



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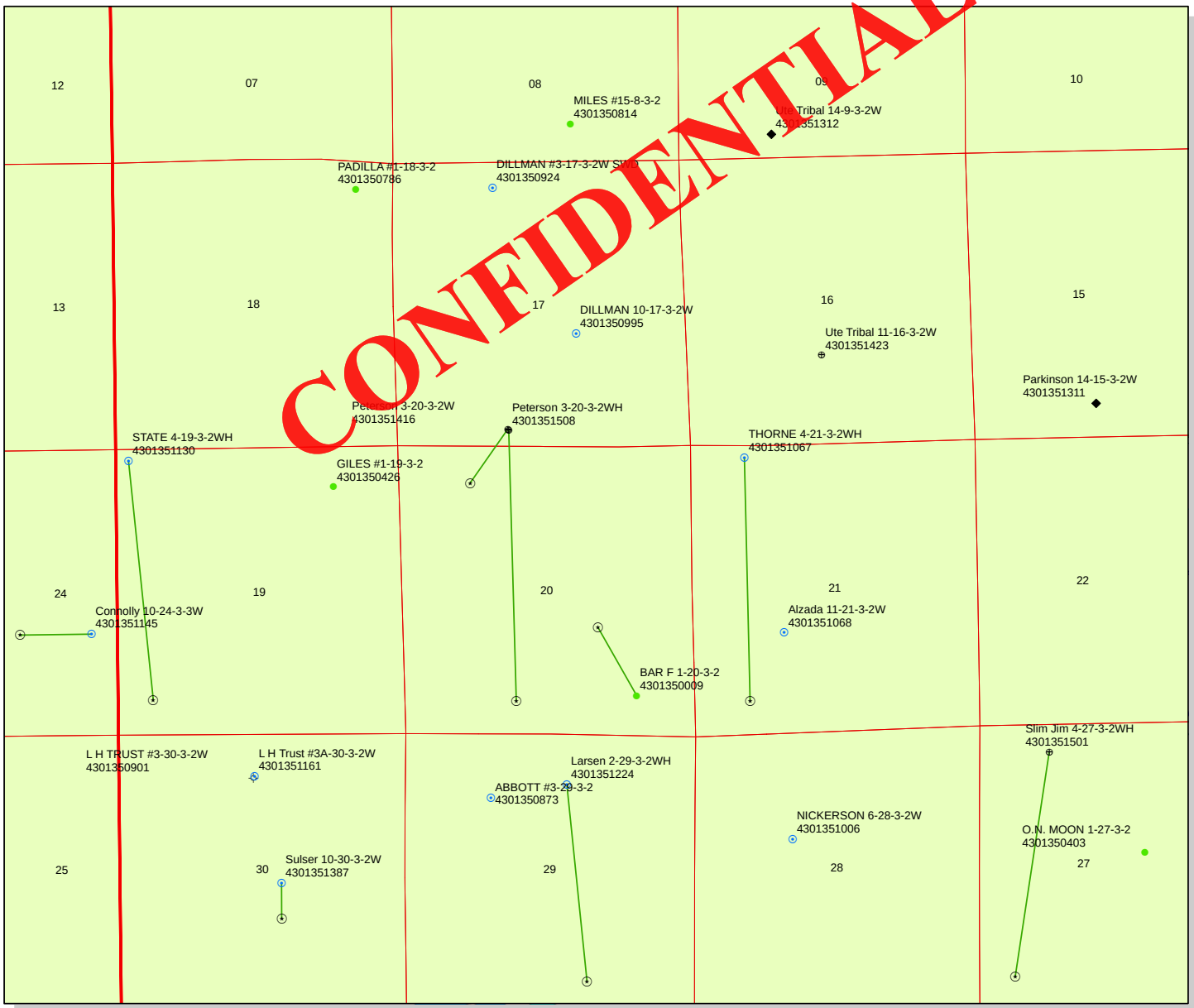
SURVEYED BY: S.V.	DATE SURVEYED: 05-08-12	VERSION:	Tri State Land Surveying, Inc. (435) 781-2501
DRAWN BY: R.B.T.	DATE DRAWN: 05-08-12	V1	180 NORTH VERNAL AVE. VERNAL, UTAH 84078
SCALE: 1" = 60'	REVISED:		

RECEIVED: June 27, 2012

API Well Number: 43013515080000



API Number: 4301351508

Well Name: Peterson 3-20-3-2WH

Township T03.0S Range R02.0W Section 17

Meridian: UBM

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields
STATUS
- Unknown
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- STORAGE
- TERMINATED

Wells Query
Status
- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well
- Bottom Hole Location - OilGasDb

2,400 1,200 0 2,400 Feet

1:22,808

RECEIVED: June 28, 2012

API Well Number: 43013515080000

NEWFIELD
ROCKY MOUNTAINS

July 17, 2012

State of Utah
Division of Oil, Gas & Mining
ATTN: Brad Hill
P O Box 145801
Salt Lake City, UT 84114

RE: **Peterson 3-20-3-2WH**
Section 20, T3S, R2W
Duchesne County, Utah

Dear Brad,

Newfield Production Company proposes to drill the Peterson 3-20-3-2WH from a surface location of 313' FSL & 2057' FWL of Section 17, T3S, R2W to a bottom hole location of 660' FSL & 2057' FWL of Section 20, T3S, R2W. Newfield shall case and cement the Peterson 3-20-3-2WH wellbore from the surface location to the point where the wellbore reaches the legal setback of 660' FNL of Section 20, T3S, R2W. The cased and cemented portion of the wellbore shall not be perforated nor produced. In the event a future recompletion into the cased and cemented portion of the wellbore is proposed, Newfield shall file the appropriate application with the State.

Newfield owns a 96 % working interest and is the operator of the Dillman 10-17-3-2W located in the northern offset drilling and spacing unit (Section 17, T3S, R2W). Bill Barrett Corporation ("BBC") owns an additional 0.16437% working interest in Section 17. Please see BBC's consent to this exception location in the attached letter. The balance of the interest in Section 17 is held by unleased mineral owners who Newfield is actively attempting to locate and lease. Due to the above circumstances, Newfield respectfully requests that DOGM administratively grant an exception location for the Peterson 3-20-3-2WH.

If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4496 or by email at laurasmith@newfield.com . Your consideration of this matter is greatly appreciated.

Sincerely,

Laura B. Smith

Laura B. Smith
Land Lead

CONFIDENTIAL

1001 17th Street, Suite 2000 Denver, CO 80202 (303) 893-0102 Fax (303) 893-0103

API Well Number: 43013515080000

NEWFIELD
ROCKY MOUNTAINS

July 16, 2012

Ms. Cindy Sandell
Bill Barrett Corporation
1099 18th Street
Suite 2300
Denver, CO 80202

RE: Exception Location Request
Peterson 3-20-3-2WH
Surface Hole Location: T3S-R2W, Section 17: SESW (313' FSL, 2057' FWL)
Bottom Hole Location: T3S-R2W, Section 20: SESW (660' FSL, 2057' FWL)
Duchesne County, Utah

Dear Cindy:

Newfield Production Company (NPC) has filed an Application for Permit to Drill the Peterson 3-20-3-2WH (the "Well"). NPC has selected a surface location in the SESW of Section 17, T3S-R2W in order to mitigate impact on the surface of the NENW of Section 20, T3S-R2W which has been determined to contain wetlands and/or waters of the United States which are under the jurisdiction of the Army Corps of Engineers.

From the surface hole location, the Well shall be drilled vertically, transition to a horizontal lateral, and then drilled in a southerly direction to a bottom hole location in the SESW of Section 20, T3S, R2W. NPC shall case and cement the wellbore from the surface hole location to that point where the wellbore reaches the legal setback of 660' FNL of Section 20, T3S, R2W. The cased and cemented portion of the wellbore shall not be perforated or produced.

Bill Barrett Corporation owns a 0.16437% WI in the northern offset drilling and spacing unit of Section 17. Please indicate Barrett's consent to NPC's exception location request by executing below. If you have any questions or require further information, please contact the undersigned at 303-382-4496 or by email at laurasmith@newfield.com. Your consideration in this matter is greatly appreciated.

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Sincerely,

Laura B. Smith

Laura B. Smith
Land Lead

Bill Barrett Corporation hereby consents to the above referenced exception location request.

By: Cindy Sandell
Name: Cindy Sandell
Title: Landman
Date: 7/17/2012

1001 17th Street, Suite 2000 Denver, CO 80202 (303) 893-0102 Fax (303) 893-0103

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator	NEWFIELD PRODUCTION COMPANY				
Well Name	Peterson 3-20-3-2WH				
API Number	43013515080000	**APD No**	6241	**Field/Unit**	WILDCAT
Location: 1/4,1/4	SESW	**Sec** 17	**Tw** 3.0S	**Rng** 2.0W	313 FSL 2057 FWL
GPS Coord (UTM)	573552 4452045	**Surface Owner**	Dale Womack, et al.		

Participants

Chris Jensen DOGM

Regional/Local Setting & Topography

New hole on Existing pad. Host well Peterson 3-20
Original statement;
Proposed location is approximately 5 road miles northwest of Myton, Utah. The location is in a greasewood flat. Slightly sloped to the south. Just south of North Myton Bench. South side of the county road. Newfield took the time to dig a test hole for the pit to determine the ground water elevation. Standing water found at approximately 3' deep. This will pose a potential problem to pit excavation and functionality, which has been questioned with several locations that have been looked at in the area. Newfield would like to try to construct a traditional pit and utilize a 16 mil liner. They propose to pump the ground water from behind the liner and place it on top of the liner to hold the liner in place and see if it will hold back the ground water. If this does not work Newfield is under the understanding that the pit will be reclaimed and a closed loop system used to drill the well.

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Surface Use Plan

Current Surface Use
Existing Well Pad

New Road Miles	Well Pad Width	Well Pad Length	Src Const Material	Surface Formation
				UNTA

Ancillary Facilities

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetlands Y

Ox bow lake and wetland immediately below

Flora / Fauna

previously disturbed pad

surrounding area is;
Dominant vegetation;
Snake broomweed, shadscale and sage brush sparsely surround the proposed site.
Wildlife;
Habitat contains forbs that may be suitable browse for deer, antelope, prairie dogs and rabbits, though none were observed. Disturbed soils do not support habitat for wildlife.

RECEIVED: July 18, 2012

Soil Type and Characteristics
disturbed imported gravels

Erosion Issues Y
gullying present on sides of the rise the pad is to be built upon

Sedimentation Issues Y

Site Stability Issues N

Drainage Diverson Required? Y

Berm Required? Y

Erosion Sedimentation Control Required? Y
berm required on the West side of the reserve pit near the gully

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

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Reserve Pit

Site-Specific Factors		Site Ranking
Distance to Groundwater (feet)		20
Distance to Surface Water (feet)		20
Dist. Nearest Municipal Well (ft)	1320 to 5280	5
Distance to Other Wells (feet)		20
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)	10 to 20	5
Affected Populations		
Presence Nearby Utility Conduits	Not Present	0
	Final Score	85 1 Sensitivity Level

Characteristics / Requirements
Pit is already dug.

Pit to be dug to a depth of 8'. Because a spill or leak will have a direct path to surface water below from existing gully, pit underlayment is to be used to protect the liner from potential puncture. Pit should be fenced to prevent entry by deer, other wildlife and domestic animals. Pit to be closed within one year after drilling activities are complete. In addition the pit itself shall be bermed on the western side where the gully is located to prevent drilling fluids from spilling over and reaching the oxbow lake below

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

Other Observations / Comments

RECEIVED: July 18, 2012

access road will cross significant unnamed wash a tributary to a wetland below. Operator has plans to span the wash with a bridge.
Water Rights personell were consulted and see no need for stream alteration permit from their office or that disturbing minor tributary drainages will impact either the wetland or the oxbow lake
Operator has suggested the likely hood of going to a closed loop system

Chris Jensen	7/2/2012
Evaluator	**Date / Time**

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RECEIVED: July 18, 2012

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

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
6241	43013515080000	LOCKED	OW	P	No
Operator	NEWFIELD PRODUCTION COMPANY		**Surface Owner-APD**	Dale Womack, et al.	
Well Name	Peterson 3-20-3-2WH		**Unit**		
Field	WILDCAT		**Type of Work**	DRILL	
Location	SESW 17 3S 2W U 313 FSL 2057 FWL GPS Coord (UTM) 573550E 4452041N				

Geologic Statement of Basis

Newfield proposes to set 60' of conductor and 2,500' of surface casing at this location. The base of the moderately saline water at this location is estimated to be at a depth of 1,600'. A search of Division of Water Rights records shows 9 water wells within a 10,000 foot radius of the center of Section 17. All but 1 well are located over a mile from the proposed location. All wells are privately owned. Depth is listed as ranging from 45 to 142 feet. Average depth is less than 100 feet. Water use is listed as irrigation, stock watering, and domestic use. 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 shallower wells to the south of the proposed location probably produce from near surface alluvial sediments. The proposed cement and casing program should adequately protect ground water in this area.

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Brad Hill — 3/17/2012
APD Evaluator — **Date / Time**

Surface Statement of Basis

New hole on existing Pad Host well Peterson 3-20
Operator has a surface agreement in place with the landowner. I was made aware that some concessions were made to the landowner. Location is proposed in the best possible position within the spacing window. Access road is going to be placed across an ephemeral wash east of the pad.
The soil type and topography at present do combine to pose a minor threat to erosion or sediment/ pollution transport in these regional climate conditions. Gullys and small ephemeral stream beds present nearby give spills a ready channel for easy transport to oxbow lake and wetland below making additional berming of the rreserve pit a good precaution. Construction standards of the Operator , with changes mentioned before, appear to be adequate for the proposed purpose. I recognize no special flora or animal species or cultural resources on site that the proposed action may harm as the soils are mostly clay badlands and are aprsely vegetated at best. The landowner 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 — 7/2/2012
Onsite Evaluator — **Date / Time**

RECEIVED: July 18, 2012

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 well site shall be bermed to prevent fluids from leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

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RECEIVED: July 18, 2012

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/27/2012 **API NO. ASSIGNED:** 43013515080000

WELL NAME: Peterson 3-20-3-2WH

OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 719-2018

CONTACT: Don Hamilton

PROPOSED LOCATION: SESW 17 030S 020W **Permit Tech Review:** ☑

SURFACE: 0313 FSL 2057 FWL **Engineering Review:** ☐

BOTTOM: 0660 FSL 2057 FWL **Geology Review:** ☑

COUNTY: DUCHESNE

LATITUDE: 40.21556 **LONGITUDE:** -110.13563

UTM SURF EASTINGS: 573550.00 **NORTHINGS:** 4452041.00

FIELD NAME: WILDCAT

LEASE TYPE: 1 - Federal

LEASE NUMBER: 14-20-H62-5951 **PROPOSED PRODUCING FORMATION(S):** GREEN RIVER

SURFACE OWNER: 4 - Fee **COALBED METHANE:** NO

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RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - RLB0010473
- ☐ **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:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: Cause 139-90

Effective Date: 5/9/2012

Siting: (4) Producing Grrv-Wstc Wells in Sec Drl Unit

- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
4 - Federal Approval - dmason
5 - Statement of Basis - bhill
27 - Other - bhill

RECEIVED: July 18, 2012

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: Peterson 3-20-3-2WH
API Well Number: 43013515080000
Lease Number: 14-20-H62-5951
Surface Owner: FEE (PRIVATE)
Approval Date: 7/23/2012

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 139-90. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

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

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

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

In accordance with Utah Admin. R.649-3-21, 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).

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

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

(please leave a voicemail message if not available)
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at http://oilgas.ogm.utah.gov

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

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

Approved By:

For John Rogers
Associate Director, Oil & Gas

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BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# Ross 31 Submitted By Branden Arnold Phone Number 435-401-0223
Well Name/Number PETERSON 3-20-3-2WH
Qtr/Qtr SE/SW Section 17 Township 3S Range 2W
Lease Serial Number 1420H625951
API Number 43-013-51508

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

Date/Time 7/30/12 9:00 AM ☒ PM ☐

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

☒ Surface Casing
☐ Intermediate Casing
☐ Production Casing
☐ Liner
☐ Other

Date/Time 7/30/12 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 _____

Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
JUN 18 2012
BLM

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

CONFIDENTIAL

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

5. Lease Serial No.
1420H625951

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
PETERSON 3-20-3-2WH

2. Name of Operator
NEWFIELD PRODUCTION COMPANY
Contact: DON S HAMILTON
E-Mail: starpoint@etv.net

9. API Well No.
43-013-51508

3a. Address
ROUTE 3 BOX 3630
MYTON, UT 84052

3b. Phone No. (include area code)
Ph: 435-719-2018
Fx: 435-719-2019

10. Field and Pool, or Exploratory
N/A

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

At surface SESW 313FSL 2057FWL 40.215592 N Lat, 110.135617 W Lon

At proposed prod. zone SESW 660FSL 2057FWL Sec. 20.

11. Sec., T., R., M., or Blk. and Survey or Area
Sec 17 T3S R2W Mer UBM

14. Distance in miles and direction from nearest town or post office*
5.4 MILES NORTHWEST OF MYTON, UTAH

12. County or Parish
DUCHESNE

13. State
UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
313

16. No. of Acres in Lease
80.00

17. Spacing Unit dedicated to this well
40.00

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
0

19. Proposed Depth
13292 MD
8342 TVD

20. BLM/BIA Bond No. on file
RLB00100473

21. Elevations (Show whether DF, KB, RT, GL, etc.
5150 GL

22. Approximate date work will start
08/15/2012

23. Estimated duration
60 DAYS

24. Attachments

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

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

25. Signature
(Electronic Submission)

Name (Printed/Typed)
DON S HAMILTON Ph: 435-719-2018

Date
06/15/2012

Title
PERMITTING AGENT

Approved by (Signature)
Johny P. Bowen

Name (Printed/Typed)
Johnny P. Bowen

Date
7-26-12

Title
Acting Assistant Field Manager
Lands & Mineral Resources

Office
VERNAL FIELD OFFICE

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

CONDITIONS OF APPROVAL ATTACHED

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

Additional Operator Remarks (see next page)

NOTICE OF APPROVAL

Electronic Submission #140793 verified by the BLM Well Information System
For NEWFIELD PRODUCTION COMPANY, sent to the Vernal
Committed to AFMSS for processing by LESLIE ROBINSON on 06/19/2012 ()

RECEIVED
AUG 03 2012
DIV. OF OIL, GAS & MINING

UDOGM

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

12UBR0423AE NO NOS-

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Newfield Production Company**	**Location:**	**SESW, Sec. 17, T3S, R2W**
Well No:	**Peterson 3-20-3-2WH**	**Lease No:**	**14-20-H62-5951**
API No:	**43-013-51508**	**Agreement:**	**N/A**

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

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

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

NOTIFICATION REQUIREMENTS

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

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- After cessation of drilling and completion operations, any visible or measureable layer of oil must be removed from the surface of the reserve pit and the pit kept free of oil.

- Pits must be free of oil and other liquid and solid wastes prior to filling. Pit liners must not be breached (cut) or filled (squeezed) while still containing fluids. The pit liner must be removed to the solids level or treated to prevent its reemergence to the surface or its interference with long-term successful revegetation.

- Reclamation will be completed in accordance with the recontouring and reseeding procedures outlined in the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM, unless otherwise specified by the private surface owner.

- The surface conditions as set forth by the owners and/or agencies.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

Site Specific Drilling Plan COA's:

- A formation integrity test shall be performed at the surface casing shoe.
- Gamma Ray Log shall be run from Total Depth to Surface.
- To effectively protect useable water, cement for the long string is required to be brought 200 feet above the surface casing shoe.

Variance Granted
Air Drilling

- Dust suppression equipment. Variance granted for water mist system to substitute for the dust suppression equipment.
- Blooie line discharge 100' from the well bore, variance granted for blooie line discharge to be 75' from the well bore.
- Compressors located in the opposite direction from the blooie line a minimum of 100' from the well bore. Variance granted for truck/trailer mounted air compressors.
- Straight run blooie line. Variance granted for targeted "T's" at bends.
- Automatic igniter. Variance granted for igniter due to water mist.

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

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a

test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.

- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.

- No aggressive/fresh hard-banded drill pipe shall be used within casing.

- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM_UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.

    - Well name and number.

    - Well location (¼¼, Sec., Twn, Rng, and P.M.).

    - Date well was placed in a producing status (date of first production for which royalty will be paid).

    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).

    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.

    - Unit agreement and/or participating area name and number, if applicable.

    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

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 QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
B	99999	17400	4301351090	GMBU M-11-9-15	NESW	11	9S	15E	DUCHESNE	8/7/2012	8/20/12
WELL 1 COMMENTS: GRRV BHL: SWNE											—
A	99999	18678	4301350557	UTE TRIBAL 1-16-4-1W	NENE	16	4S	1W	DUCHESNE	7/27/2012	8/20/12
GRRV BHL: NENE											—
B	99999	17400	4301351091	GMBU Q-11-9-15	NESW	11	9S	15E	DUCHESNE	8/6/2012	8/20/12
GRRV BHL: SWSW											—
B	99999	17400	4301351102	GMBU H-11-9-15	SENW	11	9S	15E	DUCHESNE	8/4/2012	8/20/12
GRRV BHL: NWNE											—
B	99999	17400	4301351103	GMBU N-11-9-15	SENW	11	9S	15E	DUCHESNE	8/5/2012	8/20/12
GRRV BHL: NWSW											—
A	99999	18679	4301351508	PETERSON 3-20-3-2WH	SESW	17	3S	2W	DUCHESNE	7/18/2012	8/20/12
GRRV BHL: S20 SESW											
A	99999	18680	4304751787	UTE TRIBAL 9-4-4-1E	NESE	4	4S	1E	UINTAH	7/19/2012	8/20/12
WSTC											

CONFIDENTIAL

A - new entity for new well (single well only)
B - well to existing entity (group or unit well)
C - from one existing entity to another existing entity
D - well from one existing entity to a new entity
E - other (explain in comments section)

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

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AUG 15 2012
Div. of Oil, Gas & Mining

Tasha Robison
Signature
Production Clerk 08/09/12

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

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.

5. LEASE DESIGNATION AND SERIAL NUMBER: Peterson 3-20-3-2W
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT or CA AGREEMENT NAME: UINTA CB - WASATCH DEEP
8. WELL NAME and NUMBER: PETERSON 3-20-3-2WH
9. API NUMBER: 4301351508
10. FIELD AND POOL, OR WILDCAT: UINTA CENTRAL BASIN

1. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY
3. ADDRESS OF OPERATOR: Route 3 Box 3630 CITY Myton STATE UT ZIP 84052 PHONE NUMBER 435.646.3721
4. LOCATION OF WELL: FOOTAGES AT SURFACE: 313 FSL 2057 FWL COUNTY: DUCHESNE
OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: NENW, 17, T3S, R2W STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
[ ] NOTICE OF INTENT (Submit in Duplicate)	[ ] ACIDIZE	[ ] DEEPEN	[ ] REPERFORATE CURRENT FORMATION
Approximate date work will	[ ] ALTER CASING	[ ] FRACTURE TREAT	[ ] SIDETRACK TO REPAIR WELL
	[ ] CASING REPAIR	[ ] NEW CONSTRUCTION	[ ] TEMPORARILY ABANDON
	[ ] CHANGE TO PREVIOUS PLANS	[ ] OPERATOR CHANGE	[ ] TUBING REPAIR
	[ ] CHANGE TUBING	[ ] PLUG AND ABANDON	[ ] VENT OR FLAIR
[X] SUBSEQUENT REPORT (Submit Original Form Only)	[ ] CHANGE WELL NAME	[ ] PLUG BACK	[ ] WATER DISPOSAL
	[ ] CHANGE WELL STATUS	[ ] PRODUCTION (START/STOP)	[ ] WATER SHUT-OFF
Date of Work Completion:	[ ] COMMINGLE PRODUCING FORMATIONS	[ ] RECLAMATION OF WELL SITE	[X] OTHER: - Spud Notice
07/20/2012	[ ] CONVERT WELL TYPE	[ ] RECOMPLETE - DIFFERENT FORMATION	

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

On 7/17/12 MIRU Ross #31. Spud well @8:00 AM. Drill 60' of 12 1/4" hole with air mist. TIH W/ 2 Jt's 14" H-40 36.75# csgn. Set @ 78. On 7/20/12 cement with 90 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 8 barrels cement to pit. WOC.

NAME (PLEASE PRINT) Branden Arnold TITLE

SIGNATURE DATE 08/09/2012

(This space for State use only)

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DIV. OF OIL, GAS & MINING

Casing / Liner Detail

Well	Peterson 3-20-3-2W
Prospect	Central Basin
Foreman	
Run Date:	
String Type	Surface, 9.625", 36#, J-55, LTC (Generic)

- Detail From Top To Bottom -

Depth	*Length*	*JTS*	*Description*	*OD*	*ID*
1,028.79			18' KB		
1,027.37	1.42		Wellhead		
1,028.79	-2.00	-1	Cutt Off	9.625	
18.00	962.02	23	9 5/8 Casing	9.625	
980.02	1.40	1	Float	9.625	
981.42	44.05	1	Shoe Joint	9.625	
1,025.47	1.90	1	Guide Shoe	9.625	
1,027.37			-		

Cement Detail

Cement Company: BJ

Slurry	# of Sacks	Weight (ppg)	Yield	Volume (ft^3)	Description - Slurry Class and Additives
Slurry 1	395	15.8	1.17	462.15	Class G+2%kcl+.25#CF

Stab-In-Job?	No
BHT:	0
nitial Circulation Pressure:	
nitial Circulation Rate:	
Final Circulation Pressure:	
Final Circulation Rate:	
Displacement Fluid:	Water
Displacement Rate:	
Displacement Volume:	75.1
Mud Returns:	
Centralizer Type And Placement:	

Middle of first, top of second and every other for a total of six

Cement To Surface?	Yes
Est. Top of Cement:	0
Plugs Bumped?	Yes
Pressure Plugs Bumped:	1440
Floats Holding?	No
Casing Stuck On / Off Bottom?	No
Casing Reciprocated?	No
Casing Rotated?	No
CIP:	15:18
Casing Wt Prior To Cement:	
Casing Weight Set On Slips:	

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

FORM 9

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

5.LEASE DESIGNATION AND SERIAL NUMBER:
14-20-H62-5951

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:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
PETERSON 3-20-3-2WH

2. NAME OF OPERATOR:
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:
43013515080000

3. ADDRESS OF OPERATOR:
Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER:
435 646-4825 Ext

9. FIELD and POOL or WILDCAT:
WILDCAT

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
0313 FSL 2057 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: SESW Section: 17 Township: 03.0S Range: 02.0W Meridian: U

COUNTY:
DUCHESNE

STATE:
UTAH

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

TYPE OF SUBMISSION

- ✓ NOTICE OF INTENT
  Approximate date work will start:
  9/10/2012
- ☐ SUBSEQUENT REPORT
  Date of Work Completion:
- ☐ SPUD REPORT
  Date of Spud:
- ☐ DRILLING REPORT
  Report Date:

TYPE OF ACTION

☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

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

Newfield Production Company respectuflly submits the attached updated drilling plan and horizontal plan to make minor changes to the 7" intermediate casing cement job and add a foamed cement job to the 4-1/2" production liner.

Accepted by the Utah Division of Oil, Gas and Mining

Date: September 17, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Don Hamilton	435 719-2018	Permitting Agent
SIGNATURE		**DATE**
N/A		9/7/2012

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Newfield Production Company
Peterson 3-20-3-2WH
Surface Hole Location: 313' FSL, 2057' FWL, Section 17, T3S, R2W
Bottom Hole Location: 660' FSL, 2057' FWL, Section 20, T3S, R2W
Duchesne County, UT

Drilling Program

1. Formation Tops

Uinta	surface
Green River	3,295'
Garden Gulch member	6,108'
Uteland Butte	8,458'
Lateral TD	8,342' TVD / 12,808' MD

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

Base of moderately saline	578'	(water)
Green River	6,108' - 8,342'	(oil)

3. Pressure Control

Section	BOP Description
Surface	12-1/4" diverter
Interm/Prod	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 5M system. A 5M BOP system will consist of 2 ram preventers (double or two singles) and an annular preventer (see attached diagram). A choke manifold rated to at least 5,000 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
Conductor	0'	60'	37	H-40	Weld	--	--	--	--	--	--
14									--	--	--
Surface	0'	2,500'	36	J-55	LTC	8.33	8.33	12	3,520	2,020	453,000
9 5/8									2.51	2.54	5.03
Intermediate	0'	8,491'	26	P-110	BTC	10	10.5	15	9,960	6,210	830,000
7		8,830'							2.79	1.64	3.62
Production	7,987'	8,342'	13.5	P-110	BTC	10	10.5	--	12,410	10,670	422,000
4 1/2		12,808'							3.54	2.87	6.48

Assumptions:

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

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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^3 / sacks	OH excess	Weight (ppg)	Yield (ft^3/sk)
Conductor	17 1/2	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	41 / 35	15%	15.8	1.17
Surface Lead	12 1/4	2,000'	Premium Lite II w/ 3% KCl + 10% bentonite	720 / 204	15%	11.0	3.53
Surface Tail	12 1/4	500'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	180 / 154	15%	15.8	1.17
Intermediate Lead	8 3/4	5,108'	HLC Premium - 65% Class G / 35% Poz + 10% Bentonite	883 / 435	15%	12.5	2.03
Intermediate Tail	8 3/4	2,722'	50/50 Poz/Class G + 1% bentonite	471 / 365	15%	14.0	1.29
Production	6 1/8	4,821'	50/50 Poz/Class G + 1% bentonite (foamed with nitrogen to 12.5 ppg)	522 / 226	15%	14.3	2.31

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.

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

The production liner will be cemented with nitrified foam cement. Actual cement volume will be adjusted based on actual lateral length. A liner top hanger and packer will be installed 50' above KOP.

6. Type and Characteristics of Proposed Circulating Medium

Interval — **Description**

Surface - 2,500'

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.

2,500' - 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

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if conditions warrant, with barite.
Anticipated maximum mud weight is 10.5 ppg.

7. Logging, Coring, and Testing

Logging: A dual induction, gamma ray, and caliper log will be run in the intermediate section from the top of the curve to the base of the surface casing. A compensated neutron/formation density log will be run in the intermediate section from the top of the curve to the top of the Garden Gulch formation. A cement bond log will be run from the top of the curve to the cement top behind the intermediate casing.

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 0.52 psi/ft gradient.

8,342' x 0.52 psi/ft = 4338 psi

No abnormal temperature is expected. No H_2S is expected.

9. Other Aspects

An 8-3/4" vertical hole will be drilled to a kick off point of 8,037' .
Directional tools will then be used to build to 92.15 degrees inclination.
The 7" intermediate casing string will be set once the well is landed horizontally in the target zone.

The lateral will be drilled to the bottomhole location shown on the plat.
The liner will be cemented with nitrified foam cement. The top of the liner will be placed 50' above KOP and will be isolated with a liner top packer.

Newfield requests the following variances from Onshore Order #2:
- Variance from Onshoer Order #2, III.E.1
  Refer to Newfield Production Company Standard Operating Practices "Ute Tribal Green River Development Program" paragraph 9.0

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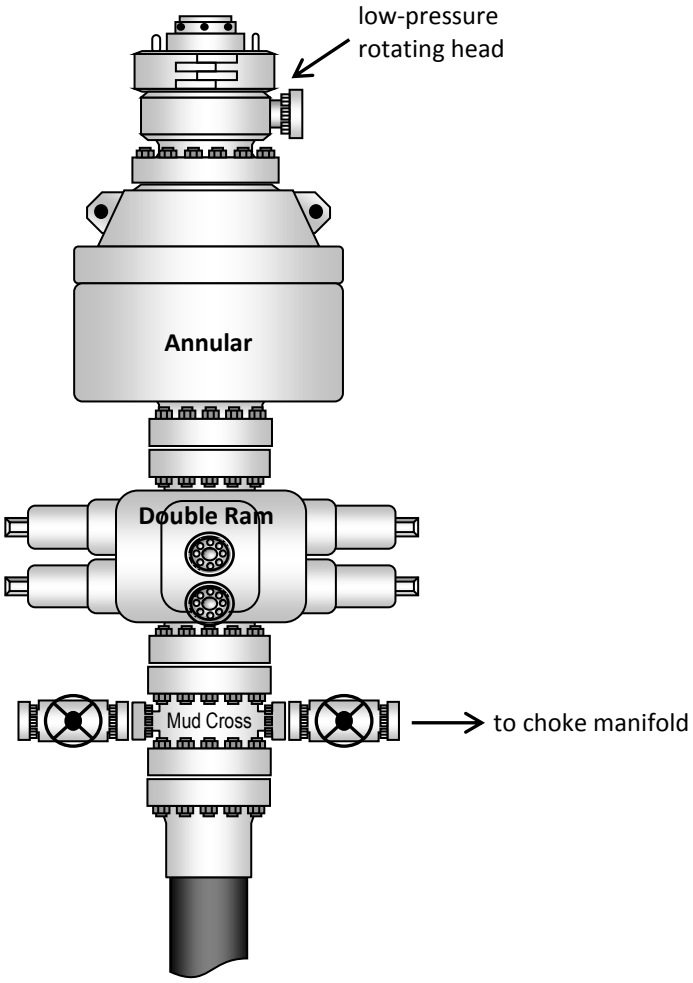
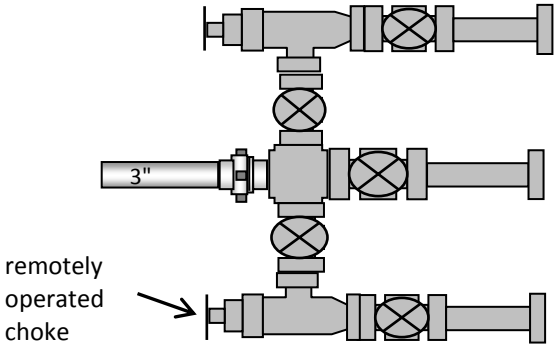
Typical 5M BOP stack configuration



Typical 5M choke manifold configuration



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NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT

PETERSON 3-20-3-2WH

Plan: Design #1

Standard Survey Report

30 August, 2012

RECEIVED: Sep. 07, 2012

Sundry Number: 29827 API Well Number: 43013515080000

NEWFIELD

Weatherford®

Project:	DUCHESNE COUNTY, UT
Site:	PETERSON 3-20-3-2WH
Well:	PETERSON 3-20-3-2WH
Wellbore:	PETERSON 3-20-3-2WH
Design:	Design #2
Latitude:	40° 12' 56.130 N
Longitude:	110° 8' 8.220 W
GL:	5149.50
KB:	WELL @ 5167.50ft (PIONEER 68)

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL PETERSON 3-20-3-2WH	8342.00	-4999.97	168.46	40° 12' 6.716 N	110° 8' 6.049 W	Point

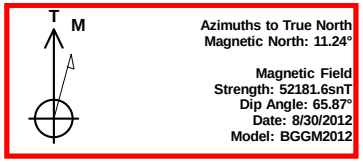
WELL DETAILS: PETERSON 3-20-3-2WH

Ground Level: 5149.50

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	7250161.13	2021416.61	40° 12' 56.130 N	110° 8' 8.220 W	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
2474.00	0.50	197.20	2473.96	-5.81	5.87	0.00	0.00	6.01	Start DLS 8.00 TFO -21.13
2530.63	5.00	178.13	2530.51	-8.52	5.87	8.00	-21.13	8.71	Start 5506.78 hold at 2530.63 MD
8037.41	5.00	178.13	8016.34	-488.21	21.52	0.00	0.00	488.66	Start DLS 11.00 TFO 0.00
8829.71	92.15	178.13	8491.45	-1026.38	39.05	11.00	0.00	1027.11	Start 3978.51 hold at 8829.71 MD
12808.22	92.15	178.13	8342.00	-4999.97	168.46	0.00	0.00	5002.81	TD at 12808.22

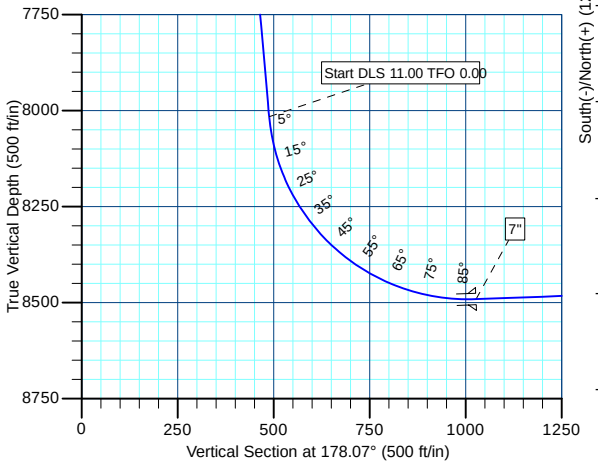


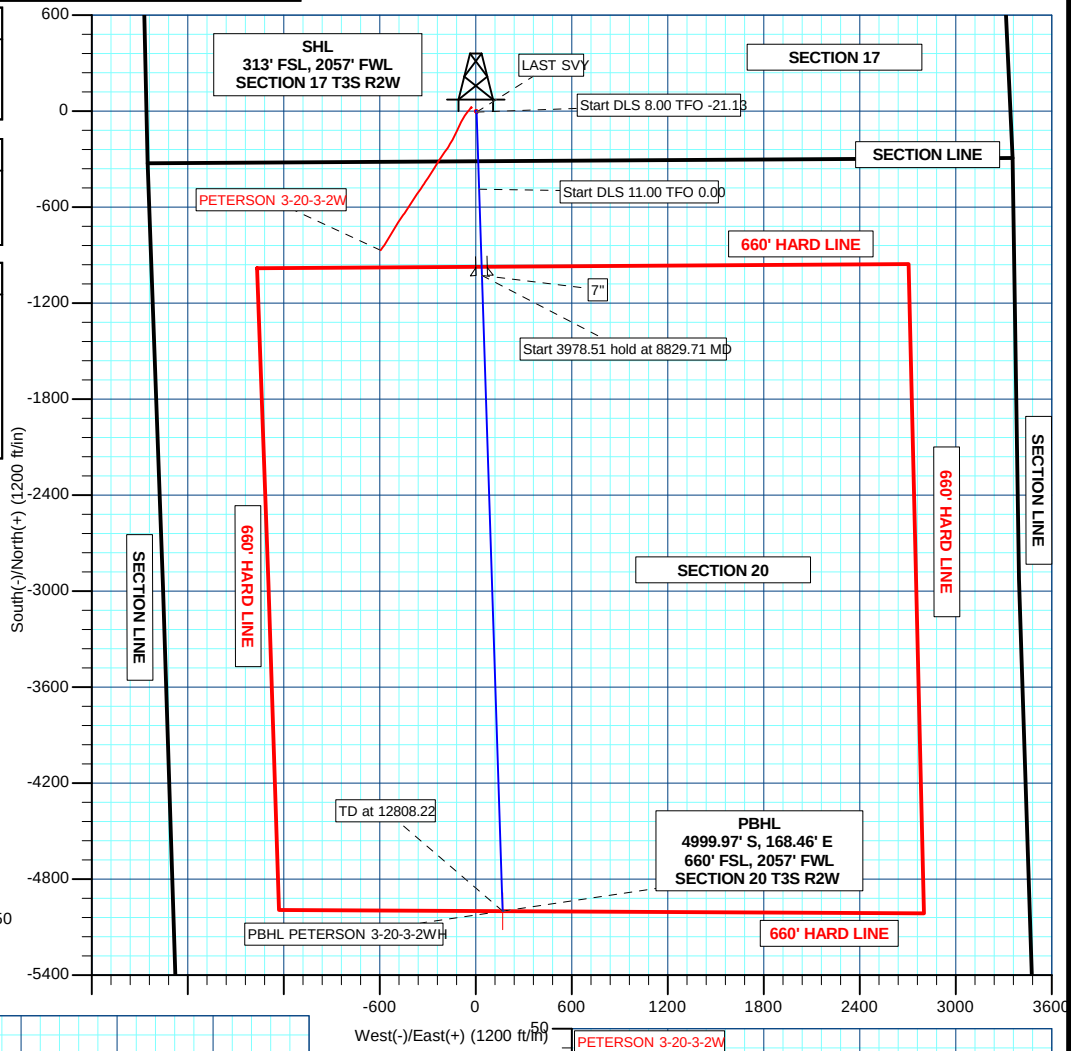
Azimuths to True North
Magnetic North: 11.24°

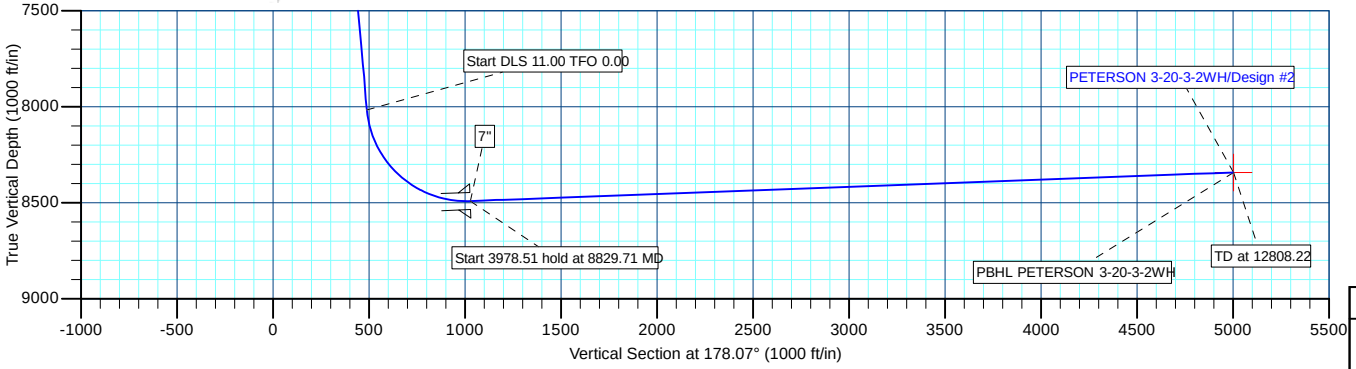
Magnetic Field
Strength: 52181.6snT
Dip Angle: 65.87°
Date: 8/30/2012
Model: BGGM2012

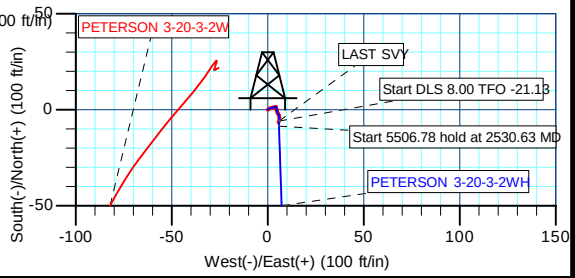
CASING DETAILS

TVD	MD	Name	Size
8491.45	8829.71	7"	7









Plan: Design #2 (PETERSON 3-20-3-2WH/PETERSON 3-20-3-2WH)

Created By: TRACY WILLIAMS Date: 13:31, August 30 2012

Weatherford®

NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT
PETERSON 3-20-3-2WH
PETERSON 3-20-3-2WH

PETERSON 3-20-3-2WH

Plan: Design #2

Standard Planning Report

30 August, 2012

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Planning Report

Weatherford

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #2		

Project DUCHESNE COUNTY, UT

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site PETERSON 3-20-3-2WH

Site Position:		**Northing:**	7,250,161.13 usft	**Latitude:**	40° 12' 56.130 N
From:	Lat/Long	**Easting:**	2,021,416.61 usft	**Longitude:**	110° 8' 8.220 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.87 °

Well PETERSON 3-20-3-2WH

Well Position	**+N/-S**	0.00 ft	**Northing:**	7,250,161.13 usft	**Latitude:**	40° 12' 56.130 N
	+E/-W	0.00 ft	**Easting:**	2,021,416.61 usft	**Longitude:**	110° 8' 8.220 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,149.50 ft

Wellbore PETERSON 3-20-3-2WH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2012	8/30/2012	11.25	65.87	52,182

Design Design #2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	2,474.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	178.07

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
2,474.00	0.50	197.20	2,473.96	-5.81	5.87	0.00	0.00	0.00	0.00	
2,530.63	5.00	178.13	2,530.51	-8.52	5.87	8.00	7.95	-33.67	-21.13	
8,037.41	5.00	178.13	8,016.34	-488.21	21.52	0.00	0.00	0.00	0.00	
8,829.71	92.15	178.13	8,491.45	-1,026.38	39.05	11.00	11.00	0.00	0.00	
12,808.22	92.15	178.13	8,342.00	-4,999.97	168.46	0.00	0.00	0.00	0.00	PBHL PETERSON 3-

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Planning Report

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Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72.40	0.20	23.40	72.40	0.12	0.05	-0.11	0.28	0.28	0.00
105.80	0.30	81.40	105.80	0.18	0.16	-0.18	0.77	0.30	173.65
136.40	0.30	54.60	136.40	0.24	0.30	-0.23	0.45	0.00	-87.58
165.70	0.40	50.40	165.70	0.35	0.45	-0.34	0.35	0.34	-14.33
194.80	0.30	56.10	194.80	0.46	0.59	-0.44	0.36	-0.34	19.59
224.10	0.50	65.70	224.10	0.55	0.77	-0.53	0.72	0.68	32.76
253.20	0.40	57.30	253.20	0.66	0.97	-0.63	0.41	-0.34	-28.87
283.10	0.50	74.50	283.10	0.75	1.18	-0.71	0.56	0.33	57.53
314.80	0.50	70.30	314.79	0.84	1.45	-0.79	0.12	0.00	-13.25
344.80	0.30	83.70	344.79	0.89	1.65	-0.83	0.73	-0.67	44.67
374.80	0.60	79.90	374.79	0.92	1.88	-0.86	1.00	1.00	-12.67
404.80	0.50	72.40	404.79	0.99	2.16	-0.92	0.41	-0.33	-25.00
434.80	0.50	76.20	434.79	1.06	2.41	-0.98	0.11	0.00	12.67
464.80	0.40	76.80	464.79	1.12	2.64	-1.03	0.33	-0.33	2.00
494.80	0.40	75.80	494.79	1.17	2.84	-1.07	0.02	0.00	-3.33
534.80	0.30	84.90	534.79	1.21	3.08	-1.11	0.29	-0.25	22.75
554.80	0.40	73.50	554.79	1.23	3.20	-1.13	0.61	0.50	-57.00
584.80	0.20	84.90	584.79	1.27	3.35	-1.16	0.69	-0.67	38.00
614.00	0.20	69.00	613.99	1.29	3.45	-1.17	0.19	0.00	-54.45
644.80	0.20	98.70	644.79	1.30	3.56	-1.18	0.33	0.00	96.43
674.80	0.20	57.80	674.79	1.32	3.65	-1.20	0.47	0.00	-136.33
704.80	0.20	68.30	704.79	1.37	3.75	-1.24	0.12	0.00	35.00
734.80	0.10	55.80	734.79	1.40	3.82	-1.28	0.35	-0.33	-41.67
764.80	0.10	44.80	764.79	1.44	3.86	-1.31	0.06	0.00	-36.67
794.80	0.00	79.70	794.79	1.46	3.87	-1.32	0.33	-0.33	0.00
824.00	0.20	79.00	823.99	1.47	3.92	-1.33	0.68	0.68	0.00
854.00	0.10	53.40	853.99	1.49	4.00	-1.36	0.39	-0.33	-85.33
884.00	0.00	59.50	883.99	1.51	4.02	-1.37	0.33	-0.33	0.00
914.00	0.10	63.80	913.99	1.52	4.04	-1.38	0.33	0.33	0.00
944.00	0.00	150.30	943.99	1.53	4.06	-1.39	0.33	-0.33	0.00
1,004.00	0.00	52.60	1,003.99	1.53	4.06	-1.39	0.00	0.00	0.00
1,034.00	0.20	117.40	1,033.99	1.51	4.11	-1.37	0.67	0.67	0.00
1,064.00	0.00	72.50	1,063.99	1.48	4.16	-1.34	0.67	-0.67	0.00
1,094.00	0.10	169.70	1,093.99	1.46	4.16	-1.32	0.33	0.33	0.00
1,124.00	0.10	108.30	1,123.99	1.42	4.19	-1.28	0.34	0.00	-204.67
1,154.00	0.00	178.60	1,153.99	1.41	4.22	-1.27	0.33	-0.33	0.00
1,184.00	0.20	147.40	1,183.99	1.37	4.24	-1.23	0.67	0.67	0.00
1,214.00	0.20	166.60	1,213.99	1.28	4.29	-1.13	0.22	0.00	64.00
1,244.00	0.20	142.20	1,243.99	1.18	4.33	-1.04	0.28	0.00	-81.33
1,274.00	0.20	148.30	1,273.99	1.10	4.39	-0.95	0.07	0.00	20.33
1,304.00	0.20	131.70	1,303.98	1.02	4.46	-0.87	0.19	0.00	-55.33
1,334.00	0.10	179.40	1,333.98	0.96	4.50	-0.80	0.51	-0.33	159.00
1,364.00	0.20	139.50	1,363.98	0.89	4.53	-0.74	0.46	0.33	-133.00
1,394.00	0.30	156.70	1,393.98	0.78	4.59	-0.62	0.41	0.33	57.33
1,424.00	0.20	167.00	1,423.98	0.66	4.64	-0.50	0.36	-0.33	34.33
1,454.00	0.10	183.10	1,453.98	0.58	4.65	-0.42	0.36	-0.33	53.67
1,484.00	0.10	182.10	1,483.98	0.53	4.65	-0.37	0.01	0.00	-3.33
1,514.00	0.10	169.60	1,513.98	0.47	4.65	-0.32	0.07	0.00	-41.67
1,544.00	0.30	185.30	1,543.98	0.37	4.65	-0.21	0.69	0.67	52.33
1,574.00	0.40	178.90	1,573.98	0.19	4.64	-0.03	0.36	0.33	-21.33
1,604.00	0.40	163.70	1,603.98	-0.02	4.67	0.18	0.35	0.00	-50.67
1,634.00	0.30	153.60	1,633.98	-0.19	4.74	0.35	0.39	-0.33	-33.67
1,664.00	0.40	176.70	1,663.98	-0.36	4.78	0.52	0.57	0.33	77.00

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Planning Report

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Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,694.00	0.40	170.50	1,693.98	-0.57	4.80	0.73	0.14	0.00	-20.67
1,724.00	0.30	165.00	1,723.98	-0.75	4.84	0.91	0.35	-0.33	-18.33
1,754.00	0.40	152.90	1,753.98	-0.92	4.91	1.08	0.41	0.33	-40.33
1,784.00	0.40	171.60	1,783.98	-1.12	4.97	1.28	0.43	0.00	62.33
1,814.00	0.40	162.30	1,813.98	-1.32	5.02	1.49	0.22	0.00	-31.00
1,844.00	0.40	157.80	1,843.98	-1.52	5.09	1.69	0.10	0.00	-15.00
1,874.00	0.40	165.20	1,873.98	-1.72	5.15	1.89	0.17	0.00	24.67
1,904.00	0.30	157.70	1,903.98	-1.89	5.21	2.06	0.37	-0.33	-25.00
1,934.00	0.30	150.60	1,933.98	-2.03	5.28	2.21	0.12	0.00	-23.67
1,964.00	0.30	142.20	1,963.98	-2.16	5.37	2.34	0.15	0.00	-28.00
1,994.00	0.40	135.50	1,993.97	-2.30	5.49	2.48	0.36	0.33	-22.33
2,024.00	0.30	139.90	2,023.97	-2.43	5.61	2.62	0.34	-0.33	14.67
2,054.00	0.40	145.50	2,053.97	-2.58	5.72	2.77	0.35	0.33	18.67
2,084.00	0.30	147.40	2,083.97	-2.73	5.82	2.93	0.34	-0.33	6.33
2,114.00	0.40	172.60	2,113.97	-2.90	5.88	3.10	0.60	0.33	84.00
2,144.00	0.40	169.50	2,143.97	-3.11	5.91	3.31	0.07	0.00	-10.33
2,174.00	0.40	176.20	2,173.97	-3.32	5.94	3.51	0.16	0.00	22.33
2,204.00	0.40	169.70	2,203.97	-3.52	5.96	3.72	0.15	0.00	-21.67
2,234.00	0.40	170.70	2,233.97	-3.73	6.00	3.93	0.02	0.00	3.33
2,264.00	0.40	171.10	2,263.97	-3.94	6.03	4.14	0.01	0.00	1.33
2,294.00	0.50	186.00	2,293.97	-4.17	6.03	4.37	0.51	0.33	49.67
2,324.00	0.60	174.30	2,323.97	-4.46	6.04	4.66	0.50	0.33	-39.00
2,354.00	0.50	173.00	2,353.97	-4.74	6.07	4.94	0.34	-0.33	-4.33
2,384.00	0.60	186.10	2,383.96	-5.03	6.07	5.23	0.53	0.33	43.67
2,414.00	0.50	195.40	2,413.96	-5.31	6.02	5.51	0.45	-0.33	31.00
2,444.00	0.50	196.90	2,443.96	-5.56	5.94	5.76	0.04	0.00	5.00
Start DLS 8.00 TFO -21.13									
2,474.00	0.50	197.20	2,473.96	-5.81	5.87	6.01	0.01	0.00	1.00
2,500.00	2.55	180.12	2,499.95	-6.50	5.83	6.69	8.00	7.90	-65.70
Start 5506.78 hold at 2530.63 MD									
2,530.63	5.00	178.13	2,530.51	-8.52	5.87	8.71	8.00	7.99	-6.48
2,600.00	5.00	178.13	2,599.62	-14.56	6.07	14.76	0.00	0.00	0.00
2,700.00	5.00	178.13	2,699.24	-23.27	6.36	23.47	0.00	0.00	0.00
2,800.00	5.00	178.13	2,798.86	-31.98	6.64	32.19	0.00	0.00	0.00
2,900.00	5.00	178.13	2,898.48	-40.69	6.92	40.90	0.00	0.00	0.00
3,000.00	5.00	178.13	2,998.09	-49.40	7.21	49.62	0.00	0.00	0.00
3,100.00	5.00	178.13	3,097.71	-58.11	7.49	58.33	0.00	0.00	0.00
3,200.00	5.00	178.13	3,197.33	-66.82	7.78	67.05	0.00	0.00	0.00
3,300.00	5.00	178.13	3,296.95	-75.54	8.06	75.76	0.00	0.00	0.00
3,400.00	5.00	178.13	3,396.57	-84.25	8.34	84.48	0.00	0.00	0.00
3,500.00	5.00	178.13	3,496.19	-92.96	8.63	93.20	0.00	0.00	0.00
3,600.00	5.00	178.13	3,595.81	-101.67	8.91	101.91	0.00	0.00	0.00
3,700.00	5.00	178.13	3,695.43	-110.38	9.20	110.63	0.00	0.00	0.00
3,800.00	5.00	178.13	3,795.05	-119.09	9.48	119.34	0.00	0.00	0.00
3,900.00	5.00	178.13	3,894.67	-127.80	9.77	128.06	0.00	0.00	0.00
4,000.00	5.00	178.13	3,994.29	-136.51	10.05	136.77	0.00	0.00	0.00
4,100.00	5.00	178.13	4,093.91	-145.22	10.33	145.49	0.00	0.00	0.00
4,200.00	5.00	178.13	4,193.53	-153.93	10.62	154.20	0.00	0.00	0.00
4,300.00	5.00	178.13	4,293.15	-162.65	10.90	162.92	0.00	0.00	0.00
4,400.00	5.00	178.13	4,392.77	-171.36	11.19	171.64	0.00	0.00	0.00
4,500.00	5.00	178.13	4,492.39	-180.07	11.47	180.35	0.00	0.00	0.00
4,600.00	5.00	178.13	4,592.01	-188.78	11.76	189.07	0.00	0.00	0.00
4,700.00	5.00	178.13	4,691.63	-197.49	12.04	197.78	0.00	0.00	0.00

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Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.00	5.00	178.13	4,791.24	-206.20	12.32	206.50	0.00	0.00	0.00
4,900.00	5.00	178.13	4,890.86	-214.91	12.61	215.21	0.00	0.00	0.00
5,000.00	5.00	178.13	4,990.48	-223.62	12.89	223.93	0.00	0.00	0.00
5,100.00	5.00	178.13	5,090.10	-232.33	13.18	232.64	0.00	0.00	0.00
5,200.00	5.00	178.13	5,189.72	-241.04	13.46	241.36	0.00	0.00	0.00
5,300.00	5.00	178.13	5,289.34	-249.75	13.74	250.08	0.00	0.00	0.00
5,400.00	5.00	178.13	5,388.96	-258.47	14.03	258.79	0.00	0.00	0.00
5,500.00	5.00	178.13	5,488.58	-267.18	14.31	267.51	0.00	0.00	0.00
5,600.00	5.00	178.13	5,588.20	-275.89	14.60	276.22	0.00	0.00	0.00
5,700.00	5.00	178.13	5,687.82	-284.60	14.88	284.94	0.00	0.00	0.00
5,800.00	5.00	178.13	5,787.44	-293.31	15.17	293.65	0.00	0.00	0.00
5,900.00	5.00	178.13	5,887.06	-302.02	15.45	302.37	0.00	0.00	0.00
6,000.00	5.00	178.13	5,986.68	-310.73	15.73	311.08	0.00	0.00	0.00
6,100.00	5.00	178.13	6,086.30	-319.44	16.02	319.80	0.00	0.00	0.00
6,200.00	5.00	178.13	6,185.92	-328.15	16.30	328.52	0.00	0.00	0.00
6,300.00	5.00	178.13	6,285.54	-336.86	16.59	337.23	0.00	0.00	0.00
6,400.00	5.00	178.13	6,385.16	-345.57	16.87	345.95	0.00	0.00	0.00
6,500.00	5.00	178.13	6,484.78	-354.29	17.15	354.66	0.00	0.00	0.00
6,600.00	5.00	178.13	6,584.40	-363.00	17.44	363.38	0.00	0.00	0.00
6,700.00	5.00	178.13	6,684.01	-371.71	17.72	372.09	0.00	0.00	0.00
6,800.00	5.00	178.13	6,783.63	-380.42	18.01	380.81	0.00	0.00	0.00
6,900.00	5.00	178.13	6,883.25	-389.13	18.29	389.52	0.00	0.00	0.00
7,000.00	5.00	178.13	6,982.87	-397.84	18.58	398.24	0.00	0.00	0.00
7,100.00	5.00	178.13	7,082.49	-406.55	18.86	406.96	0.00	0.00	0.00
7,200.00	5.00	178.13	7,182.11	-415.26	19.14	415.67	0.00	0.00	0.00
7,300.00	5.00	178.13	7,281.73	-423.97	19.43	424.39	0.00	0.00	0.00
7,400.00	5.00	178.13	7,381.35	-432.68	19.71	433.10	0.00	0.00	0.00
7,500.00	5.00	178.13	7,480.97	-441.40	20.00	441.82	0.00	0.00	0.00
7,600.00	5.00	178.13	7,580.59	-450.11	20.28	450.53	0.00	0.00	0.00
7,700.00	5.00	178.13	7,680.21	-458.82	20.57	459.25	0.00	0.00	0.00
7,800.00	5.00	178.13	7,779.83	-467.53	20.85	467.96	0.00	0.00	0.00
7,900.00	5.00	178.13	7,879.45	-476.24	21.13	476.68	0.00	0.00	0.00
8,000.00	5.00	178.13	7,979.07	-484.95	21.42	485.40	0.00	0.00	0.00
Start DLS 11.00 TFO 0.00									
8,037.41	5.00	178.13	8,016.34	-488.21	21.52	488.66	0.00	0.00	0.00
8,050.00	6.38	178.13	8,028.86	-489.46	21.56	489.91	11.00	11.00	0.01
8,100.00	11.88	178.13	8,078.21	-497.39	21.82	497.84	11.00	11.00	0.00
8,150.00	17.38	178.13	8,126.57	-510.01	22.23	510.47	11.00	11.00	0.00
8,200.00	22.88	178.13	8,173.50	-527.20	22.79	527.67	11.00	11.00	0.00
8,250.00	28.38	178.13	8,218.56	-548.82	23.50	549.30	11.00	11.00	0.00
8,300.00	33.88	178.13	8,261.34	-574.64	24.34	575.14	11.00	11.00	0.00
8,350.00	39.38	178.13	8,301.45	-604.45	25.31	604.96	11.00	11.00	0.00
8,400.00	44.88	178.13	8,338.51	-637.97	26.40	638.49	11.00	11.00	0.00
8,450.00	50.38	178.13	8,372.19	-674.87	27.61	675.42	11.00	11.00	0.00
8,500.00	55.88	178.13	8,402.18	-714.84	28.91	715.41	11.00	11.00	0.00
8,550.00	61.38	178.13	8,428.19	-757.49	30.30	758.09	11.00	11.00	0.00
8,600.00	66.88	178.13	8,450.00	-802.44	31.76	803.06	11.00	11.00	0.00
8,650.00	72.38	178.13	8,467.39	-849.28	33.29	849.92	11.00	11.00	0.00
8,700.00	77.88	178.13	8,480.21	-897.56	34.86	898.22	11.00	11.00	0.00
8,750.00	83.38	178.13	8,488.35	-946.85	36.46	947.54	11.00	11.00	0.00
8,800.00	88.88	178.13	8,491.71	-996.69	38.09	997.40	11.00	11.00	0.00
Start 3978.51 hold at 8829.71 MD - 7"									
8,829.71	92.15	178.13	8,491.45	-1,026.38	39.05	1,027.11	11.00	11.00	0.00
8,900.00	92.15	178.13	8,488.81	-1,096.58	41.34	1,097.35	0.00	0.00	0.00

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Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,000.00	92.15	178.13	8,485.05	-1,196.46	44.59	1,197.28	0.00	0.00	0.00
9,100.00	92.15	178.13	8,481.29	-1,296.33	47.84	1,297.21	0.00	0.00	0.00
9,200.00	92.15	178.13	8,477.54	-1,396.21	51.10	1,397.14	0.00	0.00	0.00
9,300.00	92.15	178.13	8,473.78	-1,496.09	54.35	1,497.07	0.00	0.00	0.00
9,400.00	92.15	178.13	8,470.02	-1,595.96	57.60	1,597.00	0.00	0.00	0.00
9,500.00	92.15	178.13	8,466.27	-1,695.84	60.85	1,696.93	0.00	0.00	0.00
9,600.00	92.15	178.13	8,462.51	-1,795.72	64.11	1,796.86	0.00	0.00	0.00
9,700.00	92.15	178.13	8,458.76	-1,895.59	67.36	1,896.78	0.00	0.00	0.00
9,800.00	92.15	178.13	8,455.00	-1,995.47	70.61	1,996.71	0.00	0.00	0.00
9,900.00	92.15	178.13	8,451.24	-2,095.34	73.86	2,096.64	0.00	0.00	0.00
10,000.00	92.15	178.13	8,447.49	-2,195.22	77.12	2,196.57	0.00	0.00	0.00
10,100.00	92.15	178.13	8,443.73	-2,295.10	80.37	2,296.50	0.00	0.00	0.00
10,200.00	92.15	178.13	8,439.97	-2,394.97	83.62	2,396.43	0.00	0.00	0.00
10,300.00	92.15	178.13	8,436.22	-2,494.85	86.87	2,496.36	0.00	0.00	0.00
10,400.00	92.15	178.13	8,432.46	-2,594.73	90.13	2,596.29	0.00	0.00	0.00
10,500.00	92.15	178.13	8,428.70	-2,694.60	93.38	2,696.22	0.00	0.00	0.00
10,600.00	92.15	178.13	8,424.95	-2,794.48	96.63	2,796.15	0.00	0.00	0.00
10,700.00	92.15	178.13	8,421.19	-2,894.36	99.88	2,896.08	0.00	0.00	0.00
10,800.00	92.15	178.13	8,417.44	-2,994.23	103.14	2,996.01	0.00	0.00	0.00
10,900.00	92.15	178.13	8,413.68	-3,094.11	106.39	3,095.94	0.00	0.00	0.00
11,000.00	92.15	178.13	8,409.92	-3,193.99	109.64	3,195.87	0.00	0.00	0.00
11,100.00	92.15	178.13	8,406.17	-3,293.86	112.90	3,295.80	0.00	0.00	0.00
11,200.00	92.15	178.13	8,402.41	-3,393.74	116.15	3,395.73	0.00	0.00	0.00
11,300.00	92.15	178.13	8,398.65	-3,493.62	119.40	3,495.65	0.00	0.00	0.00
11,400.00	92.15	178.13	8,394.90	-3,593.49	122.65	3,595.58	0.00	0.00	0.00
11,500.00	92.15	178.13	8,391.14	-3,693.37	125.91	3,695.51	0.00	0.00	0.00
11,600.00	92.15	178.13	8,387.38	-3,793.24	129.16	3,795.44	0.00	0.00	0.00
11,700.00	92.15	178.13	8,383.63	-3,893.12	132.41	3,895.37	0.00	0.00	0.00
11,800.00	92.15	178.13	8,379.87	-3,993.00	135.66	3,995.30	0.00	0.00	0.00
11,900.00	92.15	178.13	8,376.12	-4,092.87	138.92	4,095.23	0.00	0.00	0.00
12,000.00	92.15	178.13	8,372.36	-4,192.75	142.17	4,195.16	0.00	0.00	0.00
12,100.00	92.15	178.13	8,368.60	-4,292.63	145.42	4,295.09	0.00	0.00	0.00
12,200.00	92.15	178.13	8,364.85	-4,392.50	148.67	4,395.02	0.00	0.00	0.00
12,300.00	92.15	178.13	8,361.09	-4,492.38	151.93	4,494.95	0.00	0.00	0.00
12,400.00	92.15	178.13	8,357.33	-4,592.26	155.18	4,594.88	0.00	0.00	0.00
12,500.00	92.15	178.13	8,353.58	-4,692.13	158.43	4,694.81	0.00	0.00	0.00
12,600.00	92.15	178.13	8,349.82	-4,792.01	161.68	4,794.74	0.00	0.00	0.00
12,700.00	92.15	178.13	8,346.07	-4,891.89	164.94	4,894.67	0.00	0.00	0.00
TD at 12808.22									
12,808.22	92.15	178.13	8,342.00	-4,999.97	168.46	5,002.81	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL PETERSON 3-20 - plan hits target center - Point	0.00	0.00	8,342.00	-4,999.97	168.46	7,245,164.32	2,021,661.32	40° 12' 6.716 N	110° 8' 6.049 W

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Planning Report

Weatherford

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Company:	NEWFIELD EXPLORATION CO.	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Project:	DUCHESNE COUNTY, UT	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site:	PETERSON 3-20-3-2WH	**North Reference:**	True
Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	PETERSON 3-20-3-2WH		
Design:	Design #2		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
8,829.71	8,491.45	7"	7	8-3/4

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,474.00	2,473.96	-5.81	5.87	Start DLS 8.00 TFO -21.13
2,530.63	2,530.51	-8.52	5.87	Start 5506.78 hold at 2530.63 MD
8,037.41	8,016.34	-488.21	21.52	Start DLS 11.00 TFO 0.00
8,829.71	8,491.45	-1,026.38	39.05	Start 3978.51 hold at 8829.71 MD
12,808.22	8,342.00	-4,999.97	168.46	TD at 12808.22

RECEIVED: Sep. 07, 2012

NEWFIELD EXPLORATION CO.

DUCHESNE COUNTY, UT
PETERSON 3-20-3-2WH
PETERSON 3-20-3-2WH

PETERSON 3-20-3-2WH
Design #2

Anticollision Report

30 August, 2012

RECEIVED: Sep. 07, 2012

NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00 ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Reference Design #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00ft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 11,000.00 ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 8/30/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
72.40	2,474.00	Payzone Survey #1 (PETERSON 3-20-3-2	MWD	MWD - Standard
2,474.00	12,808.22	Design #2 (PETERSON 3-20-3-2WH)		

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
PETERSON 3-20-3-2W						
PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETE	984.85	985.15	36.01	34.00	17.980	CC, ES
PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETE	1,500.00	1,500.35	40.71	36.60	9.910	SF

Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W

Offset Site Error: 0.00 ft

Survey Program: 1042-MWD **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	960.00	959.94	0.00	0.00	-49.61	21.73	-25.54	960.03				
100.00	100.00	960.00	959.94	0.12	0.00	-130.32	21.73	-25.54	860.09	859.97	0.12	7,164.224	
200.00	200.00	960.00	959.94	0.33	0.00	-116.31	21.73	-25.54	760.19	759.86	0.33	2,301.420	
300.00	299.99	960.00	959.94	0.54	0.00	-131.59	21.73	-25.54	660.32	659.79	0.54	1,227.729	
400.00	399.99	960.00	959.94	0.75	0.00	-133.02	21.73	-25.54	560.52	559.77	0.75	750.614	
500.00	499.99	960.00	959.94	0.95	0.00	-134.46	21.73	-25.54	460.79	459.83	0.95	482.652	
600.00	599.99	960.00	959.94	1.16	0.00	-132.86	21.73	-25.54	361.20	360.03	1.16	310.091	
700.00	699.99	960.00	959.94	1.37	0.00	-123.02	21.73	-25.54	261.89	260.52	1.37	190.570	
800.00	799.99	960.00	959.94	1.59	0.00	-134.54	21.73	-25.54	163.41	161.82	1.59	103.094	
900.00	899.99	960.00	959.94	1.80	0.00	-119.51	21.73	-25.54	69.41	67.61	1.80	38.664	
984.85	984.83	985.15	985.09	1.97	0.03	-119.94	21.59	-25.83	36.01	34.00	2.00	17.980	CC, ES
1,000.00	999.99	1,000.30	1,000.24	2.01	0.05	-56.40	21.51	-26.01	36.11	34.06	2.05	17.600	
1,100.00	1,099.99	1,100.34	1,100.27	2.21	0.21	143.32	20.97	-27.16	36.91	34.49	2.43	15.219	
1,200.00	1,199.99	1,200.35	1,200.28	2.42	0.43	143.35	20.68	-27.97	37.60	34.76	2.85	13.196	
1,300.00	1,299.98	1,300.14	1,300.00	2.63	0.66	171.99	23.77	-26.99	38.80	35.52	3.28	11.832	
1,400.00	1,399.98	1,400.55	1,400.36	2.84	0.87	149.64	25.33	-27.06	40.09	36.39	3.70	10.848	
1,500.00	1,499.98	1,500.35	1,499.78	3.05	1.10	120.79	18.48	-31.87	40.71	36.60	4.11	9.910	SF
1,600.00	1,599.98	1,597.55	1,595.70	3.26	1.34	111.82	6.13	-41.35	46.66	42.08	4.58	10.189	
1,700.00	1,699.98	1,694.33	1,690.42	3.47	1.66	92.17	-9.05	-54.20	60.45	55.38	5.07	11.913	
1,800.00	1,799.98	1,789.95	1,783.08	3.68	2.07	83.43	-27.75	-68.52	80.06	74.50	5.56	14.411	
1,900.00	1,899.98	1,886.90	1,876.44	3.89	2.52	82.07	-50.05	-82.15	102.61	96.60	6.01	17.066	
2,000.00	1,999.97	1,983.48	1,969.09	4.10	2.99	97.70	-74.61	-93.95	126.90	120.44	6.47	19.627	
2,100.00	2,099.97	2,082.03	2,063.88	4.31	3.43	66.27	-99.16	-104.99	151.36	144.46	6.90	21.928	
2,200.00	2,199.97	2,180.62	2,159.18	4.52	3.87	55.05	-122.12	-115.59	174.78	167.44	7.34	23.797	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

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NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00 ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W

Survey Program: 1042-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,300.00	2,299.97	2,278.19	2,253.72	4.73	4.30	40.20	-143.54	-126.59	197.95	190.16	7.79	25.405	
2,400.00	2,399.96	2,374.60	2,347.18	4.93	4.75	31.56	-164.08	-138.39	221.24	213.00	8.24	26.834	
2,500.00	2,499.95	2,478.08	2,447.75	5.14	5.22	40.67	-185.35	-150.33	243.21	234.51	8.71	27.928	
2,600.00	2,599.62	2,579.22	2,546.50	5.36	5.65	42.55	-204.51	-160.76	258.43	249.25	9.18	28.148	
2,700.00	2,699.24	2,678.19	2,643.20	5.58	6.07	42.77	-223.20	-170.58	272.90	263.24	9.66	28.250	
2,800.00	2,798.86	2,777.48	2,740.29	5.80	6.48	43.30	-240.75	-181.62	287.25	277.11	10.14	28.319	
2,900.00	2,898.48	2,875.55	2,836.22	6.03	6.89	44.04	-257.22	-193.62	301.72	291.10	10.63	28.392	
3,000.00	2,998.09	2,972.95	2,931.42	6.26	7.30	44.72	-273.83	-205.82	316.64	305.52	11.11	28.489	
3,100.00	3,097.71	3,072.53	3,028.73	6.50	7.72	45.30	-291.04	-218.08	331.62	320.00	11.61	28.559	
3,200.00	3,197.33	3,171.45	3,125.38	6.74	8.15	45.77	-308.34	-230.04	346.61	334.49	12.11	28.619	
3,300.00	3,296.95	3,272.10	3,223.79	6.99	8.57	46.14	-326.01	-241.67	361.29	348.67	12.62	28.635	
3,400.00	3,396.57	3,372.90	3,322.40	7.23	9.00	46.39	-343.82	-252.56	375.54	362.41	13.13	28.610	
3,500.00	3,496.19	3,473.65	3,421.04	7.48	9.41	46.52	-361.71	-262.61	389.25	375.62	13.63	28.549	
3,600.00	3,595.81	3,577.37	3,522.76	7.73	9.82	46.72	-379.26	-272.77	402.26	388.11	14.15	28.429	
3,700.00	3,695.43	3,676.43	3,620.07	7.99	10.21	46.97	-395.14	-282.34	414.53	399.88	14.65	28.291	
3,800.00	3,795.05	3,773.73	3,715.66	8.24	10.58	47.40	-409.88	-292.93	427.08	411.92	15.15	28.184	
3,900.00	3,894.67	3,873.71	3,813.82	8.50	10.97	47.80	-425.29	-303.96	439.94	424.27	15.67	28.084	
4,000.00	3,994.29	3,969.63	3,907.93	8.76	11.35	48.06	-440.83	-314.13	453.05	436.88	16.17	28.021	
4,100.00	4,093.91	4,066.38	4,002.73	9.02	11.74	48.32	-456.87	-324.92	466.82	450.15	16.68	27.995	
4,200.00	4,193.53	4,174.16	4,108.44	9.28	12.17	48.61	-474.27	-336.72	480.19	462.98	17.21	27.895	
4,300.00	4,293.15	4,266.23	4,198.87	9.54	12.53	48.84	-488.73	-346.19	492.77	475.06	17.71	27.826	
4,400.00	4,392.77	4,360.17	4,290.79	9.81	12.92	49.09	-504.51	-357.39	507.29	489.07	18.22	27.846	
4,500.00	4,492.39	4,471.18	4,399.60	10.07	13.37	49.35	-522.63	-369.87	521.03	502.26	18.77	27.757	
4,600.00	4,592.01	4,573.73	4,500.45	10.33	13.76	49.52	-538.47	-379.56	532.81	513.51	19.30	27.613	
4,700.00	4,691.63	4,671.90	4,597.04	10.60	14.13	49.76	-553.08	-389.28	544.56	524.75	19.81	27.490	
4,800.00	4,791.25	4,761.46	4,684.97	10.87	14.48	49.97	-567.06	-398.98	557.49	537.18	20.30	27.457	
4,900.00	4,890.86	4,855.63	4,777.23	11.14	14.87	50.12	-582.80	-409.44	571.39	550.58	20.82	27.451	
5,000.00	4,990.48	4,960.37	4,879.82	11.40	15.29	50.19	-600.80	-420.35	585.08	563.73	21.35	27.399	
5,100.00	5,090.10	5,046.53	4,964.11	11.67	15.65	50.28	-615.81	-430.09	599.61	577.77	21.84	27.449	
5,200.00	5,189.72	5,159.24	5,074.40	11.94	16.12	50.45	-635.00	-443.12	614.08	591.67	22.41	27.402	
5,300.00	5,289.34	5,258.03	5,171.31	12.21	16.51	50.62	-650.77	-454.01	627.42	604.49	22.93	27.357	
5,400.00	5,388.96	5,350.15	5,261.61	12.48	16.88	50.80	-665.59	-464.60	641.23	617.79	23.44	27.352	
5,500.00	5,488.58	5,439.63	5,349.03	12.76	17.27	50.94	-681.10	-475.71	656.56	632.61	23.95	27.414	
5,600.00	5,588.20	5,550.08	5,456.79	13.03	17.75	50.99	-701.45	-488.85	672.28	647.76	24.52	27.423	
5,700.00	5,687.82	5,647.40	5,552.01	13.30	18.16	50.95	-719.09	-498.54	686.27	661.23	25.04	27.410	
5,800.00	5,787.44	5,738.67	5,641.07	13.57	18.55	50.91	-736.34	-508.51	701.49	675.94	25.55	27.460	
5,900.00	5,887.06	5,838.99	5,738.99	13.84	18.98	50.96	-754.67	-520.33	716.95	690.87	26.08	27.489	
6,000.00	5,986.68	5,946.84	5,844.39	14.12	19.44	51.02	-773.91	-532.76	731.96	705.32	26.64	27.478	
6,100.00	6,086.30	6,044.93	5,940.49	14.39	19.84	51.06	-790.73	-542.85	745.56	718.39	27.16	27.447	
6,200.00	6,185.92	6,149.77	6,043.08	14.67	20.27	51.09	-809.10	-554.16	759.80	732.09	27.71	27.420	
6,300.00	6,285.54	6,252.47	6,143.80	14.94	20.68	51.15	-826.23	-564.70	773.05	744.80	28.25	27.366	
6,400.00	6,385.16	6,332.48	6,222.06	15.21	21.02	51.21	-840.10	-573.78	787.52	758.79	28.73	27.412	
6,500.00	6,484.78	6,441.67	6,328.96	15.49	21.47	51.32	-858.53	-586.33	801.81	772.51	29.29	27.374	
6,600.00	6,584.40	6,510.00	6,395.82	15.76	21.75	51.43	-869.77	-594.75	816.91	787.17	29.74	27.467	
6,700.00	6,684.02	6,510.00	6,395.82	16.04	21.75	51.43	-869.77	-594.75	840.55	810.55	30.00	28.019	
6,800.00	6,783.63	6,510.00	6,395.82	16.31	21.75	51.43	-869.77	-594.75	875.05	844.80	30.26	28.920	
6,900.00	6,883.25	6,510.00	6,395.82	16.59	21.75	51.43	-869.77	-594.75	919.19	888.67	30.52	30.122	
7,000.00	6,982.87	6,510.00	6,395.82	16.87	21.75	51.43	-869.77	-594.75	971.65	940.87	30.77	31.573	
7,100.00	7,082.49	6,510.00	6,395.82	17.14	21.75	51.43	-869.77	-594.75	1,031.16	1,000.12	31.03	33.228	
7,200.00	7,182.11	6,510.00	6,395.82	17.42	21.75	51.43	-869.77	-594.75	1,096.57	1,065.28	31.29	35.043	
7,300.00	7,281.73	6,510.00	6,395.82	17.70	21.75	51.43	-869.77	-594.75	1,166.90	1,135.35	31.55	36.985	
7,400.00	7,381.35	6,510.00	6,395.82	17.97	21.75	51.43	-869.77	-594.75	1,241.31	1,209.50	31.81	39.023	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

RECEIVED: Sep. 07, 2012

NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00 ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W

Survey Program: 1042-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,500.00	7,480.97	6,510.00	6,395.82	18.25	21.75	51.43	-869.77	-594.75	1,319.11	1,287.04	32.07	41.133	
7,600.00	7,580.59	6,510.00	6,395.82	18.53	21.75	51.43	-869.77	-594.75	1,399.73	1,367.40	32.33	43.297	
7,700.00	7,680.21	6,510.00	6,395.82	18.80	21.75	51.43	-869.77	-594.75	1,482.71	1,450.12	32.59	45.498	
7,800.00	7,779.83	6,510.00	6,395.82	19.08	21.75	51.43	-869.77	-594.75	1,567.68	1,534.83	32.85	47.725	
7,900.00	7,879.45	6,510.00	6,395.82	19.36	21.75	51.43	-869.77	-594.75	1,654.33	1,621.22	33.11	49.968	
8,000.00	7,979.07	6,510.00	6,395.82	19.63	21.75	51.43	-869.77	-594.75	1,742.41	1,709.04	33.37	52.219	
8,100.00	8,078.21	6,510.00	6,395.82	19.95	21.75	42.28	-869.77	-594.75	1,830.56	1,797.89	32.67	56.032	
8,200.00	8,173.50	6,510.00	6,395.82	20.41	21.75	32.45	-869.77	-594.75	1,913.27	1,881.36	31.91	59.950	
8,300.00	8,261.34	6,510.00	6,395.82	21.05	21.75	26.35	-869.77	-594.75	1,988.06	1,957.25	30.81	64.531	
8,400.00	8,338.51	6,510.00	6,395.82	21.86	21.75	22.45	-869.77	-594.75	2,053.18	2,024.08	29.09	70.568	
8,500.00	8,402.18	6,510.00	6,395.82	22.83	21.75	19.89	-869.77	-594.75	2,107.23	2,080.28	26.95	78.192	
8,600.00	8,450.00	6,510.00	6,395.82	23.96	21.75	18.23	-869.77	-594.75	2,149.12	2,124.37	24.75	86.821	
8,700.00	8,480.21	6,510.00	6,395.82	25.23	21.75	17.21	-869.77	-594.75	2,178.06	2,155.01	23.04	94.522	
8,800.00	8,491.72	6,510.00	6,395.82	26.58	21.75	16.71	-869.77	-594.75	2,193.50	2,171.09	22.41	97.898	
8,900.00	8,488.81	6,510.00	6,395.82	28.00	21.75	16.65	-869.77	-594.75	2,199.71	2,176.92	22.79	96.536	
9,000.00	8,485.05	6,510.00	6,395.82	29.48	21.75	16.65	-869.77	-594.75	2,209.62	2,186.38	23.25	95.051	
9,100.00	8,481.29	6,510.00	6,395.82	31.01	21.75	16.65	-869.77	-594.75	2,223.99	2,200.24	23.75	93.650	
9,200.00	8,477.54	6,510.00	6,395.82	32.59	21.75	16.65	-869.77	-594.75	2,242.73	2,218.45	24.29	92.346	
9,300.00	8,473.78	6,510.00	6,395.82	34.20	21.75	16.65	-869.77	-594.75	2,265.74	2,240.88	24.86	91.149	
9,400.00	8,470.02	6,510.00	6,395.82	35.84	21.75	16.65	-869.77	-594.75	2,292.88	2,267.42	25.46	90.064	
9,500.00	8,466.27	6,510.00	6,395.82	37.51	21.75	16.65	-869.77	-594.75	2,324.01	2,297.92	26.09	89.091	
9,600.00	8,462.51	6,510.00	6,395.82	39.20	21.75	16.65	-869.77	-594.75	2,358.97	2,332.23	26.74	88.231	
9,700.00	8,458.76	6,510.00	6,395.82	40.92	21.75	16.65	-869.77	-594.75	2,397.59	2,370.18	27.41	87.478	
9,800.00	8,455.00	6,510.00	6,395.82	42.65	21.75	16.65	-869.77	-594.75	2,439.70	2,411.61	28.10	86.828	
9,900.00	8,451.24	6,510.00	6,395.82	44.41	21.75	16.65	-869.77	-594.75	2,485.13	2,456.32	28.80	86.274	
10,000.00	8,447.49	6,510.00	6,395.82	46.17	21.75	16.65	-869.77	-594.75	2,533.69	2,504.16	29.53	85.810	
10,100.00	8,443.73	6,510.00	6,395.82	47.95	21.75	16.65	-869.77	-594.75	2,585.21	2,554.95	30.26	85.428	
10,200.00	8,439.97	6,510.00	6,395.82	49.74	21.75	16.65	-869.77	-594.75	2,639.51	2,608.50	31.01	85.121	
10,300.00	8,436.22	6,510.00	6,395.82	51.54	21.75	16.65	-869.77	-594.75	2,696.43	2,664.66	31.77	84.881	
10,400.00	8,432.46	6,510.00	6,395.82	53.36	21.75	16.65	-869.77	-594.75	2,755.80	2,723.27	32.53	84.704	
10,500.00	8,428.70	6,510.00	6,395.82	55.17	21.75	16.65	-869.77	-594.75	2,817.48	2,784.16	33.31	84.581	
10,600.00	8,424.95	6,510.00	6,395.82	57.00	21.75	16.65	-869.77	-594.75	2,881.30	2,847.20	34.10	84.507	
10,700.00	8,421.19	6,510.00	6,395.82	58.84	21.75	16.65	-869.77	-594.75	2,947.13	2,912.25	34.89	84.476	
10,800.00	8,417.44	6,510.00	6,395.82	60.68	21.75	16.65	-869.77	-594.75	3,014.85	2,979.16	35.69	84.484	
10,900.00	8,413.68	6,510.00	6,395.82	62.52	21.75	16.65	-869.77	-594.75	3,084.32	3,047.83	36.49	84.526	
11,000.00	8,409.92	6,510.00	6,395.82	64.37	21.75	16.65	-869.77	-594.75	3,155.43	3,118.13	37.30	84.598	
11,100.00	8,406.17	6,510.00	6,395.82	66.23	21.75	16.65	-869.77	-594.75	3,228.07	3,189.96	38.11	84.696	
11,200.00	8,402.41	6,510.00	6,395.82	68.09	21.75	16.65	-869.77	-594.75	3,302.15	3,263.21	38.93	84.816	
11,300.00	8,398.65	6,510.00	6,395.82	69.96	21.75	16.65	-869.77	-594.75	3,377.56	3,337.80	39.76	84.956	
11,400.00	8,394.90	6,510.00	6,395.82	71.83	21.75	16.65	-869.77	-594.75	3,454.22	3,413.63	40.58	85.113	
11,500.00	8,391.14	6,510.00	6,395.82	73.70	21.75	16.65	-869.77	-594.75	3,532.04	3,490.63	41.41	85.285	
11,600.00	8,387.39	6,510.00	6,395.82	75.57	21.75	16.65	-869.77	-594.75	3,610.96	3,568.71	42.25	85.469	
11,700.00	8,383.63	6,510.00	6,395.82	77.45	21.75	16.65	-869.77	-594.75	3,690.90	3,647.82	43.09	85.663	
11,800.00	8,379.87	6,510.00	6,395.82	79.33	21.75	16.65	-869.77	-594.75	3,771.80	3,727.87	43.93	85.866	
11,900.00	8,376.12	6,510.00	6,395.82	81.22	21.75	16.65	-869.77	-594.75	3,853.59	3,808.83	44.77	86.077	
12,000.00	8,372.36	6,510.00	6,395.82	83.10	21.75	16.65	-869.77	-594.75	3,936.23	3,890.62	45.61	86.294	
12,100.00	8,368.60	6,510.00	6,395.82	84.99	21.75	16.65	-869.77	-594.75	4,019.65	3,973.19	46.46	86.515	
12,200.00	8,364.85	6,510.00	6,395.82	86.88	21.75	16.65	-869.77	-594.75	4,103.82	4,056.51	47.31	86.740	
12,300.00	8,361.09	6,510.00	6,395.82	88.77	21.75	16.65	-869.77	-594.75	4,188.68	4,140.52	48.16	86.969	
12,400.00	8,357.33	6,510.00	6,395.82	90.67	21.75	16.65	-869.77	-594.75	4,274.20	4,225.18	49.02	87.199	
12,500.00	8,353.58	6,510.00	6,395.82	92.57	21.75	16.65	-869.77	-594.75	4,360.33	4,310.46	49.87	87.431	
12,600.00	8,349.82	6,510.00	6,395.82	94.46	21.75	16.65	-869.77	-594.75	4,447.04	4,396.32	50.73	87.663	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

RECEIVED: Sep. 07, 2012

NEWFIELD

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00 ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Offset Design PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W - PETERSON 3-20-3-2W

Survey Program: 1042-MWD

Offset Site Error: 0.00 ft

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
12,700.00	8,346.07	6,510.00	6,395.82	96.36	21.75	16.65	-869.77	-594.75	4,534.30	4,482.72	51.59	87.896	
12,800.00	8,342.31	6,510.00	6,395.82	98.26	21.75	16.65	-869.77	-594.75	4,622.08	4,569.63	52.45	88.128	
12,808.22	8,342.00	6,510.00	6,395.82	98.42	21.75	16.65	-869.77	-594.75	4,629.32	4,576.80	52.52	88.148	

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NEWFIELD

Weatherford International Ltd.

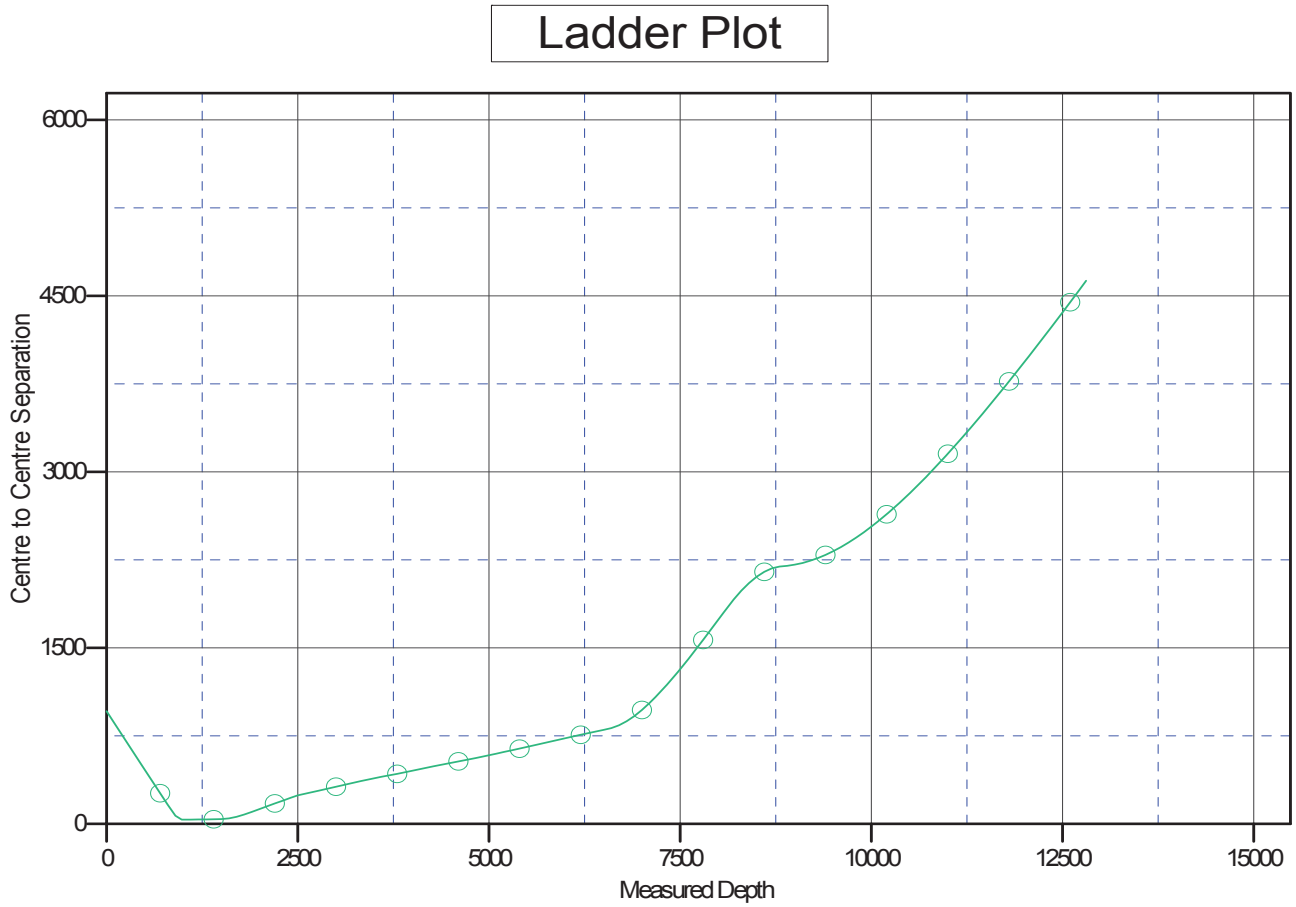
Anticollision Report

Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00 ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5167.50ft (PIONEER 68)
Offset Depths are relative to Offset Datum
Central Meridian is 111° 30' 0.000 W

Coordinates are relative to: PETERSON 3-20-3-2WH
Coordinate System is US State Plane 1983, Utah Central Zone
Grid Convergence at Surface is: 0.87°



LEGEND

N3-20-3-2W, PETERSON 3-20-3-2W V0

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

RECEIVED: Sep. 07, 2012

NEWFIELD

Weatherford International Ltd.

Anticollision Report

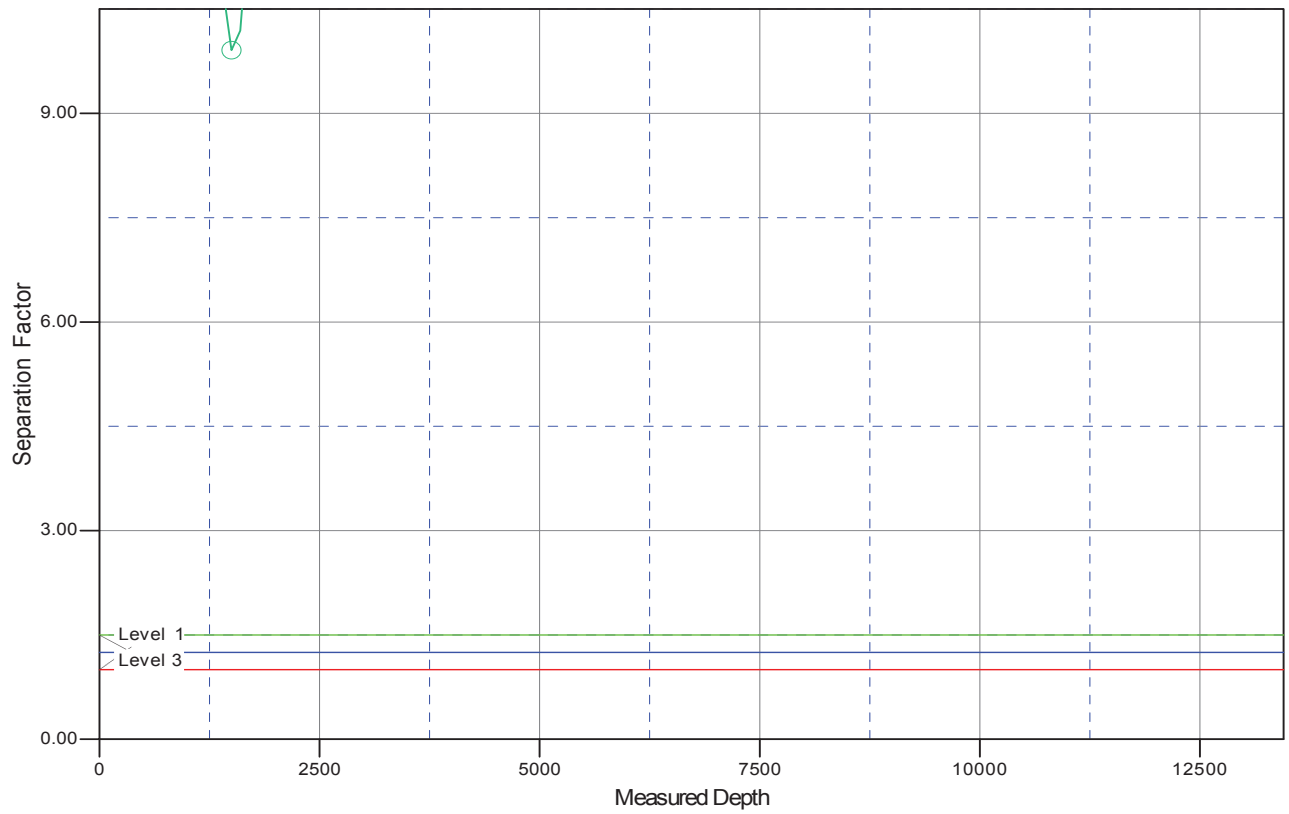
Weatherford

Company:	NEWFIELD EXPLORATION CO.	**Local Co-ordinate Reference:**	Well PETERSON 3-20-3-2WH
Project:	DUCHESNE COUNTY, UT	**TVD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Reference Site:	PETERSON 3-20-3-2WH	**MD Reference:**	WELL @ 5167.50ft (PIONEER 68)
Site Error:	0.00 ft	**North Reference:**	True
Reference Well:	PETERSON 3-20-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	PETERSON 3-20-3-2WH	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Design #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5167.50ft (PIONEER 68)
Offset Depths are relative to Offset Datum
Central Meridian is 111° 30' 0.000 W

Coordinates are relative to: PETERSON 3-20-3-2WH
Coordinate System is US State Plane 1983, Utah Central Zone
Grid Convergence at Surface is: 0.87°

Separation Factor Plot



LEGEND

N3-20-3-2W, PETERSON 3-20-3-2W V0

RECEIVED: Sep. 07, 2012

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

5. LEASE DESIGNATION AND SERIAL NUMBER: Peterson 3-20-3-2WH

SUNDRY NOTICES AND REPORTS ON WELLS

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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.

7. UNIT or CA AGREEMENT NAME: UINTA CB -BASAL CARB

1. TYPE OF WELL: OIL WELL [x] GAS WELL [ ] OTHER

8. WELL NAME and NUMBER: PETERSON 3-20-3-2WH

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 4301351508

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: UINTA CENTRAL BASIN

4. LOCATION OF WELL:

FOOTAGES AT SURFACE:

COUNTY: DUCHESNE

OTR/OTR. SECTION. TOWNSHIP. RANGE. MERIDIAN: SESW 17 3S 2W

STATE: UT

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

TYPE OF SUBMISSION	TYPE OF ACTION		
[ ] NOTICE OF INTENT (Submit in Duplicate)	[ ] ACIDIZE	[ ] DEEPEN	[ ] REPERFORATE CURRENT FORMATION
Approximate date work will	[ ] ALTER CASING	[ ] FRACTURE TREAT	[ ] SIDETRACK TO REPAIR WELL
	[ ] CASING REPAIR	[ ] NEW CONSTRUCTION	[ ] TEMPORARITLY ABANDON
	[ ] CHANGE TO PREVIOUS PLANS	[ ] OPERATOR CHANGE	[ ] TUBING REPAIR
	[ ] CHANGE TUBING	[ ] PLUG AND ABANDON	[ ] VENT OR FLAIR
[X] SUBSEQUENT REPORT (Submit Original Form Only)	[ ] CHANGE WELL NAME	[ ] PLUG BACK	[ ] WATER DISPOSAL
Date of Work Completion:	[ ] CHANGE WELL STATUS	[ ] PRODUCTION (START/STOP)	[ ] WATER SHUT-OFF
	[ ] COMMINGLE PRODUCING FORMATIONS	[ ] RECLAMATION OF WELL SITE	[X] OTHER: - Spud Notice
07/31/2012	[ ] CONVERT WELL TYPE	[ ] RECOMPLETE - DIFFERENT FORMATION	

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

On 7/30/12 MIRU Ross #31. Spud well @8:00 AM. Drill 60' of 17 1/2" hole with air mist. TIH W/ 2 Jt's 14' H-40 36.75# csgn. Set @ 78. On 7/31/12 cement with 90 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 15 barrels cement to pit. WOC.

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NAME (PLEASE PRINT) Branden Arnold TITLE

SIGNATURE DATE 09/19/2012

(This space for State use only)

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Casing / Liner Detail

Well	Peterson 3-20-3-2WH
Prospect	Central Basin
Foreman	
Run Date:	
String Type	Surface, 9.625", 36#, J-55, LTC (Generic)

- Detail From Top To Bottom -

Depth	*Length*	*JTS*	*Description*	*OD*	*ID*
2,584.18			18' KB		
18.00	1.42		Wellhead		
19.42	2516.64	57	9 5/8 Casing With Cut Off	9.625	
2,536.06	1.88	1	Float collor	9.625	
2,537.94	44.23	1	Shoe Joint	9.625	
2,582.17	2.01	1	Float Shoe	9.625	
2,584.18			-		

Cement Detail

Cement Company: BJ

Slurry	# of Sacks	Weight (ppg)	Yield	Volume (ft^3)	Description - Slurry Class and Additives
Slurry 2	217	1.17	1.17	253.89	Class G+2%kcl+.25#CF
Slurry 1	476	12.5	1.97	937.72	Premium Lite II

Stab-In-Job?	No	Cement To Surface?	Yes
BHT:	0	Est. Top of Cement:	0
Initial Circulation Pressure:		Plugs Bumped?	Yes
Initial Circulation Rate:		Pressure Plugs Bumped:	1300
Final Circulation Pressure:		Floats Holding?	Yes
Final Circulation Rate:		Casing Stuck On / Off Bottom?	No
Displacement Fluid:	Water	Casing Reciprocated?	No
Displacement Rate:		Casing Rotated?	No
Displacement Volume:	195	CIP:	7:00
Mud Returns:		Casing Wt Prior To Cement:	
Centralizer Type And Placement:		Casing Weight Set On Slips:	

Middle of first, top of second and every other for a total of 6

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIDENTIAL

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
14-20-H62-5951

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

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
NEWFIELD EXPLORATION COMPANY

8. Lease Name and Well No.
PETERSON 3-20-3-2WH

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

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

9. AFI Well No.
43-013-51508

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

10. Field and Pool or Exploratory
UNKNOWN

At surface 313' FSL & 2057' FWL (SE/SW) SEC. 17, T3S, R2W

11. Sec., T., R., M., on Block and Survey or Area
SEC. 17, T3S, R2W

At top prod. interval reported below 744' FNL & 2105' FWL (NE/NW) SEC. 20, T3S, R2W

12. County or Parish
DUCHESNE

13. State
UT

At total depth 656' FSL 2107' FWL (SE/SW) SEC. 20, T3S, R2W BHL by DOGM HSM

14. Date Spudded
07/30/2012

15. Date T.D. Reached
09/30/2012

16. Date Completed 11/01/2012
☐ D & A ☑ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*
5150' GL 5168' KB

18. Total Depth: MD 12837'
TVD 8339'

19. Plug Back T.D.: MD 9730'
TVD 8449

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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12-1/4"	9-5/8" J-55	36#	0	2584'		476 PRMLITE II			
						217 CLASS "G"			
8-7/5"	7" P-110	26#	0	8804'		560 VERSCEM		SURFACE	
						420 BONDCEM			
6-1/8"	4.5" P-110	13.5#	7918'	12826'		290 FOAMCEM			
						50 ELASTISL			

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 @ 7889'	Hornet @ 7871'						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) ~~Green River~~ Wasatch	8865' MD	12704' MD	8865-12704' MD	0.39"	528	
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
8865-12704' MD	Frac w/ 2956159#s 30/50 white sand; 33625 bbls Lightning 17 fluid; 20 stages.

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
11/2/12	11/12/12	24	→	739	358	302			FLOWING

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
			→					

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*(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.)*

SOLD AND USED FOR FUEL

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

GEOLOGICAL MARKERS

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				GARDEN GULCH	6212'
				DOUGLAS CREEK	7338'
				BI-CARBONATE	7631'
				B LIMESTONE	7873'
				CASTLE PEAK	8253'
				BASAL CARBONATE	8548'
				WASATCH	8687'

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: Daily Completion Report

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 Peatross Date 12/04/2012

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.

(Continued on page 3)

SURVEY REPORT

Weatherford®

Report Date:	**9/27/2012**		
Customer:	**Newfield**	Field:	**Peterson**
Job Name:	**4027159**	Rig:	**Pioneer 68**
Well Name:	**Peterson 3-20-3-2WH**	Rig Loc:	**Duchesne County,**

Survey Calculation Method: **Minimum Curvature**

Magnetic Reference	Target Direction	Total Magnetic Field	Magnetic Dip Angle	Magnetic Declination	Grid Convergence	Total Correction
True North	**178.07 deg**	**52182 nT**	**65.87 deg**	**11.25 deg**	**0.00 deg**	**11.25 deg**

Survey Tie-On	Depth	INC	AZ	TVD	NS	EW
	2576.00 ft	**0.40 deg**	**199.80 deg**	**2575.96 ft**	**-6.57 ft**	**5.61 ft**

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
2620.00	0.35	204.36	2619.96	-6.84	5.50	7.02	0.13
2683.00	1.30	185.36	2682.95	-7.72	5.36	7.90	1.55
2747.00	3.82	180.41	2746.88	-10.58	5.27	10.75	3.95
2810.00	4.87	176.59	2809.70	-15.35	5.42	15.52	1.73
2873.00	4.81	177.35	2872.48	-20.66	5.70	20.84	0.14
2937.00	4.86	178.22	2936.25	-26.05	5.91	26.23	0.14
2999.00	5.02	178.54	2998.02	-31.38	6.06	31.57	0.26
3063.00	5.03	178.06	3061.77	-36.99	6.22	37.17	0.07
3126.00	5.05	178.09	3124.53	-42.52	6.41	42.71	0.03
3189.00	4.96	177.63	3187.29	-48.01	6.61	48.20	0.16
3252.00	5.09	178.19	3250.05	-53.52	6.82	53.72	0.22
3316.00	5.00	179.50	3313.80	-59.15	6.93	59.35	0.23
3380.00	5.00	178.19	3377.55	-64.73	7.04	64.93	0.18
3443.00	4.48	173.87	3440.34	-69.92	7.39	70.13	1.00
3506.00	4.70	173.62	3503.14	-74.93	7.94	75.15	0.35
3570.00	4.94	176.11	3566.91	-80.28	8.42	80.52	0.50
3633.00	4.84	177.84	3629.68	-85.65	8.70	85.89	0.28
3696.00	4.60	178.40	3692.47	-90.83	8.87	91.07	0.39
3823.00	4.24	181.33	3819.09	-100.61	8.91	100.85	0.33
3950.00	3.87	179.45	3945.77	-109.59	8.84	109.83	0.31
4077.00	4.78	178.83	4072.41	-119.17	8.99	119.40	0.72
4203.00	4.27	180.99	4198.02	-129.11	9.02	129.34	0.43
4330.00	5.26	180.66	4324.58	-139.65	8.87	139.87	0.78
4457.00	4.92	177.16	4451.07	-150.91	9.07	151.13	0.36
4583.00	4.65	178.54	4576.64	-161.42	9.47	161.64	0.23
4710.00	4.66	177.01	4703.22	-171.71	9.87	171.95	0.10
4836.00	4.32	179.34	4828.83	-181.57	10.19	181.81	0.31
4962.00	4.93	175.85	4954.42	-191.72	10.64	191.97	0.53
5089.00	4.29	171.65	5081.01	-201.86	11.72	202.14	0.57
5216.00	4.73	174.11	5207.61	-211.77	12.95	212.08	0.38
5343.00	4.35	169.91	5334.22	-221.72	14.33	222.08	0.40
5470.00	4.97	177.70	5460.80	-231.96	15.39	232.34	0.70
5596.00	4.75	177.58	5586.34	-242.62	15.83	243.02	0.17
5723.00	4.51	178.32	5712.93	-252.87	16.20	253.27	0.19
5786.00	4.37	177.50	5775.74	-257.74	16.38	258.15	0.24

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
5849.00	4.14	178.16	5838.57	-262.41	16.56	262.82	0.37
5976.00	4.70	179.26	5965.19	-272.20	16.77	272.61	0.45
6103.00	4.86	177.73	6091.75	-282.78	17.05	283.19	0.16
6229.00	4.34	176.79	6217.34	-292.87	17.53	293.29	0.42
6293.00	3.98	178.07	6281.17	-297.51	17.74	297.94	0.58
6419.00	5.55	178.10	6406.73	-307.97	18.09	308.40	1.25
6546.00	4.74	180.72	6533.22	-319.35	18.23	319.78	0.66
6673.00	4.07	181.14	6659.84	-329.11	18.07	329.53	0.53
6799.00	4.83	177.03	6785.46	-338.87	18.26	339.30	0.65
6926.00	4.08	180.94	6912.08	-348.73	18.46	349.15	0.64
7051.00	4.29	180.16	7036.75	-357.85	18.37	358.27	0.17
7178.00	4.26	175.09	7163.39	-367.30	18.76	367.73	0.30
7305.00	6.09	169.87	7289.87	-378.63	20.35	379.10	1.49
7431.00	5.14	171.90	7415.26	-390.80	22.32	391.33	0.77
7558.00	4.76	174.44	7541.79	-401.68	23.64	402.25	0.35
7684.00	4.42	170.38	7667.39	-411.67	24.95	412.28	0.37
7811.00	3.12	151.93	7794.11	-419.54	27.40	420.23	1.39
7915.00	2.70	136.14	7897.98	-423.81	30.43	424.59	0.87
7955.00	2.75	129.41	7937.94	-425.10	31.82	425.93	0.81
7987.00	5.24	164.27	7969.86	-426.99	32.81	427.85	10.53
8018.00	9.57	177.29	8000.60	-430.93	33.32	431.81	14.89
8050.00	12.98	187.51	8031.98	-437.15	32.97	438.01	12.31
8082.00	17.09	191.17	8062.88	-445.33	31.59	446.14	13.18
8113.00	20.05	184.18	8092.26	-455.10	30.32	455.87	11.93
8145.00	23.09	182.16	8122.02	-466.85	29.68	467.58	9.78
8176.00	25.71	179.77	8150.25	-479.65	29.48	480.37	9.03
8208.00	28.30	179.83	8178.76	-494.18	29.53	494.89	8.09
8240.00	31.71	179.43	8206.46	-510.18	29.64	510.89	10.67
8272.00	35.80	178.29	8233.06	-527.95	30.00	528.66	12.93
8303.00	39.35	176.35	8257.63	-546.83	30.90	547.56	12.07
8335.00	42.17	175.56	8281.87	-567.66	32.38	568.43	8.96
8367.00	46.37	175.34	8304.77	-589.93	34.15	590.74	13.13
8398.00	49.50	175.84	8325.54	-612.87	35.92	613.73	10.17
8430.00	52.97	176.47	8345.57	-637.76	37.59	638.66	10.95
8461.00	55.41	177.13	8363.71	-662.86	38.99	663.80	8.06
8493.00	57.79	177.79	8381.32	-689.55	40.17	690.51	7.63
8525.00	60.47	177.80	8397.74	-716.99	41.23	717.97	8.38
8556.00	63.47	178.87	8412.31	-744.34	42.02	745.33	10.15
8588.00	66.78	179.56	8425.77	-773.36	42.41	774.35	10.53
8620.00	68.89	181.38	8437.84	-802.99	42.17	803.96	8.44
8651.00	71.22	181.24	8448.41	-832.12	41.50	833.05	7.53
8683.00	73.49	180.52	8458.11	-862.61	41.03	863.51	7.41
8715.00	76.59	178.71	8466.37	-893.52	41.24	894.40	11.12
8746.00	80.02	177.32	8472.66	-923.86	42.30	924.76	11.90
8763.00	81.94	176.70	8475.32	-940.62	43.17	941.54	11.85
8880.00	90.80	178.67	8482.72	-1057.17	47.88	1058.18	7.76
8911.00	90.74	178.60	8482.31	-1088.16	48.61	1089.18	0.30
8943.00	89.65	178.03	8482.20	-1120.14	49.55	1121.18	3.84
8974.00	89.26	177.34	8482.49	-1151.12	50.81	1152.17	2.56
9006.00	90.06	177.57	8482.68	-1183.08	52.23	1184.17	2.60

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
9038.00	90.74	178.00	8482.46	-1215.06	53.46	1216.17	2.51
9069.00	92.59	178.91	8481.56	-1246.03	54.30	1247.16	6.65
9101.00	92.28	179.79	8480.20	-1278.00	54.66	1279.12	2.91
9132.00	91.85	180.25	8479.08	-1308.98	54.65	1310.08	2.03
9163.00	92.10	179.78	8478.01	-1339.96	54.64	1341.04	1.72
9195.00	92.34	179.73	8476.77	-1371.94	54.78	1373.01	0.77
9258.00	91.85	178.47	8474.47	-1434.89	55.77	1435.95	2.14
9290.00	92.47	178.15	8473.26	-1466.85	56.71	1467.93	2.18
9321.00	91.91	177.62	8472.08	-1497.81	57.86	1498.91	2.49
9353.00	92.46	177.35	8470.86	-1529.75	59.26	1530.88	1.91
9385.00	93.08	176.41	8469.31	-1561.67	61.00	1562.84	3.52
9417.00	92.96	176.58	8467.63	-1593.56	62.95	1594.78	0.65
9448.00	92.34	177.30	8466.19	-1624.49	64.60	1625.74	3.06
9480.00	92.84	178.54	8464.75	-1656.43	65.76	1657.71	4.17
9512.00	92.96	178.88	8463.13	-1688.38	66.48	1689.66	1.13
9543.00	92.59	179.49	8461.63	-1719.34	66.92	1720.62	2.30
9575.00	91.85	179.79	8460.39	-1751.32	67.13	1752.58	2.50
9606.00	91.85	179.74	8459.39	-1782.30	67.25	1783.55	0.16
9638.00	93.27	179.47	8457.96	-1814.27	67.47	1815.51	4.52
9670.00	93.27	179.10	8456.13	-1846.21	67.87	1847.45	1.15
9702.00	93.70	178.39	8454.19	-1878.15	68.57	1879.39	2.59
9733.00	95.31	178.39	8451.75	-1909.04	69.44	1910.29	5.19
9765.00	95.19	178.24	8448.83	-1940.89	70.38	1942.16	0.60
9797.00	93.88	178.20	8446.30	-1972.77	71.37	1974.06	4.10
9828.00	93.95	178.79	8444.18	-2003.69	72.18	2004.98	1.91
9860.00	94.63	178.66	8441.78	-2035.59	72.89	2036.89	2.16
9892.00	93.89	178.81	8439.41	-2067.49	73.59	2068.80	2.36
9924.00	93.09	179.09	8437.46	-2099.43	74.18	2100.74	2.65
9955.00	92.22	178.29	8436.02	-2130.39	74.89	2131.70	3.81
9987.00	91.17	178.37	8435.08	-2162.36	75.82	2163.69	3.29
10018.00	91.36	179.07	8434.39	-2193.34	76.51	2194.68	2.34
10050.00	91.48	178.82	8433.60	-2225.33	77.10	2226.66	0.87
10081.00	92.22	179.04	8432.60	-2256.31	77.68	2257.64	2.49
10113.00	93.17	178.73	8431.09	-2288.27	78.30	2289.60	3.12
10144.00	92.34	179.02	8429.60	-2319.22	78.91	2320.56	2.84
10176.00	91.29	179.57	8428.59	-2351.20	79.30	2352.54	3.70
10207.00	92.16	180.81	8427.66	-2382.19	79.20	2383.50	4.88
10239.00	92.40	181.79	8426.38	-2414.15	78.47	2415.43	3.15
10271.00	91.36	181.05	8425.34	-2446.13	77.68	2447.36	3.99
10302.00	91.05	181.98	8424.68	-2477.11	76.86	2478.29	3.16
10334.00	91.05	182.14	8424.10	-2509.08	75.71	2510.21	0.50
10365.00	91.76	182.44	8423.34	-2540.05	74.47	2541.12	2.49
10396.00	91.42	182.30	8422.48	-2571.01	73.19	2572.02	1.19
10428.00	90.88	182.96	8421.83	-2602.97	71.73	2603.91	2.66
10460.00	91.11	183.36	8421.28	-2634.92	69.96	2635.78	1.44
10491.00	91.11	183.10	8420.68	-2665.86	68.22	2666.65	0.84
10523.00	91.17	183.66	8420.04	-2697.80	66.33	2698.50	1.76
10555.00	91.17	182.94	8419.39	-2729.74	64.49	2730.36	2.25
10586.00	89.88	182.02	8419.10	-2760.71	63.15	2761.27	5.11
10618.00	89.57	182.22	8419.26	-2792.69	61.96	2793.19	1.15

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)
10649.00	91.54	182.78	8418.96	-2823.65	60.61	2824.09	6.61
10681.00	92.41	182.02	8417.85	-2855.61	59.27	2855.98	3.61
10712.00	94.23	182.96	8416.06	-2886.52	57.93	2886.84	6.61
10776.00	91.66	179.26	8412.77	-2950.41	56.69	2950.64	7.03
10839.00	92.04	179.35	8410.74	-3013.37	57.45	3013.60	0.62
10902.00	91.60	179.61	8408.74	-3076.34	58.03	3076.55	0.81
10965.00	93.27	178.88	8406.06	-3139.27	58.86	3139.47	2.89
11029.00	91.17	175.48	8403.58	-3203.13	62.00	3203.40	6.24
11092.00	91.67	174.33	8402.02	-3265.86	67.60	3266.29	1.99
11156.00	92.41	172.76	8399.74	-3329.42	74.79	3330.05	2.71
11218.00	91.85	169.66	8397.43	-3390.64	84.25	3391.55	5.08
11282.00	91.97	168.58	8395.30	-3453.45	96.33	3454.74	1.70
11345.00	90.68	167.77	8393.84	-3515.10	109.23	3516.78	2.42
11407.00	92.78	168.61	8391.97	-3575.75	121.92	3577.83	3.65
11469.00	91.97	169.30	8389.40	-3636.55	133.78	3638.99	1.72
11533.00	92.72	169.25	8386.79	-3699.38	145.68	3702.19	1.17
11597.00	93.21	169.66	8383.47	-3762.21	157.38	3765.38	1.00
11660.00	93.95	171.46	8379.54	-3824.24	167.69	3827.71	3.08
11691.00	94.20	173.38	8377.34	-3854.89	171.77	3858.48	6.23
11722.00	94.07	173.77	8375.10	-3885.61	175.23	3889.31	1.32
11755.00	93.58	174.73	8372.90	-3918.37	178.53	3922.16	3.26
11786.00	94.07	175.54	8370.83	-3949.19	181.15	3953.05	3.05
11818.00	93.89	176.19	8368.61	-3981.03	183.45	3984.95	2.10
11849.00	93.39	177.09	8366.64	-4011.91	185.27	4015.88	3.32
11880.00	91.73	177.99	8365.26	-4042.85	186.60	4046.84	6.09
11912.00	91.42	178.53	8364.38	-4074.83	187.57	4078.83	1.95
11944.00	92.34	179.29	8363.33	-4106.80	188.18	4110.81	3.73
11975.00	92.96	180.37	8361.90	-4137.77	188.27	4141.76	4.01
12007.00	92.29	180.85	8360.43	-4169.73	187.93	4173.70	2.57
12038.00	92.90	182.10	8359.03	-4200.69	187.13	4204.61	4.48
12066.00	93.35	182.26	8357.50	-4228.63	186.07	4232.50	1.71
12098.00	91.79	181.60	8356.07	-4260.58	184.99	4264.39	5.29
12129.00	89.32	181.56	8355.77	-4291.56	184.14	4295.33	7.97
12161.00	89.26	181.03	8356.16	-4323.55	183.41	4327.27	1.67
12192.00	90.43	181.09	8356.25	-4354.54	182.84	4358.23	3.78
12224.00	90.12	180.77	8356.09	-4386.54	182.32	4390.19	1.39
12256.00	90.31	179.78	8355.97	-4418.54	182.17	4422.17	3.15
12319.00	91.32	179.26	8355.08	-4481.53	182.69	4485.14	1.80
12382.00	92.28	178.64	8353.10	-4544.49	183.85	4548.10	1.81
12445.00	92.41	177.02	8350.52	-4607.39	186.23	4611.04	2.58
12509.00	92.16	175.38	8347.97	-4671.19	190.47	4674.96	2.59
12573.00	91.63	174.29	8345.85	-4734.90	196.23	4738.82	1.89
12636.00	91.79	173.78	8343.97	-4797.53	202.77	4801.64	0.85
12700.00	92.04	172.33	8341.83	-4861.02	210.51	4865.35	2.30
12763.00	91.06	170.09	8340.13	-4923.25	220.13	4927.87	3.88
12777.00	91.48	170.50	8339.82	-4937.05	222.49	4941.74	4.19

Depth (ft)	Inc (deg)	Azm (deg)	TVD (ft)	Well Head NS (ft)	EW (ft)	VSect (ft)	Dogleg (deg/100ft)

Vertical Section is 5001.21 ft along the target direction of 178.07 deg at a measured depth of 12837.01 ft.
Horizontal Displacement is 5001.62 ft along the well bore azimuth of 177.34 deg.
The total correction is 11.25 deg relative to True North.

Daily Activity Report

Format For Sundry

PETERSON 3-20-3-2WH

8/1/2012 To 12/30/2012

10/6/2012 Day: 1 **Completion**

Rigless on 10/6/2012 - Install WH - JSA and safety meeting. Topics included tag lines, overhead loads, and pinch points. NU 7? 10K manual frac valve, 7? 5K BOP with blind rams and 4 ?? pipe rams, and 7? 5K annular preventer. - JSA and safety meeting. Topics included tag lines, overhead loads, and pinch points. NU 7? 10K manual frac valve, 7? 5K BOP with blind rams and 4 ?? pipe rams, and 7? 5K annular preventer. - JSA and safety meeting. Topics included tag lines, overhead loads, and pinch points. NU 7? 10K manual frac valve, 7? 5K BOP with blind rams and 4 ?? pipe rams, and 7? 5K annular preventer. - Install flowline - Install flowline - Shell test valves, frac valve and blind rams against TWCV to 250 psi for 5 minutes, OK. Increase pressure to 5000 psi for 10 minutes, no leak off. Function test 7? 10K manual frac valve at 5000 psi for 10 minutes, no leak off. Function test blind rams and inside valve to 250 psi for 5 minutes, no leak off. Increase pressure to 5000 psi for 10 minutes, no leak off. PU test mandrel. Function test pipe rams and outside valve to 250 psi for 5 minutes, OK. Increase pressure to 5000 psi for 10 minutes, no leak off. Function test annular preventer to 250 psi for 5 minutes, no leak off. Increase pressure to 3000 psi for 10 minutes, no leak off. Remove TWCV and TC1A tbg hanger. LD test mandrel. Secure well. SDFN. - Cameron on location. JSA and safety meeting. Remove B-1 flange on WH. Install 11? 5K x 7? 10K tubing head. Place TC1A hanger with TWCV in tbg head. Pressure test 11? x 7? void to 5000 psi for 15 minutes, no leak off. Pressure test all valves 250 psi low for 5 minutes and 10,000 psi high for 10 minutes, all tests good. While filling ditches and holes on location with front end loader, noticed spongy ground on east side of WH in area WO rig will set. Scrape out saturated soil. Work soil to dry it out. Replace and pack soil. Haul in three loads of road base to level location. - Cameron on location. JSA and safety meeting. Remove B-1 flange on WH. Install 11? 5K x 7? 10K tubing head. Place TC1A hanger with TWCV in tbg head. Pressure test 11? x 7? void to 5000 psi for 15 minutes, no leak off. Pressure test all valves 250 psi low for 5 minutes and 10,000 psi high for 10 minutes, all tests good. While filling ditches and holes on location with front end loader, noticed spongy ground on east side of WH in area WO rig will set. Scrape out saturated soil. Work soil to dry it out. Replace and pack soil. Haul in three loads of road base to level location. - Cameron on location. JSA and safety meeting. Remove B-1 flange on WH. Install 11? 5K x 7? 10K tubing head. Place TC1A hanger with TWCV in tbg head. Pressure test 11? x 7? void to 5000 psi for 15 minutes, no leak off. Pressure test all valves 250 psi low for 5 minutes and 10,000 psi high for 10 minutes, all tests good. While filling ditches and holes on location with front end loader, noticed spongy ground on east side of WH in area WO rig will set. Scrape out saturated soil. Work soil to dry it out. Replace and pack soil. Haul in three loads of road base to level location. - Shell test valves, frac valve and blind rams against TWCV to 250 psi for 5 minutes, OK. Increase pressure to 5000 psi for 10 minutes, no leak off. Function test 7? 10K manual frac valve at 5000 psi for 10 minutes, no leak off. Function test blind rams and inside valve to 250 psi for 5 minutes, no leak off. Increase pressure to 5000 psi for 10 minutes, no leak off. PU test mandrel. Function test pipe rams and outside valve to 250 psi for 5 minutes, OK. Increase pressure to 5000 psi for 10 minutes, no leak off. Function test annular preventer to 250 psi for 5 minutes, no leak off. Increase pressure to 3000 psi for 10 minutes, no leak off. Remove TWCV and TC1A tbg hanger. LD test mandrel. Secure well. SDFN. - Shell test valves, frac valve and blind rams against TWCV to 250 psi for 5 minutes, OK. Increase pressure to 5000 psi for 10 minutes, no leak off. Function test 7? 10K manual frac valve at 5000 psi for 10 minutes, no leak off. Function test blind rams and inside valve to 250 psi for 5 minutes, no leak off. Increase pressure to 5000 psi for 10 minutes, no leak off. PU test mandrel. Function test pipe rams and outside valve to 250 psi for 5 minutes, OK. Increase pressure to 5000 psi for 10 minutes, no leak off. Function test annular preventer to 250 psi for 5 minutes, no leak off. Increase

pressure to 3000 psi for 10 minutes, no leak off. Remove TWCV and TC1A tbg hanger. LD test mandrel. Secure well. SDFN. - Install flowline
Daily Cost: $0
Cumulative Cost: $7,461

10/10/2012 Day: 4 **Completion**

Rigless on 10/10/2012 - Wait on Rig - - Wait on WOR - - - Wait on 4 1/2" TIW valves, Valves not unloaded on location, finally found in Runner's yard, - Wait on 4 1/2" TIW valves, Valves not unloaded on location, finally found in Runner's yard, - Wait on 4 1/2" TIW valves, Valves not unloaded on location, finally found in Runner's yard, - Wait on 4 1/2" TIW valves, Valves not unloaded on location, finally found in Runner's yard, - MIRU Stone Well Service Rig #10. Spot in pipe kicker and pipe racks. Put 4 1/2" frac string on pipe racks. Unload flowback equipment. RU flowback. Clean, drift, and tally 4 1/2" frac string. - MIRU Stone Well Service Rig #10. Spot in pipe kicker and pipe racks. Put 4 1/2" frac string on pipe racks. Unload flowback equipment. RU flowback. Clean, drift, and tally 4 1/2" frac string. - MIRU Stone Well Service Rig #10. Spot in pipe kicker and pipe racks. Put 4 1/2" frac string on pipe racks. Unload flowback equipment. RU flowback. Clean, drift, and tally 4 1/2" frac string. - MIRU Stone Well Service Rig #10. Spot in pipe kicker and pipe racks. Put 4 1/2" frac string on pipe racks. Unload flowback equipment. RU flowback. Clean, drift, and tally 4 1/2" frac string. - RIH with 3.75" guage ring with junk basket to 8075'. POH. LD guage ring and junk basket. PU CBL, GR, and CCL tools. Pressure test lubricator against 10K frac valve to 3000 psi. Run CBL, Gamma Ray, and CCL from 8072' to 7060'. TOL at 7918'. Correlate log to Halliburton OH log dated 9-18-12. RIH to 8072'. Run logs at 1500 psi from 8072' to surface. TOC at surface. RD lubricator and EWL trk. - RIH with 3.75" guage ring with junk basket to 8075'. POH. LD guage ring and junk basket. PU CBL, GR, and CCL tools. Pressure test lubricator against 10K frac valve to 3000 psi. Run CBL, Gamma Ray, and CCL from 8072' to 7060'. TOL at 7918'. Correlate log to Halliburton OH log dated 9-18-12. RIH to 8072'. Run logs at 1500 psi from 8072' to surface. TOC at surface. RD lubricator and EWL trk. - RIH with 3.75" guage ring with junk basket to 8075'. POH. LD guage ring and junk basket. PU CBL, GR, and CCL tools. Pressure test lubricator against 10K frac valve to 3000 psi. Run CBL, Gamma Ray, and CCL from 8072' to 7060'. TOL at 7918'. Correlate log to Halliburton OH log dated 9-18-12. RIH to 8072'. Run logs at 1500 psi from 8072' to surface. TOC at surface. RD lubricator and EWL trk. - RIH with 3.75" guage ring with junk basket to 8075'. POH. LD guage ring and junk basket. PU CBL, GR, and CCL tools. Pressure test lubricator against 10K frac valve to 3000 psi. Run CBL, Gamma Ray, and CCL from 8072' to 7060'. TOL at 7918'. Correlate log to Halliburton OH log dated 9-18-12. RIH to 8072'. Run logs at 1500 psi from 8072' to surface. TOC at surface. RD lubricator and EWL trk. - MIRU JW Wire line unit, Make up 71/16" 5K adapter spool on annular BOP, Rig up lubricator and test 250 psi low, 3,000 psi high, test good - MIRU JW Wire line unit, Make up 71/16" 5K adapter spool on annular BOP, Rig up lubricator and test 250 psi low, 3,000 psi high, test good - MIRU JW Wire line unit, Make up 71/16" 5K adapter spool on annular BOP, Rig up lubricator and test 250 psi low, 3,000 psi high, test good - MIRU JW Wire line unit, Make up 71/16" 5K adapter spool on annular BOP, Rig up lubricator and test 250 psi low, 3,000 psi high, test good - Wait on JW wire line unit to run CBL log - Wait on JW wire line unit to run CBL log - Wait on JW wire line unit to run CBL log - Wait on JW wire line unit to run CBL log - Wait on WOR - Wait on WOR - Wait on WOR - Wait on WOR - Wait on WOR - Wait on WOR - Wait on WOR -
Daily Cost: $0
Cumulative Cost: $24,424

10/11/2012 Day: 8 **Completion**

Stone #10 on 10/11/2012 - RIH 4.5 frac string, test casing, leaked, Change BOP stacks. - FMC frac stack on location, Unload and NU & test 4 1/16? 10K frac stack. Tested stack 250 Psi

low and 10,000 psi high, Stacked as follows: 4 1/16 HCR valve, manual 4 1/16 frac valve, 4 1/16 flowcross with double outlets with double wing valves, manual 4 1/16 frac valve, Night cap. - ND 71/16? 5K clean out stack, and called FMC for 4 1/16? 10K frac stack, - Wait and looking for 4 1/2" TIW valves to be sent to location, found in trucking company's yard - RU 4G test trk with chart. Pressure 7? x 4 ? annulus to 1800 psi, leaking up BOP. Back out lock pins. Pull out of PBR and inspect tbg hanger. Check connection to insure it is tight. Lubricate hanger and sting into PBR. Land frac string with 54K compression. Run in lock pins. Pressure annulus to 4010 psi for 15 minutes, leaked off to 3970 psi-good test. Bleed pressure off annulus to 3500 psi. Monitor with guage. Pressure up on frac string to 3000 psi, change over and swage leaking. Bleed off pressure. Remove change over and swage, clean threads and wrap with Teflon tape. Install connections, pressure frac string to 2900 psi and would go no higher. Annulus pressure constant at 3500 psi. Small amount of water running over BOP. Tighten landing jt in tbg hanger. Attempt to pressure test again, still leaking - PUMU Halliburton's Seal Assembly, QN nipple and RIH 4 1/2" frac string as follows: Halliburton's seal assembly for VersaFlex liner hanger, (14.27'), QN profile nipple (3.775 ID) (1.61'), PU 187 jts 4 ?? frac string. Circulate hole with 280 bbl fresh water with biocide. Space frac string out with 188 jts 4 ?? 13.5# BTC P110 frac string,1-8? x 4 ?? pup, 1-10? x 4 ?? pup, 1-4? x 4 ?? pup, and 1 jt 4 ??13.5# BTC P110 frac string in hole. Land 4 1/2 in tbg head with 54K compression. Run in lock pins - Remove landing jt, clean and wrap threads with Teflon tape. Install landing jt. Pressure csg to 3200 psi, pressure would drop to 2900 psi, repeated several times. Annulus maintained 3500 psi. Bleed off pressure on tbg. Remove landing jt. Close blind rams. Pump down frac string. Pressured to 3200 psi the pressure would drop to 2900, build to 3200 psi and drop again. SIP 2800 psi. RU pump trk. Establish injection rate at 4450 psi and 2.3 bpm. ISDP 3102 psi.
Daily Cost: $0
Cumulative Cost: $160,641

10/12/2012 Day: 9 **Completion**

Stone #10 on 10/12/2012 - Test 4 1/2" 10K frac stack, MIRU wireline, RIH Howco dummy plug, POH dummy plug, ND 4 1/16 frac stac, NU 7 1/16" BOP stack and Test. - NU 7 1/16? 5K BOP stack: 7 1/16? 10K manual frac valve, 10K X 5K spacer spool, 7 1/16? 5K double BOP (Blind rams, 2 3/8? pipe rams), 7 1/16? 5K flowcross with double out lets and double wing valves, 7 1/16? 5K annular BOP, - Wait on new clean out BOP stack to arrive location, ND 4 1/16? 10K Frac stack, (left HCR on well as barrier), Set pipe racks and lay out 2 3/8? PH-6 workstring on racks and tally. All parts on location, NU 7 1/16? clean out BOP stack at present time, - Finish testing frac stack 250 Psi low and 10,000 psi high, Tested flowback lines and manifold, All tested good, 4 1/16" 10K frac stack as follows: 4 1/16 HCR valve, manual 4 1/16 frac valve, 4 1/16 flowcross with double outlets with double wing valves, manual 4 1/16 frac valve, Night cap. - RIH with 3.52? OD dummy plug. Correlate to liner top. Initiate pump down, found pump trk didn?t have enough HP. SD job. RD Cudd pump trk. Wait on pump trks 3 hrs. Spot in and RU pump trks. Pressure test lines to 10K, OK. - Pull back pressure valve from 4 1/2 hanger, MIRU JW Wireline and Cudd pump truck. Pressure test lines to 9800 psi, OK. - Pressure annulus to 3500 psi, trap pressure, and monitor. Run in hole with dummy plug at 210 fpm, pump down frac string at 4.5 bpm and 3600 psi, tool stopped at 8774? with 4200 psi, issues with pump trucks. POH to 8100?. RIH at 210 fpm, started pumping 4.2 bpm at 4200 psi, tool stopped at 8774?. POH to 8100?. RIH at 210 fpm, started pumping 8 bpm at 6300 psi, tool stopped at 8774?, pressure spiked to 7800 psi. Pressure leaked off to 3560 psi while POH to 8100?. Start IH at 200 fpm, pressure immediately spiked to 9500 psi at 2.3 bpm. SD pumps and WL. Pressure slowly leaked off to 7200 psi. Bled off pressure to flow back tank. Bled pressure off annulus. POH with dummy plug. RD lubricator, EWL trk, and pump trucks.
Daily Cost: $0
Cumulative Cost: $197,590

10/13/2012 Day: 10 **Completion**

Stone #10 on 10/13/2012 - Test BOP stack, PUMU TTS abrasive perferator and mill and 2 3/8 PH6 tbg and RIH, Clean out to PBTD, abrasive perferate stage #1 perf's, clean up well bore, POH and lay down workstring, - Circulating well with fresh water,to clean up well bore. - Finish PUMU 2 3/8? PH6 tbg and perforator BHA, 30,000 wt, 38,000 wt up drag, 22,000 wt down, pipe moving freely, Tieback on 6 lines, RIH and tag at 12,778?, No overpull off bottom, rigging up to circulate well bore clean with 2.5 times volume. BHA as follows: Insert twister convex mill (.99?), Rotary sub (.75?), Bypassing Abrasive Perforator w/(6) Ports @ 60? (3.55?), Rotary sub Xover (1.17?), 4? Pup jt (3.76?), Snubbing back pressure valve (1.72?), 1 jt 2 3/8? PH-6 P-110 tbg, (31.06?), 1.710? ?RN? Nipple (1.09?), 2 3/8? PH-6 P-110 tbg, (4,886.97?), 1.710? ?R? nipple (.97?), 2 3/8? PH-6 P-110 tbg (7,873.03?), (410 jts). (Western Chem is to treated water with Claycare 1gpt, Alpha 452 1 gpt), - Nipple up 7 1/16? 5K BOP stack: 7 1/16? 10K manual frac valve, 10K X 5K spacer spool, 7 1/16? 5K double BOP (Blind rams, 2NU 7 1/16? 5K BOP stack: 7 1/16? 10K manual frac valve, 10K X 5K spacer spool, 7 1/16? 5K double BOP (Blind rams, 2 3/8? pipe rams), 7 1/16? 5K flowcross with double out lets and double wing valves, 7 1/16? 5K annular BOP, Tested 250 Psi low and 5,000 Psi on BOP?s, 250 Psi low, 3,000 Psi Annular, All tested good, Pull back pressure valve from hanger. - Noticed single BOP with 2 3/8" pipe rams is not on stack. BOP stack is nippled up per procedure. Notified Orson Barney. Elected to install 2nd set of pipe rams. Install TC1A tbg hanger with TWCV. Land tbg at 1622'. Run in lock down pins. Fill tbg with water. Close blind rams. RD tongs and floor. ND annular preventer. NU single BOP with 2 3/8? pipe rams. NU annular preventer. Function test single pipe rams to 250 psi for 5 minutes, no leak odd. Increase pressure to 5000 psi for 10 minutes, OK. Function test annular preventer to 250 psi for 5 minutes, OK. Increase pressure to 3000 psi for 10 minutes, no leak off. Pressure test flow back line that was removed during nipple up. BOP stack as follows: 7? 10K manual frac valve; 7? 5K double BOP with blind rams, 2 3/8? pipe rams, and double gate valves below blinds; BOP with 7? 5K flow cross; 7? 5K single BOP with 2 3/8? pipe rams; and 7? 5K annular preventer. Remove TWCV. Back out lock pins. Remove tbg hanger. - PUMU TTS?s abrasive perforator BHA as follows: Insert twister convex mill (.99?), Rotary sub (.75?), Bypassing Abrasive Perforator w/(6) Ports @ 60? (3.55?), Rotary sub Xover (1.17?), 4? Pup jt (3.76?), Snubbing back pressure valve (1.72?), 1 jt 2 3/8? PH-6 P-110 tbg, (31.06?), 1.710? ?RN? Nipple (1.09?), 2 3/8? PH-6 P-110 tbg, (31.06), 1.710? ?R? nipple (.97?), and 51 jts 2 3/8? PH-6 P-110 tbg. - Pressure test flow back line that was removed during nipple up to 5000 psi for 10 minutes, OK. BOP stack as follows: 7? 10K manual frac valve; 7? 5K double BOP with blind rams, 2 3/8? pipe rams, and double gate valves below blinds; BOP with 7? 5K flow cross; 7? 5K single BOP with 2 3/8? pipe rams; and 7? 5K annular preventer. Remove TWCV. Back out lock pins. Remove tbg hanger
Daily Cost: $0
Cumulative Cost: $236,303

10/14/2012 Day: 11 **Completion**

Stone #10 on 10/14/2012 - Circulate well bore 2.5 times volume, Abrasive cut stage #1 perf's 12,704' (41/2 collar at 12,698'), 12,635' and 12,570', wash down and clean up well bore, - 19:00 - 00:30 Finish POH and lay down 2 3/8 PH6 workstring on racks, 431 jts. Held 2,000 psi on well bore while pulling tbg and filling casing, pressure slowly fall off as more water is pumped into well bore and pipe is pulled, Well bore pressure down to 150 Psi with 70 jts left in well, bled well down and monitored pressure while coming out of hole with tubing, Out of hole with tools and all tools recovered. Well trying to flow, shut in and called for Lubricator to set back pressure valve in hanger. - Break circulation at 3 bpm and 4300 psi. Had leak in swivel hose and at saver sub in swivel. SD. Set back swivel. Install hard line to tbg. Circulate1.5 bottoms up at 3100 psi while replacing hose and saver sub. PU swivel and jt #407. 120 RPM. Hanging weight 30K, Slack off 26K. Pick up 36K. Pump 10 bbl sweep and

clean out to 12609'. Pump 2 bbl in and 2 bbl out for 100 bbl. Clean out to landing collar at 12778?.Pump 10 bbl sweep at 12,701?, 77? from landing collar. Rate 2.6 bpm. Pressure 4000 psi. WH pressure 1500 psi. 120 RPM. Hanging weight 30K. Pick up 32K. Slack off 28K. Pump 20 bbl sweep with gel, 20 bbl water, then another 20 bbl sweep. Circulate 3.5 bottoms up with 456 bbl water with Clay Sta and Alpha 452. Clean water at returns. LD power swivel and 9 jts tbg. Depth 12,520?, top perf 12,570?. Pump down annulus at 2.4 bpm and 3875 psi. RD pump trk. LD jts 2 3/8?, 5.96#, P-110, PH6 tbg. - PU swivel and jt #407. 120 RPM. Hanging weight 30K, Slack off 26K. Pick up 26K.Pump 10 bbl sweep and clean out to 12609'. Pump 2 bbl in and 2 bbl out for 100 bbl. - Circ well to clean out well bore, Pumped 230 bbls at 3.5 BPM 4,300 Psi, moving tbg while circulating, Pumped two sweeps while circulating well to flowback tanks, - Pick swivel back up to wash down to PBTD 12,778'. - Pull up to perf?s depth 12,704? (41/2 collar at 12,698?), break circulation with water treated with Claycare and Alpha 452 and drop ball to shift tools to abrasive perforator and prepare to abrasive cut perf?s first cluster of stage 1. Perforate first cluster at 3 bpm at 4,300 psi, with 3 bpm returns at 700 psi on 38 choke, first cluster cut in 30 mins, Had 400 psi spike while on pressure while cutting perf;s. POH to 12,635? and cut cluster 2 of stage #1 at 3 bpm at 4,300 psi, , with 3 bpm returns at 700 psi on 38 choke, first cluster cut in 30 mins, Slight sign of gas at surface during cutting on second cluster. POH to 12,570? and cut cluster 3 of stage #1 at 3 bpm at 4,300 psi, , with 3 bpm returns at 700 psi on 38 choke, third cluster cut in 30 mins, - Break circulation at 3 bpm and 4300 psi. Had leak in swivel hose and at saver sub in swivel. SD. Set back swivel. Install hard line to tbg. Circulate1.5 bottoms up at 3100 psiwhile replacing hose and saver sub.
Daily Cost: $0
Cumulative Cost: $322,772

10/19/2012 Day: 12 **Completion**

Rigless on 10/19/2012 - Prep for frac - Fill frac tanks. Install water manifold on tanks. Fill sand cans. - No Actively
Daily Cost: $0
Cumulative Cost: $326,722

10/20/2012 Day: 13 **Completion**

Rigless on 10/20/2012 - MIRU Baker Hugh Frac Equipment & JW WL & Crain. PT Treating iron, N2 Pop off & Back side Pop off. Frac Stg #1. - Location Safety Mtg. Prime pumps and test lines to 9,900 psi, OK. Hydraulic Fracture stage #1 as follows: Break down 23.5 bpm @ 6,295 psi. Avg rate: 36 bpm, Avg press: 6,705 psi, Max rate: 36. bpm, Max press: 8,370 Psi. FG .966, ISIP: 4,435 PSI, 5 MIN 4,055 psi, 10 MIN: 3,995 psi. 15 MIN: 3,960 psi. Total 30/50 White: 113,040 lbs. Total Prop 113.040 Total 15% HCL Acid 20 bbls. Avg HHP: 5,867. Total load to recover 2,360 bbls. - No Actively - 06:30 AM MANUAL FRAC VALVE REQUIRES 24 1/4 TURNS AND BACK OFF 1/4 TURN. MAXIMUM FRAC PRESSURE IS 9,900 PSI. MIRU RockWaterr for transferring water. MIRU Pure Energgy for Flowback MI and set up office trailer. MI start unloading sand. MIRU Baker Hugh frac equipment and JW W/L. 18:30 PM RU complete. Crew change. HSM. JSA, PPE, Review stg 1 frac Op?s, Stop-work authority, Smoking Policy & evacuation Plans. Prime and test line to 9,900 psig. Test OK. Test annulus lines to 5,000 psig. Test OK. Test N2 pop to 9,750 psig. Test manual Pop off on back side to 3,300 psig. RU Transducer to monitor pressure between 7" and 9-5/8" casing. - 2200 PM Pressure testing completed, Tested lines to 9,900 PSI. Tested pop off to 9,750 PSI, N2 Bottle 2,110 PSI, N2 regulator 248 PSI. Back Side pop off set 3,300 PSI. holding 2,707 PSI. Start Stage 1 HF live 1,930 PSI.
Daily Cost: $0
Cumulative Cost: $482,244

10/21/2012 Day: 14 **Completion**

Rigless on 10/21/2012 - Perf stgs 2,3,4,5. Frac stgs 2,3,4,5 - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. - Location Safety Mtg. Prime pumps and test lines to 9,830 psi, OK. Hydraulic Fracture stage #5 as follows: Break down 17.7 bpm @ 5,780 psi. Avg rate: 36 bpm, Avg press: 6,970 psi, Max rate: 37. bpm, Max press: 8,040 Psi. FG 1.093, ISIP: 5,500 PSI, 5 MIN 4,600 psi, 10 MIN: 4,150 psi. 15 MIN: 3,950 psi. Total 30/50 White: 147,660 lbs. Total Prop 147,660 Total 15% HCL Acid 20 bbls. Avg HHP: 6,099. Total load to recover 1,833 bbls. Including 147 BBLS for pump down. Finish frac w/100% in formation. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.5 bpm 4,707 Psi. ok, HES 10K Obsidian plug set 11,948', Perforate Stage #5 at (11,920 - 21.5') (11,855' - 56.5') (11,790' - 91.5'). Final pressure of 3,997 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 163 bbls on P/D, Prep To Hydraulic Fracture Stage #5. - Location Safety Mtg. Prime pumps and test lines to 9,819 psi, OK. Hydraulic Fracture stage #4 as follows: Break down 23.2 bpm @ 6,890 psi. Avg rate: 35 bpm, Avg press: 7,150 psi, Max rate: 36. bpm, Max press: 8,402 Psi. FG 1.036, ISIP: 5,020 PSI, 5 MIN 4,341 psi, 10 MIN: 4,049 psi. 15 MIN: 3,922 psi. Total 30/50 White: 148,560 lbs. Total Prop 148,560 Total 15% HCL Acid 40 bbls. Avg HHP: 6,046. Total load to recover 2,780 bbls. Including 163 BBLS for pump down. Finish frac w/100% in formation. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,424 Psi. ok, HES 10K Obsidian plug set 12,534', Perforate Stage #2 at (12,505 - 06.5') (12,440' - 41.5') (12,375' - 76.5'). Final pressure of 4,078 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 209 bbls on P/D, Prep To Hydraulic Fracture Stage #2. - Location Safety Mtg. Prime pumps and test lines to 9,843 psi, OK. Hydraulic Fracture stage #3 as follows: Break down 23.4 bpm @ 6,177 psi. Avg rate: 35 bpm, Avg press: 6,947 psi, Max rate: 36. bpm, Max press: 7,995 Psi. FG 1.03, ISIP: 5,000 PSI, 5 MIN 4,238 psi, 10 MIN: 4,019 psi. 15 MIN: 3,937 psi. Total 30/50 White: 149,899 lbs. Total Prop 149,899 Total 15% HCL Acid 24.5 bbls. Avg HHP: 5,959. Total load to recover 3,275 bbls. Including 212 BBLS for pump down. Finish frac w/100% in formation. NOTE: Back side 2" manual Pop off leaking out of weep hole. SD. BO pressure. Change out Pop off. Reset to Pop off @ 3,250 +/- 100 psi. Test N2 Pop off to 9,650 Psi. Reg 250 & Bottle 2,035. 9-5/8" CSG 22 Psi. Back side 2,694 Psi. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 8.8 bpm 4,582 Psi. ok, HES 10K Obsidian plug set 12,327', Perforate Stage #3 at (12,300 - 01.5') (12,245' - 46.5') (12,184' - 85.5'). Final pressure of 3,919 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 212 bbls on P/D, Prep To Hydraulic Fracture Stage #3. - 0615 AM While picking up guns found rocker arm broke on tool trap currently setting down tool trap to replace, ETA on another tool trap from JW wire line shop 2 hours. NPT= 1.2 hrs. - Location Safety Mtg. Prime pumps and test lines to 9,832 psi, OK. Hydraulic Fracture stage #2 as follows: Break down 17.9 bpm @ 5,270 psi. Avg rate: 36 bpm, Avg press: 6,725 psi, Max rate: 37. bpm, Max press: 8,220 Psi. FG 1.01, ISIP: 4,815 PSI, 5 MIN 4,150 psi, 10 MIN: 4,045 psi. 15 MIN: 3,995 psi. Total 30/50 White: 120,200 lbs. Total Prop 120,200 Total 15% HCL Acid 20 bbls. Avg HHP: 5,884. Total load to recover 2,687 bbls. Including 209 BBLS for pump down - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.4 bpm 4,654 Psi. ok, HES 10K Obsidian plug set 12,159', Perforate Stage #4 at (12,115 - 16.5') (12,050' - 51.5') (11,985' - 86.5'). Final pressure of 4,028 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 224 bbls on P/D, Prep To Hydraulic Fracture Stage #4. NOTE: While pumping down plug & guns had to SD several time due to pump jacking off.
Daily Cost: $0
Cumulative Cost: $885,639

10/22/2012 Day: 15 **Completion**

Rigless on 10/22/2012 - Continue HF stages 6 of 20 - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. - Location Safety Mtg. Prime pumps and test lines to 9,830 psi, OK. Hydraulic Fracture stage #10 as follows: Break down 16.6 bpm @ 5,920 psi. Avg rate: 35 bpm, Avg press: 6,945 psi, Max rate: 36 bpm, Max press 8,815 Psi. FG 1.175, ISIP: 6,180 PSI, 5 MIN 4,445 psi, 10 MIN: 4,085 psi. 15 MIN: 3,925 psi. Total 30/50 White: 150,210 lbs. Total Prop 150,210 Total 15% HCL Acid 20 bbls. Avg HHP: 5,975. Total load to recover 1,781 bbls. Including 118 BBLS for pump down. Finish frac w/100% in formation. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,985 Psi. ok, HES 10K Obsidian plug set 10,968', Perforate Stage #10 at (10,942 - 43.5') (10,880' - 81.5') (10,824' - 25.5'). Final pressure of 4,037 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 115 bbls on P/D, Prep To Hydraulic Fracture Stage #10. - Location Safety Mtg. Prime pumps and test lines to 9,919 psi, OK. Hydraulic Fracture stage #9 as follows: Break down 16.7 bpm @ 5,502 psi. Avg rate: 35 bpm, Avg press: 7,040 psi, Max rate: 36 bpm, Max press: 8,825 Psi. FG 1.250, ISIP: 6,810 PSI, 5 MIN 5,010 psi, 10 MIN: 4,175 psi. 15 MIN: 3,915 psi. Total 30/50 White: 142,257 lbs. Total Prop 142,257 Total 15% HCL Acid 34 bbls. Avg HHP: 6,091. Total load to recover 1,842 bbls. Including 138 BBLS for pump down. Finish frac w/100% in formation. 18:10 PM Pressure testing completed, Tested pop off to 9,615 PSI. N2 Bottle 1,800 PSI. Regulator 255 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 11 PSI. 7? holding 2,758 PSI. Start Stage 9 HF - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,748 Psi. ok, HES 10K Obsidian plug set 11,181', Perforate Stage #9 at (11,140 - 41.5') (11,080' - 81.5') (11,010' - 11.5'). Final pressure of 3,875 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 138 bbls on P/D, Prep To Hydraulic Fracture Stage #9. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.3 bpm 4,833 Psi. ok, HES 10K Obsidian plug set 11,714', Perforate Stage #6 at (11,708 - 09.5') (11,660' - 61.5') (11,595' - 96.5'). Final pressure of 4,079 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 147 bbls on P/D, Prep To Hydraulic Fracture Stage #6. - Stage #8 NOTE: 13:29 PM Found a leak while PT 4? main line. SD. BO pressure. Change out 4? rubber seal. Retest 4? main line and found a leak on a 3? down line jt coming off pump. SD. BO pressure. Change out 3? rubber seal. Retest main line to 9,828 psi. Tstd OK. PT N2 Pop off several time. (1) PT 9,887, Reg 260, Bottle 2,100. Did not pop off. (2) Decrease reg to 250, retest to 9,790 psi. Did not pop off. (3) Decrease reg 245, Pop off at 7,248 psi. (4) Increase reg 252, Pop off at 7,028 psi. Changing out N2 Pop off @ RPT. 14:00 PM Pressure testing completed, Tested lines to 9,828 PSI. Tested pop off to 9,685 PSI. N2 Bottle 2,068 PSI. Regulator 250 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 9 PSI. 7? holding 2,745 PSI. Start Stage 8 HF - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.5 bpm 5,162 Psi. ok, HES 10K Obsidian plug set 11,350', Perforate Stage #8 at (11,323 - 24.5') (11,270' - 71.5') (11,206' - 07.5'). Final pressure of 4,073 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 162 bbls on P/D, Prep To Hydraulic Fracture Stage #8. - Location Safety Mtg. Prime pumps and test lines to 9,822 psi, OK. Hydraulic Fracture stage #7 as follows: Break down 16.5 bpm @ 6,242 psi. Avg rate: 35 bpm, Avg press: 6,825 psi, Max rate: 36. bpm, Max press: 8,343 Psi. FG 1.208, ISIP: 6456 PSI, 5 MIN 4,995 psi, 10 MIN: 4,288 psi. 15 MIN: 3,975 psi. Total 30/50 White: 145,786 lbs. Total Prop 145,786 Total 15% HCL Acid 26.9 bbls. Avg HHP: 5,888. Total load to recover 2,125 bbls. Including 140 BBLS for pump down. Finish frac w/97% in formation. Tested pop off to 9,492 PSI. N2 Bottle 1,955 PSI. Regulator 252 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 0 PSI. 7? holding 2,684 PSI. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 5,850 Psi. ok, HES 10K Obsidian plug set 11,564', Perforate Stage #7 at (11,530 - 31.5') (11,465' - 66.5') (11,400' - 401.5'). Final pressure of 4,027 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 140 bbls on P/D, Prep To Hydraulic Fracture Stage #7. - Location Safety Mtg. Prime pumps and test lines to 9,880 psi, OK. Hydraulic Fracture stage #6 as follows: Break down 17.7 bpm @ 6,300 psi. Avg rate: 33 bpm, Avg press: 7,625 psi, Max rate: 36. bpm, Max press: 9,340 Psi. FG N/A, ISIP: N/A PSI, 5 MIN N/A psi, 10 MIN: N/A psi. 15 MIN: N/A psi. Total 30/50 White:

151,939 lbs. Total Prop 151,939 Total 15% HCL Acid 20 bbls. Avg HHP: 6,093. Total load to recover 1,876 bbls. Including 147 BBLS for pump down. Finish frac w/100% in formation. 0530 AM Stage 6 HF completed, Placed 151,940 LBS prop, purposed 150,000, Pressured out on flush with 30 BBLS left in flush, attempted to flush 3 times at 3 BPM and pressured out at 9,310 PSI. Opened up to choke on 18/64 ADJ choke and worked up to 26/64 ADJ choke and flowed back 260 BBLS. And shut back in established rate at 22 BPM at 8,800 PSI. and flushed well bore clean. Lowered rate to 10.4 BPM at 6,100 PSI. Prepare for stage 7 plug and perf. - Location Safety Mtg. Prime pumps and test lines to 9,828 psi, OK. Hydraulic Fracture stage #8 as follows: Break down 16.7 bpm @ 5,810 psi. Avg rate: 35 bpm, Avg press: 6,651 psi, Max rate: 36. bpm, Max press: 8,121 Psi. FG 1.029, ISIP: 4,960 PSI, 5 MIN 4,052 psi, 10 MIN: 3,937 psi. 15 MIN: 3,893 psi. Total 30/50 White: 149,427 lbs. Total Prop 149,427 Total 15% HCL Acid 33.9 bbls. Avg HHP: 5,640. Total load to recover 1,915 bbls. Including 162 BBLS for pump down. Finish frac w/100% in formation.
Daily Cost: $0
Cumulative Cost: $1,339,802

10/23/2012 Day: 16 **Completion**

Rigless on 10/23/2012 - Frac & Perf Stgs 11 - 16 - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 5,084 Psi. ok, HES 10K Obsidian plug set 10,797', Perforate Stage #11 at (10,750 - 51.5') (10,685' - 86.5') (10,620' - 21.5'). Final pressure of 4,110 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 110 bbls on P/D, Prep To Hydraulic Fracture Stage #11. - Location Safety Mtg. Prime pumps and test lines to 9,890 psi, OK. Hydraulic Fracture stage #17 - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 5,388 Psi. ok, HES 10K Obsidian plug set 9,622', Perforate Stage #17 at (9,580 - 81.5') (9,520' - 21.5') (9,450' - 51.5'). Final pressure of 4,204 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 63 bbls on P/D, Prep To Hydraulic Fracture Stage #17. - Location Safety Mtg. Prime pumps and test lines to 9,815 psi, OK. Hydraulic Fracture stage #16 as follows: Break down 16.6 bpm @ 6,250psi. Avg rate: 35 bpm, Avg press: 7,335 psi, Max rate: 36 bpm, Max press 9,010 Psi. FG 1.348, ISIP: 7,625 PSI, 5 MIN 5,820 psi, 10 MIN: 4,750 psi. 15 MIN: 4,200 psi. Total 30/50 White: 171,456 lbs. Total Prop 171,456 Total 15% HCL Acid 20 bbls. Avg HHP: 6,274. Total load to recover 1,792 bbls. Including 72 BBLS for pump down. Finish w/100% in Formation - Stg 16 Pressure tested lines to 9,802 PSI. Tested pop off to 9,138 PSI. N2 Bottle 1,899 PSI. regulator 250 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 9 PSI. 7? holding 2,741 PSI. Start Stage 15 HF. Change out Bottle - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,923 Psi. ok, HES 10K Obsidian plug set 9,835', Perforate Stage #16 at (9,775 - 76.5') (9,710' - 11.5') (3rd gun did not fire). Final pressure of 4,181 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Two 1.5' guns 18 holes. POOH two Guns Fired, Used 73 bbls on P/D, Prep To Hydraulic Fracture Stage #16. - Location Safety Mtg. Prime pumps and test lines to 9,846 psi, OK. Hydraulic Fracture stage #15 as follows: Break down 16.4 bpm @ 6,234 psi. Avg rate: 35 bpm, Avg press: 6,758 psi, Max rate: 36 bpm, Max press 7,891 Psi. FG 1.109, ISIP: 5,630 PSI, 5 MIN 4,301 psi, 10 MIN: 4,099 psi. 15 MIN: 4,025 psi. Total 30/50 White: 149,436 lbs. Total Prop 149,436 Total 15% HCL Acid 30 bbls. Avg HHP: 5,714. Total load to recover 1,741 bbls. Including 86 BBLS for pump down. Finish w/100% in Formation - Pressure tested lines to 9,802 PSI. Tested pop off to 9,138 PSI. N2 Bottle 1,899 PSI. regulator 250 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 9 PSI. 7? holding 2,741 PSI. Start Stage 15 HF. Change out Bottle - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,786 Psi. ok, HES 10K Obsidian plug set 10,004', Perforate Stage #15 at (9,970 - 71.5') (9,905' - 06.5') (9,858' - 59.5'). Final pressure of 4,102 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 85 bbls on P/D, Prep To Hydraulic Fracture Stage #15. - Location Safety Mtg. Prime pumps and test lines to 9,846 psi, OK. Hydraulic Fracture stage #14 as follows: Break down 25.8 bpm @ 6,249psi. Avg rate: 34

bpm, Avg press: 6,597 psi, Max rate: 36 bpm, Max press 7,667 Psi. FG 1.156, ISIP: 6,020 PSI, 5 MIN 4,585 psi, 10 MIN: 4,126 psi. 15 MIN: 4,060 psi. Total 30/50 White: 153,090 lbs. Total Prop 153,090 Total 15% HCL Acid 30 bbls. Avg HHP: 5,465. Total load to recover 1,809 bbls. Including 94 BBLS for pump down. Finish w/102% in Formation - 13:40 PM Pressure tested lines to 9,846 PSI. Tested pop off to 9,400 PSI. N2 Bottle 1,300 PSI. regulator 259 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 9 PSI. 7? holding 2,736 PSI. Start Stage 14 HF. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,803 Psi. ok, HES 10K Obsidian plug set 10,216', Perforate Stage #14 at (10,165 - 66.5') (10,100' - 01.5') (10,035' - 36.5'). Final pressure of 4,173 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 94 bbls on P/D, Prep To Hydraulic Fracture Stage #14. - Location Safety Mtg. Prime pumps and test lines to 9,870 psi, OK. Hydraulic Fracture stage #13 as follows: Break down 21.2 bpm @ 6,170 psi. Avg rate: 36 bpm, Avg press: 6,583 psi, Max rate: 38 bpm, Max press 7,334 Psi. FG 1.104, ISIP: 5,590 PSI, 5 MIN 4,305 psi, 10 MIN: 4,083 psi. 15 MIN: 4,044 psi. Total 30/50 White: 150,105 lbs. Total Prop 150,105 Total 15% HCL Acid 20 bbls. Avg HHP: 5,760. Total load to recover 1,718 bbls. Including 107 BBLS for pump down. 09:45 AM Pressure tested lines to 9,870 PSI. Tested pop off to 9,716 PSI. N2 Bottle 1,400 PSI. regulator 260 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 0 PSI. 7? holding 2,693 PSI. Start Stage 13 HF. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,816 Psi. ok, HES 10K Obsidian plug set 10,384', Perforate Stage #13 at (10,357 - 58.5') (10,295' - 96.5') (10,240' - 41.5'). Final pressure of 4,081 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 107 bbls on P/D, Prep To Hydraulic Fracture Stage #13. - Location Safety Mtg. Prime pumps and test lines to 9,830 psi, OK. Hydraulic Fracture stage #12 as follows: Break down 35.5 bpm @ 7,686 psi. Avg rate: 35 bpm, Avg press: 6,970 psi, Max rate: 36 bpm, Max press 7,614 Psi. FG 1.056, ISIP: 5,190 PSI, 5 MIN 4,597 psi, 10 MIN: 4,267 psi. 15 MIN: 4,136 psi. Total 30/50 White: 152,221 lbs. Total Prop 152,221 Total 15% HCL Acid 20 bbls. Avg HHP: 6,048. Total load to recover 1724 bbls. Including 109 BBLS for pump down. - 0415 PM Pressure testing completed, Tested lines to 9,825 PSI. Started pumping ball down and had to shut down and swap out 1 pump and fix check valve. 0600 AM Pressure tested lines to 9,830 PSI. Tested pop off to 9,550 PSI. N2 Bottle 1,245 PSI. regulator 259 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 0 PSI. 7? holding 2,742 PSI. Start Stage 12 HF - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 5,033 Psi. ok, HES 10K Obsidian plug set 10,584', Perforate Stage #12 at (10,555 - 56.5') (10,491' - 92.5') (10,425' - 26.5'). Final pressure of 4,023 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 100 bbls on P/D, Prep To Hydraulic Fracture Stage #12. - Location Safety Mtg. Prime pumps and test lines to 9,800 psi, OK. Hydraulic Fracture stage #11 as follows: Break down 14.5 bpm @ 5,765 psi. Avg rate: 35 bpm, Avg press: 7,140 psi, Max rate: 36 bpm, Max press 8,310 Psi. FG 1.2, ISIP: 6,390 PSI, 5 MIN 5,065 psi, 10 MIN: 4,370 psi. 15 MIN: 4,040 psi. Total 30/50 White: 150,028 lbs. Total Prop 150,028 Total 15% HCL Acid 20 bbls. Avg HHP: 6,195. Total load to recover 1,750 bbls. Including 109 BBLS for pump down.

Daily Cost: $0
Cumulative Cost: $1,880,755

10/24/2012 Day: 17 **Completion**

Rigless on 10/24/2012 - Frac stgs 17-20. Set two Kill Plug. RDMO Baker Hugh frac equip & JW WL. - Location Safety Mtg. Prime pumps and test lines to 9,890 psi, OK. Hydraulic Fracture stage #17 as follows: Break down 16.7 bpm @ 5,190 psi. Avg rate: 35 bpm, Avg press: 6,350 psi, Max rate: 36 bpm, Max press 6,960 Psi. FG 1.065, ISIP: 5,265 PSI, 5 MIN 4,350 psi, 10 MIN: 4,055 psi. 15 MIN: 4,020 psi. Total 30/50 White: 170,175 lbs. Total Prop 170,175 Total 15% HCL Acid 20 bbls. Avg HHP: 5,478. Total load to recover 1,789 bbls. Including 63 BBLS for pump down. Finish w/100% in Formation - RDMO Baker Hugh Frac Equipmrnt, JW WL & Pure Energy flowback lines. Stand-by for D/O Operation upon completion of Petterson 3-20-3-

2W - Held PJSM. Kill Plug #2. RU WL. Test to 9,500 Psi. OK. RIH w/HES 10K Obsidian CBP #2, set 8,006' w/0 psig. POOH w/ WL. LD Tool. Frac Complete. - Held PJSM. Kill Plug #1. RU WL. Test to 9,500 Psi. OK. RIH w/HES 10K Obsidian CBP #1, set 8,050' w/3,818 psig.. BO pressure slowly to 0 psig while POOH w/ WL. LD Tools. Negative for 30 min. Holding. - 10:00 AM NOTE: Stage 20 HF Cut sand early while pumping 5.0 ppg due to pressure. Placed 112,155 LBS prop (75% in formation) proposed 150,000, Pressured out on flush with 54 BBLS left in casing, Approx 8,946 lbs 20/40 sand left in casing. 10:36 AM Opened up to choke on 32/64? ADJ choke and flowed back 293 BBLS. SWI. 11: 30 AM PT to 9,630 psig. Established rate at 25 BPM at 6,300 PSI. Flushed well bore clean w/132 Bbls. SWI. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,615 Psi. ok, HES 10K Obsidian plug set 9,411', Perforate Stage #18 at (9,385 - 86.5') (9,320' - 21.5') (9,265' - 66.5'). Final pressure of 4,088 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 52 bbls on P/D, Prep To Hydraulic Fracture Stage #18. - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,666 Psi. ok, HES 10K Obsidian plug set 9,027', Perforate Stage #20 at (8,995 - 96.5') (8,930' - 31.5') (8,865' - 66.5'). Final pressure of 4,187 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 38 bbls on P/D, Prep To Hydraulic Fracture Stage #20. - Location Safety Mtg. Prime pumps and test lines to 9,830 psi, OK. Hydraulic Fracture stage #19 as follows: Break down 16.3 bpm @ 5,320 psi. Avg rate: 35 bpm, Avg press: 6,545 psi, Max rate: 35 bpm, Max press 7,220 Psi. FG 1.096, ISIP: 5,525 PSI, 5 MIN 4,375 psi, 10 MIN: 4,125 psi. 15 MIN: 3,990 psi. Total 20/40 White: 151,520 lbs. Total Prop 151,520 Total 15% HCL Acid 21 bbls. Avg HHP: 5,647. Total load to recover 1,677 bbls. Including 44 BBLS for pump down. Finish w/100% in Formation - Held PJSM. RU WL for pump down. Test to 9,500 Psi. OK. RIH. Pump down with max pump rate of 9.1 bpm 4,519 Psi. ok, HES 10K Obsidian plug set 9,239', Perforate Stage #19 at (9,190 - 91.5') (9,125' - 26.5') (9,060' - 61.5'). Final pressure of 4,123 psi & Falling. 3 1/8" guns at 60 degrees, 6 spf, Three 1.5' guns 27 holes. POOH All Guns Fired, Used 44 bbls on P/D, Prep To Hydraulic Fracture Stage #19. - Location Safety Mtg. Prime pumps and test lines to 9,840 psi, OK. Hydraulic Fracture stage #18 as follows: Break down 13.1 bpm @ 5,185 psi. Avg rate: 35 bpm, Avg press: 6,520 psi, Max rate: 36 bpm, Max press 7,740 Psi. FG 1.184, ISIP: 6,255 PSI, 5 MIN 5,050 psi, 10 MIN: 4,435 psi. 15 MIN: 4,170 psi. Total 30/50 White: 177,175 lbs. Total Prop 177,175 Total 15% HCL Acid 21 bbls. Avg HHP: 5,625. Total load to recover 1,783 bbls. Including 51 BBLS for pump down. Finish w/100% in Formation - Location Safety Mtg. Prime pumps and test lines to 9,822 psi, OK. Hydraulic Fracture stage #20 as follows: Break down 24.9 bpm @ 6,222 psi. Avg rate: 35 bpm, Avg press: 6,892 psi, Max rate: 37 bpm, Max press 8,374 Psi. FG 0.434, ISIP: N/A PSI, 5 MIN N/A psi, 10 MIN: N/A psi. 15 MIN: N/A psi. Total 20/40 White: 112,155 lbs. Total Prop 112,155 Total 15% HCL Acid 45.4 bbls. Avg HHP: 5,912. Total load to recover 1,578 bbls. Including 38 BBLS for pump down. 09:06 AM Tested pop off to 9,501 PSI. N2 Bottle 1,825 PSI. regulator 252 PSI. Back side pop off set at 3,238 PSI. 9 5/8? CSG 0 PSI. 7? holding 2,660 PSI. Start Stage 20 HF Finish w/75% in Formation. SWI.
Daily Cost: $0
Cumulative Cost: $2,143,060

10/27/2012 Day: 18 **Completion**

Rigless on 10/27/2012 - Perp to lay down 4-1/2" casing - 12:50 PM Cameron on location to Installed TWCV in 4-1/2? casing hanger. ND FMC 4-1/16" 10K Frac stack & Cameron 4-1/2" 10K DSA. 13:45 PM NU FMC Manual frac valve, Knight 10K x 5K 7-1/16" DSA on top 7-1/16? 10K manual frac valve, 5K 7-1/16" double BOP w/blind rams on BTM, 4-1/2" pipe rams on top w/double 2-1/16" manual gate valve outlets, 5K 7-1/16" flowcross w/dual, double 2-1/16" manual gate valve outlets, 5K 7-1/16" single BOP w/4-1/2?" pipe rams & Annular BOP. - 1930 PM BOP stack rigged up start pressure testing 250 PSI low and 5,000 PSI high - 16:30 MIRU MT State WOR & equipment @ RPT, Will Finish Torqueing down BOP bolts. Preparing to test BOP stack. - 2345 PM Pressure testing completed, tested bop stack and flow back 250 PSI

low, 5,000 PSI high, ETA on CSG crew 0130 AM
Daily Cost: $0
Cumulative Cost: $2,191,740

10/28/2012 Day: 19 **Completion**

Rigless on 10/28/2012 - TOOH laying down 4 1/2 frac string, pick up 2 3/8 prep for drillout - MIRU Weatherford test Unit. Knight on location to change out Pipe rams fr/4-1/2" to 2-3/8". Test lower pipe ram to 250 psi for low, for 5 min w/10K manual frac valve close. Test OK. BO pressure. Pressure test same to 5,000 for high, for 10 min. Test OK. BO pressure. Test upper pipe ram to 250 psi for low, for 5 min w/10K manual frac valve close. Test OK. BO pressure. Pressure test same to 5,000 for high, for 10 min. Test OK. BO pressure. RDMO Weatherford test Unit. - FOOH, LD 154 Jts 4-1/2" 13.5#, BTC P-110 casing (ttl 189 Jts), QN profile nipple w/3.775" ID & Halliburton seal assembly. 14:00 PM RDMO Franks Westates casing crew. NOTE: Inspect 4-1/2? casing. Found several Jts w/deep pits inside the thread end and thread end damage. - 0400 AM Pick up on 4 ?? CSG, pulled hanger and 2 way check, PU WT 90K continued pulling up and weight leveled out at 85K, Continue pulling out of hole laying down 4 ?? frac string. POOH, LD 1 Jt 4-1/2" 13.5#, BTC P-110 casing, 1-4' x 4-1/2" pup Jt, 1-10' x 4-1/2" pup Jt, 1-8' x 4-1/2" pup Jt, 34 Jts 4-1/2" 13.5#, BTC P-110 casing, - 0230 AM CSG crew arrived MIRU prepare to start pulling 4 ?? frac string - 2345 PM Pressure testing completed, tested bop stack and flow back 250 PSI low, 5,000 PSI high, ETA on CSG crew 0130 AM - MU & RIH w/BHA consisting 4 Bladed inserted Mill: 2.875" OD x 1.250" ID x 1.60' Long, Bit Sub: 2.875" OD x 1.250" ID x 1.47' Long, double flapper Sub: 2.875" OD x 0.000" ID x 1.93' Long (BHA ttl 5.0') 1 Jt 2-3/8" 5.95#, P-110 - PH-6 Tbg, "RN" Nipple w/1.710" ID x .90'.1 Jt 2-3/8" 5.95#, P-110 - PH-6 Tbg R-nipple, Cont RIH w/2-3/8 - MI and uloaded 433 Jts 2-3/8" 5.95#, P-110 - PH-6 Tbg. (Weatherford). Had issue drifting tbg w/1.773" rabbit. MI and unload 414 Jts 2-3/8" 5.95#, P-110 - PH-6 Tbg. (Newfield). Tally & drift PH- tbg. Loaded & Return 433 jts 2-3/8" 5.95#, P-110 - PH-6 Tbg. (Weatherford). to Runners yard.
Daily Cost: $0
Cumulative Cost: $2,249,188

10/29/2012 Day: 20 **Completion**

Rigless on 10/29/2012 - Drill out frac plugs 1 of 19 - 1015 AM Circulate 1 hole volume w/20 Bbl sweep while tallying 2-3/8" tbg. Recoverd Plug Parts in returns. - 0847 AM Tagged frac plug #1 @ 9,027' TBGM. (ttl 287 jts) start drilling plug Pump Rate 3 bpm 4,800 psi,17/64 choke holding 3,075 psi back pressure on choke. Drilled through plug #1 in 23 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 36K, SO WT 28K, NEUT 33K, Torque drilling 1,000 PSI. FS 700 PSI. Continue TIH to frac plug #2. 0943 AM Tagged frac plug #2 @ 9,239' TBGM. (ttl 294 jts) start drilling plug Pump Rate 2.4 bpm 4,600 psi,17/64 choke holding 3,075 psi back pressure on choke. Drilled through plug #2 in 19 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 36K, SO WT 28K, NEUT 33K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #3. - 0500 AM Swivel picked up and tagged kill plug #1 @ 8,011' TBGM. start drilling plug Pump Rate 3 bpm 4,000 psi, holding 2700 psi back pressure on choke. Drilling on kill plug #1, Pump 10 bbl sweep and while rotating and working pipe. PU WT 44K, SO WT 40K, NEUT 42K, Torque drilling 1,000 PSI. FS 700 PSI. 0508 AM Tagged kill plug #1 @ 8,011' TBGM. start drilling plug Pump Rate 3 bpm 4,000 psi, holding 2,700 psi back pressure on choke. Drilled through kill plug #1 in 14 mins. Backside 2,700 PSI, Pump 10 bbl sweep and while rotating and working pipe. PU WT 44K, SO WT420K, NEUT 42K, Torque drilling 1,000 PSI. FS 700 PSI. Continue TIH to kill plug #2. 0536 AM Tagged kill plug #2 @ 8,050' TBGM. start drilling plug Pump Rate 3 bpm 4,000 psi,18/64 choke holding 2700 psi back pressure on choke. Drilled through kill plug #3 in 32 mins. Backside increased to 3,000 PSI, Pump 10 bbl sweep and while rotating and working pipe. PU WT 44K, SO WT 40K, NEUT 42K, Torque drilling 1,000 PSI. FS 1800 PSI. Continue TIH to frac

plug #1. - 0230 AM Saw liner top on JT 252 W/15? in, slid through liner top and continued in to kill plug #1, Tagged kill plug #1 on JT 255 with 10? in at 8,011? TBGM, Tie back and pick up swivel prepare to start drilling out kill plug #1. - 1055 AM Tagged frac plug #3 @ 9,441' TBGM. (ttl 299 jts) start drilling plug Pump Rate 2.4 bpm 4,600 psi,17/64 choke holding 3,025 psi back pressure on choke. Drilled through plug #3 in 40 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 36K, SO WT 28K, NEUT 33K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #4. 1222 PM Tagged frac plug #4 @ 9,622' TBGM. (ttl 306 jts) start drilling plug Pump Rate 2.4 bpm 4,600 psi,17/64 choke holding 3,000 psi back pressure on choke. Drilled through plug #4 in 31 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 36K, SO WT 28K, NEUT 33K, Torque drilling 1,700 PSI. FS 700 PSI. Continue TIH to frac plug #5. - 1343 PM Tagged frac plug #5 @ 9,835' TBGM. (ttl 313 jts) start drilling plug Pump Rate 2.4 bpm 4,600 psi,18/64 choke holding 2,650 psi back pressure on choke. 2.4 Bbl in/3 Bbl out. Drilled through plug #5 in 35 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 36K, SO WT 28K, NEUT 33K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #6. 1440 PM Tagged frac plug #6 @ 10,004' TBGM. (ttl 318 jts) start drilling plug Pump Rate 2.4 bpm 4,600 psi,18/64 choke holding 2,650 psi back pressure on choke. 2.4 Bbl in/3 Bbl out. Drilled through plug #6 in 35 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 36K, SO WT 28K, NEUT 33K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #7. - Continue TIH with BHA #1 to kill plug #1 - 2345 PM Packing on Weatherford pump started leaking, Swap back to Mountain States pump and start pumping at 1 ? BPM at 3,300 PSI and flowing back 1 ? BPM at 2,900 PSI. Continue circulating and rotating TBG while repacking Weatherford pump, EOT at 10,667?. - Pony rod on weatherford pump broke, Rig up Mountain States pump and start pumping at 1 ? BPM at 3,300 PSI and flowing back 1 ? BPM at 2,900 PSI. Continue circulating and rotating TBG while waiting on weatherford pump, ETA on Weatherford pump 2 hours 2230 PM Weatherford pump arrives MIRU, 2315 Continue to TIH to plug #10 - 1900 PM Tagged frac plug #9 @ 10,580' TBGM. (ttl 336 jts) start drilling plug Pump Rate 2.2 bpm 4,800 psi,20/64 choke holding 2,850 psi back pressure on choke. Drilled through plug #9 in 30 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 44K, SO WT 34K, NEUT 39K, Torque drilling 1,800 PSI. FS 700 PSI. Pony rod on weatherford pump broke, Rig up Mountain States pump and start pumping at 1 ? BPM at 3,300 PSI and flowing back 1 ? BPM at 2,900 PSI. Continue circulating and rotating TBG while waiting on weatherford pump, ETA on Weatherford pump 2 hours. - 14:45 PM Tagged frac plug #6 @ 10,004' TBGM. (ttl 318 jts) start drilling plug Pump Rate 2.4 bpm 4,600 psi,19/64 choke holding 2,675 psi back pressure on choke. Drilled through plug #6 in 32 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 39K, Torque drilling 1,700 PSI. FS 700 PSI. 1535 PM Continue TIH and tagged frac plug #7. PU 3?, Circulating 1 hole volume w/20Bbl sweep @ 2.1 bpm, 4750 PSI @ RPT. - 1700 PM Tagged frac plug #7 @ 10,216' TBGM. (ttl 325 jts) start drilling plug Pump Rate 2.4 bpm 4,700 psi,24/64 choke holding 2,500 psi back pressure on choke. Drilled through plug #7 in 31 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 39K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #8. 1755 PM Tagged frac plug #8 @ 10,384' TBGM. (ttl 330 jts) start drilling plug Pump Rate 2.2 bpm 4,700 psi,20/64 choke holding 2,850 psi back pressure on choke. Drilled through plug #9 in 35 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #9.

Daily Cost: $0
Cumulative Cost: $2,298,056

10/30/2012 Day: 21 **Completion**

Rigless on 10/30/2012 - DO Plugs 10 -19 w/10 Bbls sweeps. Cont in hole CO to PBTD. Circulate two BTM up w/treated wtr. - 0950 AM Tagged frac plug #15 @ 11,714' TBGM. (ttl 373 jts) start drilling plug Pump Rate 2.5 bpm 4,700 psi 17/64 choke holding 2,625 psi back pressure on choke. Drilled through plug #15 in 45 mins. Pump 10 bbl sweep and while

rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,900 PSI. FS 700 PSI. Continue TIH to frac plug #16. 1100 AM Tagged frac plug #16 @ 11,948' TBGM. (ttl 380 jts) start drilling plug Pump Rate 2.5 bpm 4,700 psi 15/64 choke holding 2,700 psi back pressure on choke. Drilled through plug #16 in 42 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,900 PSI. FS 700 PSI. Continue TIH to frac plug #17. - 1205 PM Tagged frac plug #17 @ 12,159' TBGM. (ttl 387 jts) start drilling plug Pump Rate 2.5 bpm 4,700 psi 16/64 choke holding 2,700 psi back pressure on choke. Drilled through plug #17 in 45 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 50K, SO WT 26K, NEUT 42K, Torque drilling 1,900 PSI. FS 700 PSI. Continue TIH to frac plug #18. 1345 PM Tagged frac plug #18 @ 12,327' TBGM. (ttl 392 jts) start drilling plug Pump Rate 3.0 bpm 4,700 psi 15/64 choke holding 2,725 psi back pressure on choke. Drilled through plug #18 in 35 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 50K, SO WT 26K, NEUT 42K, Torque drilling 1,900 PSI. FS 700 PSI. Continue TIH to frac plug #19. - 1510 PM Tagged frac plug #19 @ 12,534' TBGM. (ttl 399 jts) start drilling plug Pump Rate 3.0 bpm 4,700 psi 15/64 choke holding 2,725 psi back pressure on choke. Drilled through plug #19 in XX mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 50K, SO WT 26K, NEUT 42K, Torque drilling 1,900 PSI. FS 700 PSI. Continue TIH to CO to PBTD. - 1610 PM Tagged plug PBTD at 12,778? TBGM. (ttl 406 Jts) pump 20 Bbl sweep, 40 Bbl spacer, 40 Bbl sweep, 20 Bbl spacer , circulating two bottoms up w/700 Bbls treated water consisting Biocide, Clay Stabilizer & corrosion inhibitor. Pumping Rate 3.2 bpm 4,900 psi, 18/64 choke holding 2,700 psi back pressure on choke returning 3.5 BPM. While rotating and working pipe. PU WT 50K, SO WT 26K, NEUT 42K - 2030 PM Circulated 2 bottoms up and circulated clean recovering plug parts, 15 min SICP 2,700 PSI. lay down swivel, pull out of hole laying down TBG to 4,826? with 153 JTS left in. 2345 While pulling out of hole got to 8,568?on JT 272 PU WT was 42K and started dragging pulled up to 80K and slacked back down with no issues, picking up swivel to start rotating and circulating bottoms up. - 0718 AM Tagged frac plug #13 @ 11,350' TBGM. (ttl 361 jts) start drilling plug Pump Rate 2.5 bpm 4,700 psi,20/64 choke holding 2,600 psi back pressure on choke. Drilled through plug #13 in 33 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #14. 0826 AM Tagged frac plug #14 @ 11,564' TBGM. (ttl 368 jts) start drilling plug Pump Rate 2.5 bpm 4,700 psi,15/64 choke holding 2,650 psi back pressure on choke. Drilled through plug #14 in 1 hr. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,900 PSI. FS 700 PSI. Continue TIH to frac plug #15. - 0145 AM Weatherford pump back up and running Pump Rate 2.3 bpm 4,800 psi,20/64 choke holding 2,850 psi back pressure on choke. PU WT 44K, SO WT 34K, NEUT 39K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to plug #10 0143 AM Tagged frac plug #10 @ 10,797' TBGM. (JT 343 jts) start drilling plug Pump Rate 2.4 bpm 4,900 psi,20/64 choke holding 2,900 psi back pressure on choke. Drilled through plug #10 in 25 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #11. 0250 AM Tagged frac plug #11 @ 10,968' TBGM. (JT 349 jts) start drilling plug Pump Rate 2.4 bpm 4,900 psi,20/64 choke holding 2,900 psi back pressure on choke. Drilled through plug #11 in 25 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #12. - 2345 PM Packing on Weatherford pump started leaking, Swap back to Mountain States pump and start pumping at 1 ? BPM at 3,300 PSI and flowing back 1 ? BPM at 2,900 PSI. Continue circulating and rotating TBG while repacking Weatherford pump, EOT at 10,667?. - 0615 AM Circulated clean recovered plug Parts, Tagged frac plug #12 @ 11,180' TBGM. (JT 355 jts) start drilling plug Pump Rate 2.5 bpm 4,700 psi,20/64 choke holding 2,600 psi back pressure on choke. Drilled through plug #12 in 30 mins. Pump 10 bbl sweep and while rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K, Torque drilling 1,800 PSI. FS 700 PSI. Continue TIH to frac plug #13. - 0400 AM Tagged plug 12 at 11,180? TBGM JT 255 pump two 10 BBL sweeps and circulate bottoms up, Pump Rate 2.4 bpm 4,900 psi,20/64 choke holding 2,800 psi back pressure on choke returning 2.7 BPM. While rotating and working pipe. PU WT 42K, SO WT 34K, NEUT 38K

Cumulative Cost: $2,369,945

10/31/2012 Day: 22 **Completion**

Rigless on 10/31/2012 - Circulate hole clean and Pulled up hole to 4,826'. RU & Pressure Test Snubbing Unit. ND snubbing unit, RU JW WL. - RD rig floor. ND 7-1/16" 5K annulas BOP. RU Mt States Snubbing Unit. - 1100 PM PT Snubbing Stack as follow: Function & pressure test bottom 2-3/8? pipe rams to 250 psig for low, for 5 min w/manual frac valve closed. Test OK. BO pressure. Test same to 5,000 psig for high, for 10 min. Test OK. BO pressure. Function & pressure test blind rams, manual equalizing line (closed) to 250 psig for low, for 5 min w/manual frac valve closed. Test OK. BO pressure. Test same to 5,000 psig for high, for 10 min. Test OK. BO pressure. Function & pressure test top 2-3/8? pipe rams to 250 psig for low, for 5 min w/manual frac valve closed. Test OK. BO pressure. Test same to 5,000 psig for high, for 10 min. Test OK. BO pressure. Function & pressure test annular BOP to 250 psig for low, for 5 min w/manual frac valve closed. Test OK. BO pressure. Test same to 3,500 psig for high, for 10 min. Test OK. BO pressure. Pressure test complete. Preparing to Snub out @ RPT - 1352 PM Unsecure lock-in-pin. Pick up tbg w/tbg hanger. Snub OOH. 1820 PM OOH w/153 Jts 2-2/3? 5.95#, PH-6 ? P110 TBG, double flapper sub, bit sub, 3-3/4? Junk mill. Mill wore down , nothing inside circulating ports. Mill had 4 ? 3/8? circulating ports. RD Mt States Snubbing Unit. Preparing to RU JW WL to run GR/JB and set 7? Pker. - 1930 PM Snubbing unit rigged down RU JW wireline prepare to run 6? GR/JB - 2100 PM JW Wireline lubricator rigged up and pressure testing completed, RIH with JB&GR assembly set down on liner top at 7,918', and tied into MJ at 6,185' - 91' pull out of hole. 2300 PM JB&GR at surface make up 7" Baker Hornet Packer, pressure test lubricator 250 low and 5,000 psi high test good RIH with 7" Baker Hornet Packer to set at 7,872', 1 joint above liner top, with 2,800 PSI on well, - 0545 AM EOT at 4,826? with 153 JTS in with SICP 2,800 PSI. Land TBG and prepare to rig up mountain states snubbing unit - 0245 AM Circulated 400 BBLS around with two 20 BBL gel sweeps while rotating and working TBG, Pipe moving freely at 40K hang swivel back and continue to tooh laying down TBG SICP 2,700 PSI. - 2345 While pulling out of hole got to 8,568?on JT 272 PU WT was 42K and started dragging pulled up to 80K and slacked back down with no issues, picking up swivel to start rotating and circulating bottoms up. 0015 AM Started rotating and working TBG with PU WT 42K, SO WT 38K with no issues picking up or slacking off, Circulating 3 BPM at 4,800 PSI, Flowing 3 BPM at 2,600 PSI.
Daily Cost: $0
Cumulative Cost: $2,408,231

11/1/2012 Day: 23 **Completion**

Rigless on 11/1/2012 - RIH w/Production Tbg, Land tbg hanger. Test back side. NU 10K Production Tree. RDMO Mt States WOR & Equipment. Test Production Tree. Pump plug out. - 1445 PM Installed 7-1/16? x 2-7/8? Tbg Hanger. Land tbg hanger and could not latch onto Packer. POOH, Add 2? 2-7/8? Pup Jt below first Jt. RIH, land tbg hanger and latch onto Packer w/16,000# compresstion. Secure lock-in-pin. New Tbg Details as follow: Tbg Hanger, 1 Jt 2-7/8? 6.5#, L-80 EUE 8rd tbg, 1 ? 2? Pup Jt 2-7/8? 6.5#, L-80 EUE 8rd, 244 Jts 2-7/8? 6.5#, L-80 EUE 8rd tbg, ?BX Profile Nipple w/2.313? ID top @ 7,836.19 to 7,837', 1 Jt 2-7/8? 6.5#, L-80 8rd tbg, L-10 On/Off tool overshot (skit) for 7?. EOT@ 7,888.60. 1500 PM Loaded 6 Jts 2-7/8" 6.5#, L-80 8rd Tbg (192.31', Return Tbg to Runners yard. Loaded 415 Jts 2-3/8" 5.95#, PH-6 - P-110 Tbg (Newfield WS), 2 light pipe racks & 1 heavey set of pipe rack, return to Runners yard, Newfield Blue box. - performed Negitive pressure test on PKR, changed out 2 3/8" rams to 2 7/8" pipe rams, start pressure testing pipe rams to 250 PSI low and 5,000 PSI high, Prepare to pick up TBG and on/off assembly. 0630 AM Pressure testing completed tested good, tested to 250 PSI low and 5,000 PSI high, prepare to pick up Baker on/off tool and 2 7/8? production tbg. - 0700 AM Pick up Baker L-10 on off tool and 1 JT 2 7/8" 6.5 L-80 EUE

Tbg, 2.313" X-Nipple, and 2 7/8" 6.5# L-80 TBG, Start in hole with tbg and BHA assembly - No Activity - Test backside to 250 psig for low, for 5 min. Test OK. BO pressure. Test same to 5,000 psi for high, for 10 min. Test OK. SWI w/blind rams. ND 5K Annular BOP, single 7-1/16" 5K BOP, 7-1/16" 5K flow cross. Installed TWCV in hanger. Test TWCV to 250 psig for low, for 5 min w/blind rams closed. Test OK. BO pressure. Test same to 5,000 psi for high, for 10 min. Test OK. ND double 7-1/16" 5K BOP, 5K x 10K 7-1/16" DSA, FMC 7-1/16" 10K manual frac valve. - 0245 AM Tool string at surface RDMO JW wireline unit, Baker 10K hornet packer set at 7,872?, SICP 2,700 PSI. open up to tank and bleed off slowly through choke, Prepare to change out 2 3/8? pipe rams to 2 7/8? and pressure test 250 PSI. low and 5,000 PSI high. - RU Weatherford pump line on top of Production Tree. Pump plug out @ 4,700 psi at 1/4 BPM. Pumped 55 Bbls of treated water consisting Biocide, Clay Stabilizer & corrosion inhibitor Bbls @ 3 BPM at 3,800 psi. ISIP = 3,000 psi. SWI. Turn well over to Production @ 2210 pm. - NU 10K Production Tree. RDMO Mt States WOR & equipment away fr/well. Test void to 10,000# for 5 min. Test OK. Test all valve on Production Tree to 250 for low, for 5 min, same to 10,000 psi for high for 10 min. All valves Test OK, all w/charts. BO pressure. - 1130 Tag at 7,865' TBGM with 247 jts 2 7/8" tbg 14.30' out and BHA as follows: On/Off tool overshot (skit) for 7" x 2 7/8", 1 jt 2 7/8" 6.5# L-80 8rd EUE tubing, 2 7/8" X 2.313 X nipple, 246 jts of 2 7/8" 6.5# L-80 8rd tubing, Latch onto Packer @ 7,866.58. PU Wt 58K, NEUT Wt 56K & SO Wt 52K. PU 5K over string Wt. Inguage slack off with 13,000# compresstion on packer. Release off packer, LD 1 Jt. No tubing subs needed. Total of 246 jts of 2 7/8" 6.5# L-80 8rd EUE tubing. RU and circulated 325 bbls packer fluid and Biocide on backside of tubing.
Daily Cost: $0
Cumulative Cost: $2,568,832

11/2/2012 Day: 24 **Completion**

Rigless on 11/2/2012 - All vendor equipment released & Clean location - No Activity - 0852 PM Released RBS X/Over subs, Pure Flow back equipment, Knight BOP stack, FMC 10K manual frac valve. 4-C on location to suck cellar out, clean well head off, released Select man lift, well heater. Released Out back light plants. 4-C hauling water to disposal for flow back tanks. Rustin Mair on location to loaded Pure equipment. Released Graco TIW valve, X/O sub & 2-3/8" elevator. Clean location. Turn Pad over to Production.
Daily Cost: $0
Cumulative Cost: $2,595,559

11/11/2012 Day: 25 **Completion**

Rigless on 11/11/2012 - Capture costs in DCR - Capture costs in DCR
Daily Cost: $0
Cumulative Cost: $2,680,688

12/9/2012 Day: 27 **Completion**

Rigless on 12/9/2012 - Capture Costs in DCR - Capture Costs in DCR. Western Water Solutions Tk#15150,15140,15145,15141,15146,15153($1589)
Daily Cost: $0
Cumulative Cost: $2,708,989

Pertinent Files: Go to File List