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
Tommy 14-7-3-2WH

2. TYPE OF WORK
DRILL NEW WELL ☒ REENTER P&A WELL ☐ DEEPEN WELL ☐

3. FIELD OR WILDCAT
NORTH MYTON BENCH

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-H62-6269

11. MINERAL OWNERSHIP
FEDERAL ☐ INDIAN ☒ STATE ☐ FEE ☐

12. SURFACE OWNERSHIP
FEDERAL ☐ INDIAN ☐ STATE ☐ FEE ☒

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
Leon E. Sprouse

14. SURFACE OWNER PHONE (if box 12 = 'fee')
435-890-8001

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
P.O. Box 315, ,

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	692 FSL 2364 FEL	SWSE	7	3.0 S	2.0 W	U
Top of Uppermost Producing Zone	660 FSL 1980 FWL	SESW	7	3.0 S	2.0 W	U
At Total Depth	660 FNL 1980 FWL	NENW	7	3.0 S	2.0 W	U

21. COUNTY
UINTAH

22. DISTANCE TO NEAREST LEASE LINE (Feet)
692

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: 13050 TVD: 9035

27. ELEVATION - GROUND LEVEL
5189

28. BOND NUMBER
B001834

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
Surf	17.5	13.375	0 - 1500	54.5	J-55 ST&C	8.4	Varocem	240	3.33	11.0
							Varocem	210	1.9	13.0
I1	12.25	9.625	0 - 6478	40.0	N-80 Buttress	11.5	Halliburton Premium , Type Unknown	659	3.53	11.0
							50/50 Poz	563	1.29	14.0
Prod	8.75	5.5	0 - 13050	20.0	P-110 Other	14.5	50/50 Poz	113	1.29	14.5
							50/50 Poz	1030	1.29	14.5

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** 12/17/2013	**EMAIL** starpoint@etv.net

API NUMBER ASSIGNED 43047542310000 **APPROVAL**

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Newfield Production Company
14-7-3-2WH
Surface Hole Location: 692' FSL, 2364' FEL, Section 7, T3S, R2W
Bottom Hole Location: 660' FNL, 1980' FWL, Section 7, T3S, R2W
Duchesne County, UT

Drilling Program

1. Formation Tops

Uinta	surface
Green River	3,541'
Garden Gulch member	6,462'
Uteland Butte member	8,757'
Lateral TD	9,035' TVD / 13,050' MD

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

Base of moderately saline	1,772'		(water)
Green River	6,462'	- 8,757'	(oil)
Uteland Butte member	8,757'	- 9,035'	(oil)

3. Pressure Control

Section	BOP Description
Surface	Diverter
Intermediate	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.
Prod/Prod Liner	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

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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'	--	--	Weld	--	--	--	--	--	--
20									--	--	--
Surface	0'	1,500'	54.5	J-55	STC	8.33	8.4	14	2,730	1,130	514,000
13 3/8									2.89	2.63	6.29
Intermediate	0'	8,384'	40	N-80	BTC	11	11.5	15	5,750	3,090	916,000
9 5/8		8,478'							1.19	1.23	2.73
Production	0'	9,035'	20	P-110	BTC	14	14.5	16	12,360	11,080	641,000
5 1/2		13,050'							2.37	2.03	2.46

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Assumptions:

Surface casing MASP = (frac gradient + 1.0 ppg) - (gas gradient)
Intermediate casing MASP = (reservoir pressure) - (gas gradient)
Production casing MASP = (reservoir pressure) - (gas gradient)
Intermediate collapse calculations assume 50% evacuated
Maximum intermediate csg collapse load assumes loss of mud to a fluid level of 4,192'
Intermediate csg run from surface to 8,384' and will not experience full evacuation
Production csg run from surface to TD will isolate intermediate csg from production loads
Production csg withstands burst and collapse loads for anticipated production conditions
Surface & production collapse calcs assume fully evacuated casing w/ a gas gradient
All tension calculations assume air weight of casing
Gas gradient = 0.15 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	24	60'	Class G w/ 2% KCl + 0.25 lbs/sk Cello Flake	66 / 57	15%	15.8	1.17
Surface Lead	17 1/2	1,000'	Varicem (Type III) + .125 lbs/sk Cello Flakes	799 / 240	15%	11.0	3.33
Surface Tail	17 1/2	500'	Varicem (Type III) + .125 lbs/sk Cello Flakes	399 / 210	15%	13.0	1.9
Intermediate Lead	12 1/4	6,462'	HLC Premium - 35% Poz/65% Class G + 10% bentonite	2,328 / 659	15%	11.0	3.53
Intermediate Tail	12 1/4	2,016'	50/50 Poz/Class G + 1% bentonite	726 / 563	15%	14.0	1.29
Production Lead	8 3/4	500'	50/50 Poz/Class G + 1% bentonite	145 / 113	15%	14.5	1.29
Production Tail	8 3/4	4,572'	50/50 Poz/Class G + 1% bentonite	1328 / 1030	15%	14.5	1.29

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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 5.5" production string will be run from surface to TD and cemented back to 500' above the intermediate casing shoe. The cement slurries will be adjusted for hole conditions and blend test results. The lateral will be cemented past the setback.

The wellbore will cross the heal setback @ 9,128' MD
The float collar will be @ 13,050' MD
This well will not be perforated or produced outside the legal setbacks.

6. Type and Characteristics of Proposed Circulating Medium

Interval	Description
Surface - 1,500'	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.

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1,500' - 8,478' A water based mud system will be utilized. Hole stability may be improved with additions of KCl or a similar inhibitive substance. In order to control formation pressure the system will be weighted with additions of bentonite, and if conditions warrant, with barite.

Anticipated maximum mud weight is 11.5 ppg.

8,478' - TD One of two possible mud systems may be used depending on offset well performance on ongoing wells:
A water based mud: 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.

-or-

A diesel based OBM system: with an oil to water ratio between 70/30 and 80/20. Emulsifiers and wetting agents will be used to maintain adequate mud properties. A water phase salinity will be maintained in the range of 25% using CaCl (Calcium Chloride). All cuttings will be dried and centrifuged so that they can be easily transferred to a lined cuttings pit with little to no free fluid on them. The cuttings will be mixed with fly ash prior to transportation to a location on Newfield owned surface. Once on Newfield owned surface, the cuttings will be treated with the previously approved FIRMUS process and used as a construction material on future location and/or roads on Newfield owned surface. The cuttings may also be transported to a state approved disposal facility.

Anticipated maximum mud weight is 14.5 ppg.

7. Logging, Coring, and Testing

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

Cores: As deemed necessary.

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

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8. Anticipated Abnormal Pressure or Temperature

Maximum anticipated bottomhole pressure will be approximately equal to total depth (feet) multiplied by a 0.73 psi/ft gradient.

9,035' x 0.73 psi/ft = 6577.5 psi

No abnormal temperature is expected. No H_2S is expected.

9. Other Aspects

The lateral of this well will target the Uteland Butte member of the Green River formation
After setting 9-5/8" casing, an 8-3/4" vertical hole will be drilled to a kick off point of 8,508'
Directional tools will then be used to build to 87.20 degrees inclination.
The lateral will be drilled to the bottomhole location shown on the plat. A 5-1/2" longstring will be run from surface to TD and cemented in place.

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

If oil based mud (OBM) is used and If Newfield owns the surface rights on the same drilling site at a location where construction is desired, the cuttings may be used for construction by a Firmus® process at that location. Otherwise, after the cuttings have been made safe for transport as described in paragraph 6, they will be transported to another location on which Newfield owns surface rights and there mixed, as part of a Firmus® process, with at least one additional chemical that will convert them to a temporarily uncured cementitious mixture that will be placed and shaped into a temporary desired final structure that will spontaneously harden within seven days after placement to form the desired structure. Samples of the temporary desired final structure may be taken for testing as described below (after the samples have hardened), or samples of the starting pretreated cuttings and mud will be taken during the construction and later mixed in a laboratory, molded, and cured to simulate the final structure as well as reasonably possible. Either these laboratory-made simulations of the final structure or samples of the temporary mixture itself after hardening, will be mechanically tested directly to determine their unconfined compressive strength and their hydraulic conductivity. Leachates of the mechanically tested structures themselves or of finer particles made by crushing and size-grading of the mechanically tested structures themselves to a specified particle size range will be analyzed, according to specified methods, for their contents of arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, zinc, benzene, total petroleum hydrocarbons (TPH), and chlorides, and the pH of these leachates will also be measured. The results of all these tests will be reported by Newfield to UDOGM at intervals as requested, along with the latitude and longitude (or other comparable location data) of the site of the useful constructions built.

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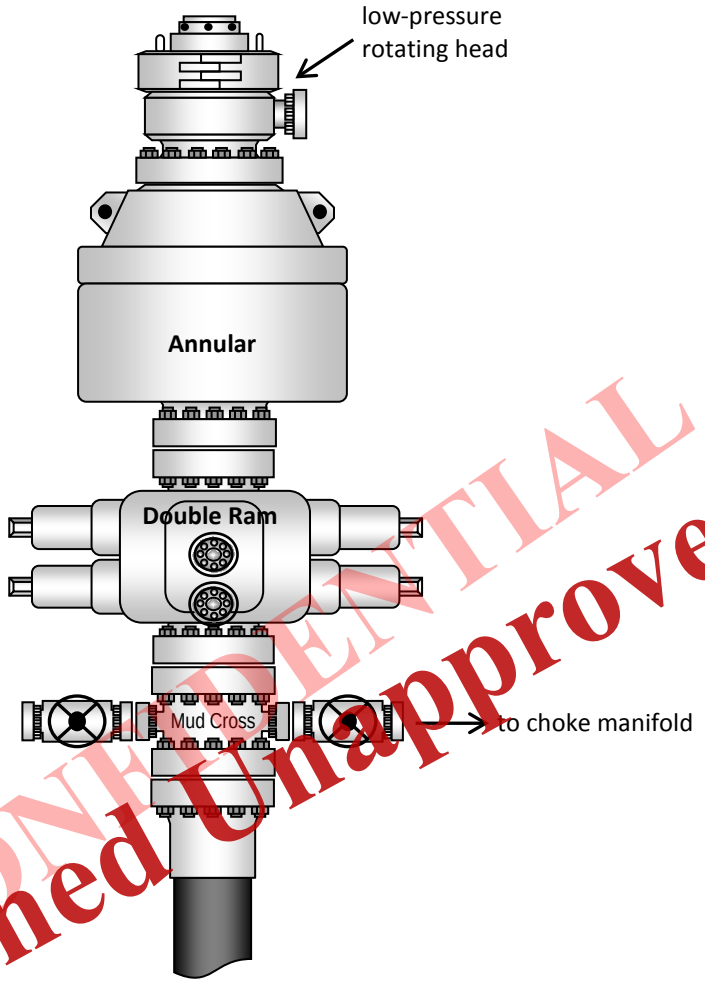
Typical 5M BOP stack configuration



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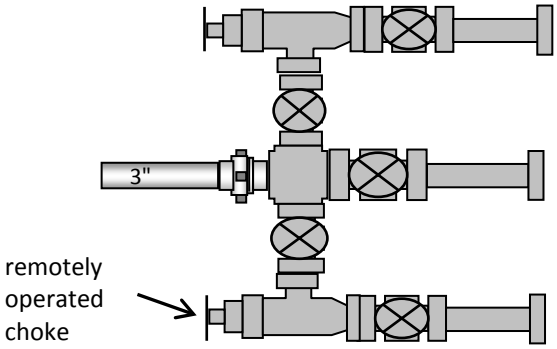
Typical 5M choke manifold configuration



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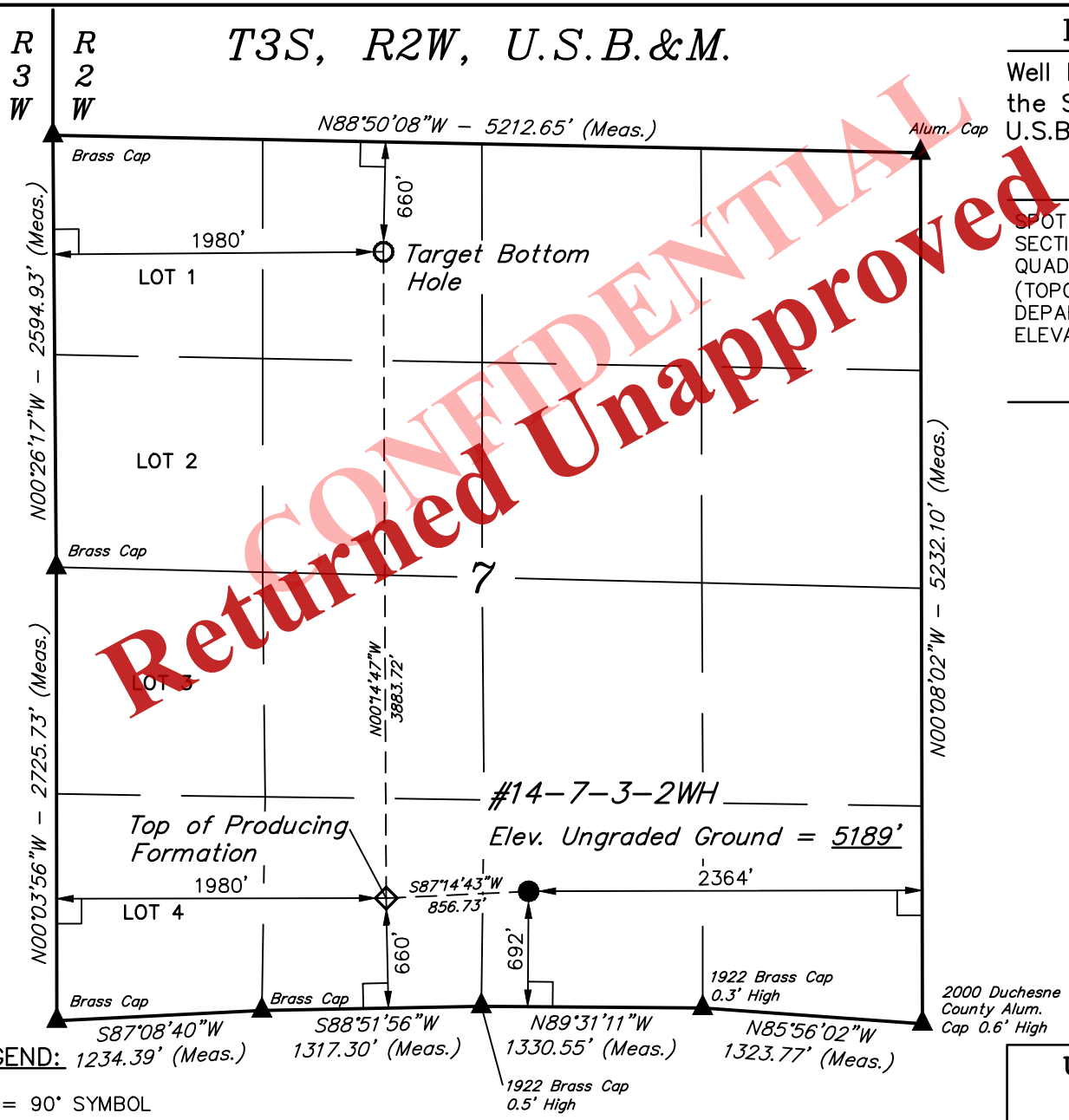
NEWFIELD EXPLORATION COMPANY

Well location, #14-7-3-2WH, located as shown in the SW 1/4 SE 1/4 of Section 7, T3S, R2W, U.S.B.&M., Duchesne County, Utah.

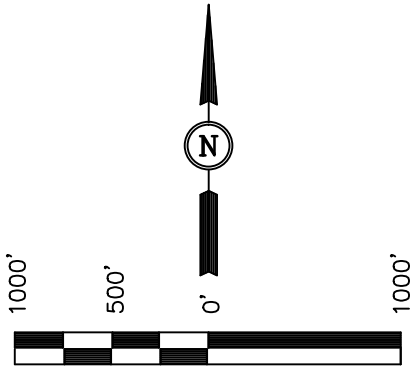


BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHEAST CORNER OF SECTION 20, T3S, R2W, U.S.B.&M. TAKEN FROM THE MYTON, QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5148 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

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
REGISTRATION NO. 161319
STATE OF UTAH

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH 07-18-13

LEGEND:

└ = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (TOP OF PRODUCING FORMATION)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°14'30.78" (40.241883)	LATITUDE = 40°13'52.41" (40.231225)	LATITUDE = 40°13'52.82" (40.231339)
LONGITUDE = 110°09'16.91" (110.154697)	LONGITUDE = 110°09'16.68" (110.154633)	LONGITUDE = 110°09'05.65" (110.151569)
NAD 27 (TARGET BOTTOM HOLE)	**NAD 27 (TOP OF PRODUCING FORMATION)**	**NAD 27 (SURFACE LOCATION)**
LATITUDE = 40°14'30.93" (40.241925)	LATITUDE = 40°13'52.56" (40.231267)	LATITUDE = 40°13'52.97" (40.231381)
LONGITUDE = 110°09'14.37" (110.153992)	LONGITUDE = 110°09'14.13" (110.153925)	LONGITUDE = 110°09'03.10" (110.150861)

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST – VERNAL, UTAH 84078
(435) 789-1017

SCALE	DATE SURVEYED:	DATE DRAWN:
1" = 1000'	04-25-13	06-19-13
PARTY: M.A. C.K. C.A.G.	REFERENCES: G.L.O. PLAT	
WEATHER: HOT	FILE: NEWFIELD EXPLORATION COMPANY	

Received: December 17, 2013

NEWFIELD EXPLORATION COMPANY
#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH
SECTION 7, T3S, R2W, U.S.B.&M.

PROCEED IN A NORTHEASTERLY, THEN NORTHERLY DIRECTION FROM MYTON, UTAH ALONG HIGHWAY 40 APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THIS ROAD AND COUNTY ROAD 64 TO THE WEST; TURN LEFT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 2.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN RIGHT AND PROCEED IN A NORTHWESTERLY, THEN WESTERLY DIRECTION APPROXIMATELY 2.8 MILES TO THE BEGINNING OF THE PROPOSED ACCESS TO THE NORTH; FOLLOW ROAD FLAGS IN A NORTHERLY, THEN WESTERLY DIRECTION APPROXIMATELY 473' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM MYTON, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 6.3 MILES.

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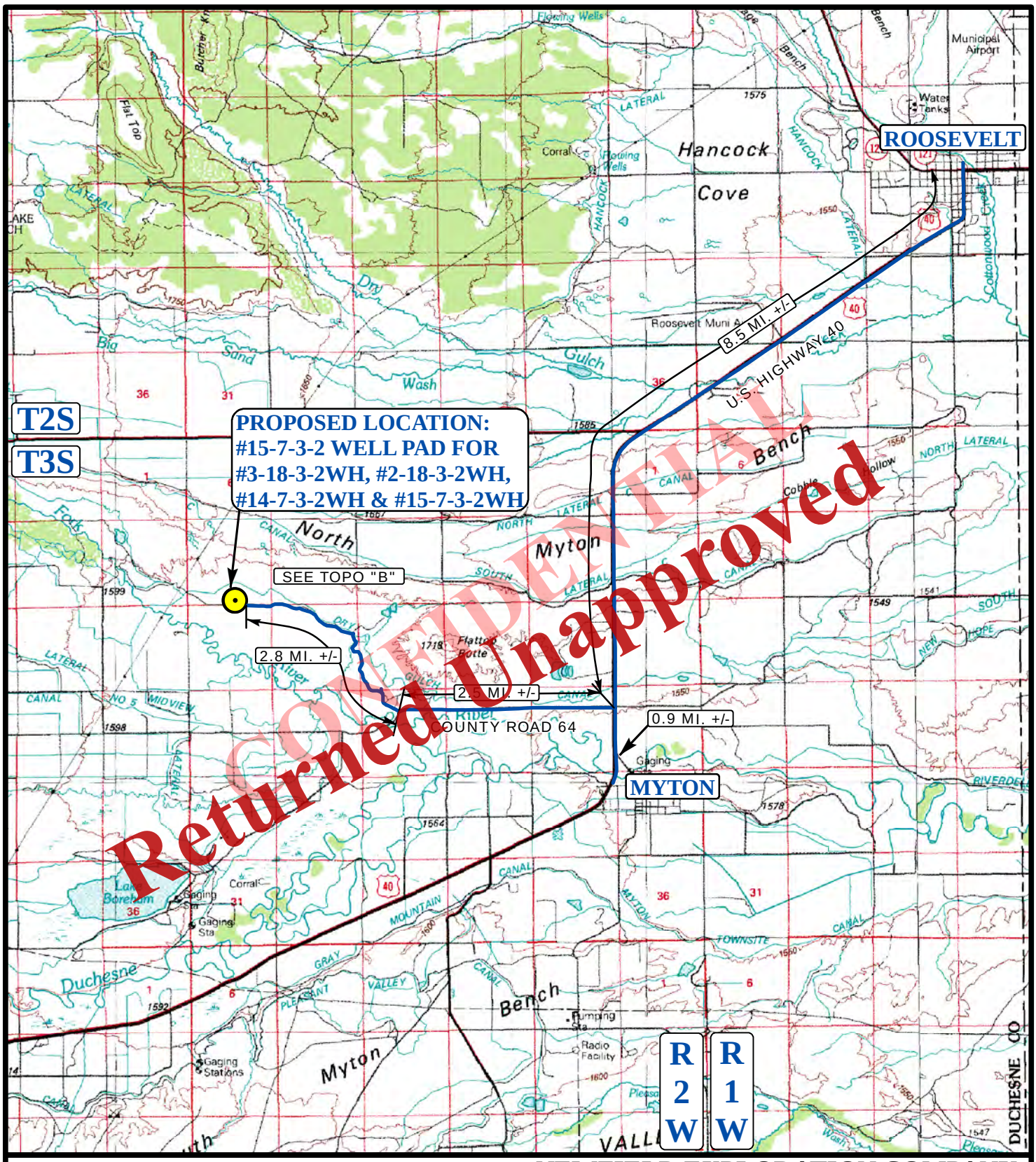


LEGEND:

PROPOSED LOCATION

N

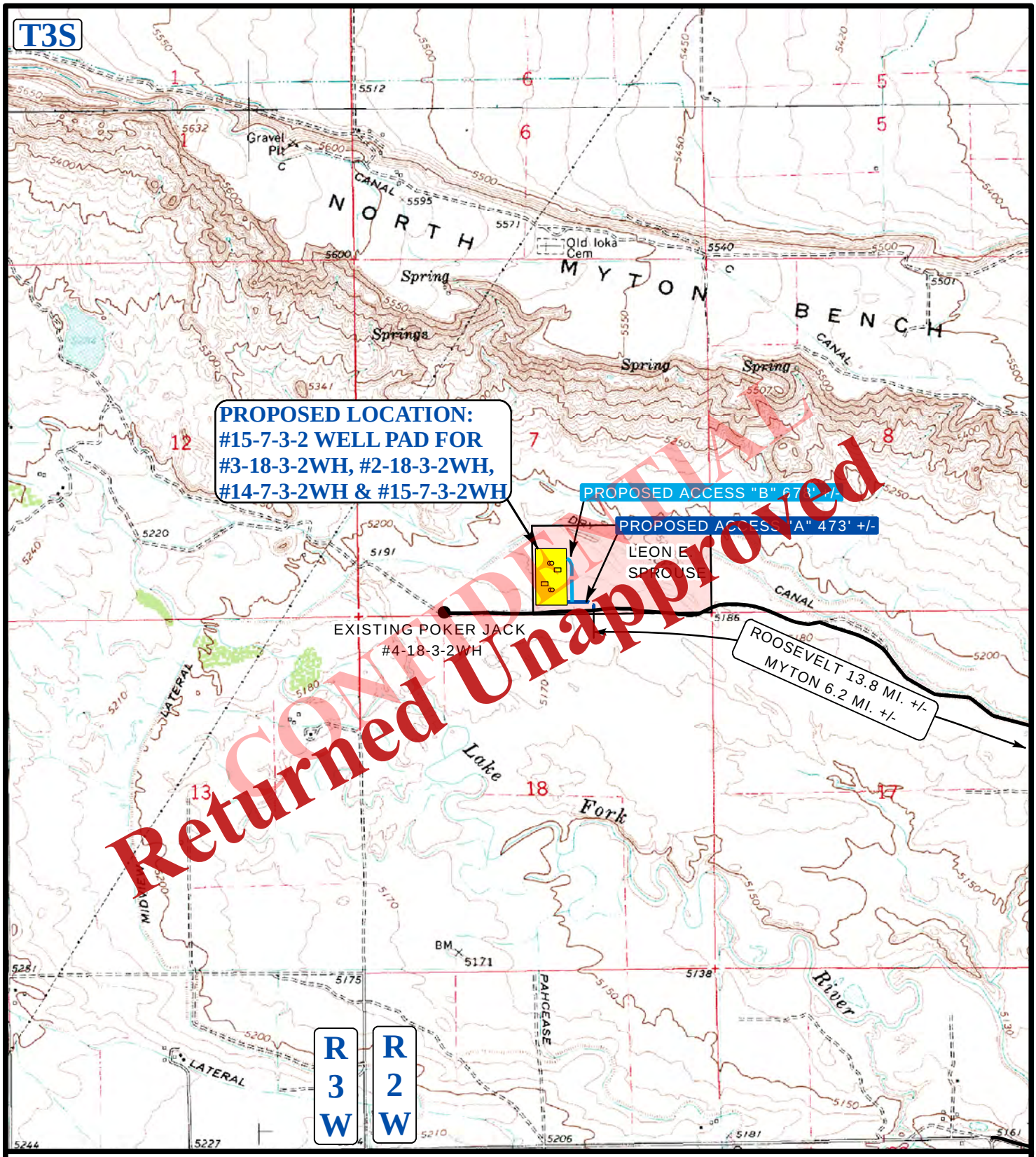
NEWFIELD EXPLORATION COMPANY

#15-7-3-2 WELL PAD FOR #3-18-3-2WH,
#2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH
SECTION 7, T3S, R2W, U.S.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

ACCESS ROAD MAP	07 MONTH	15 DAY	13 YEAR	A TOPO
SCALE: 1:100,000	DRAWN BY: S.O.	REVISED: 00-00-00		

Received: December 17, 2013



LEGEND:

EXISTING ROADS
PROPOSED ACCESS ROAD "A"
PROPOSED ACCESS ROAD "B"

N

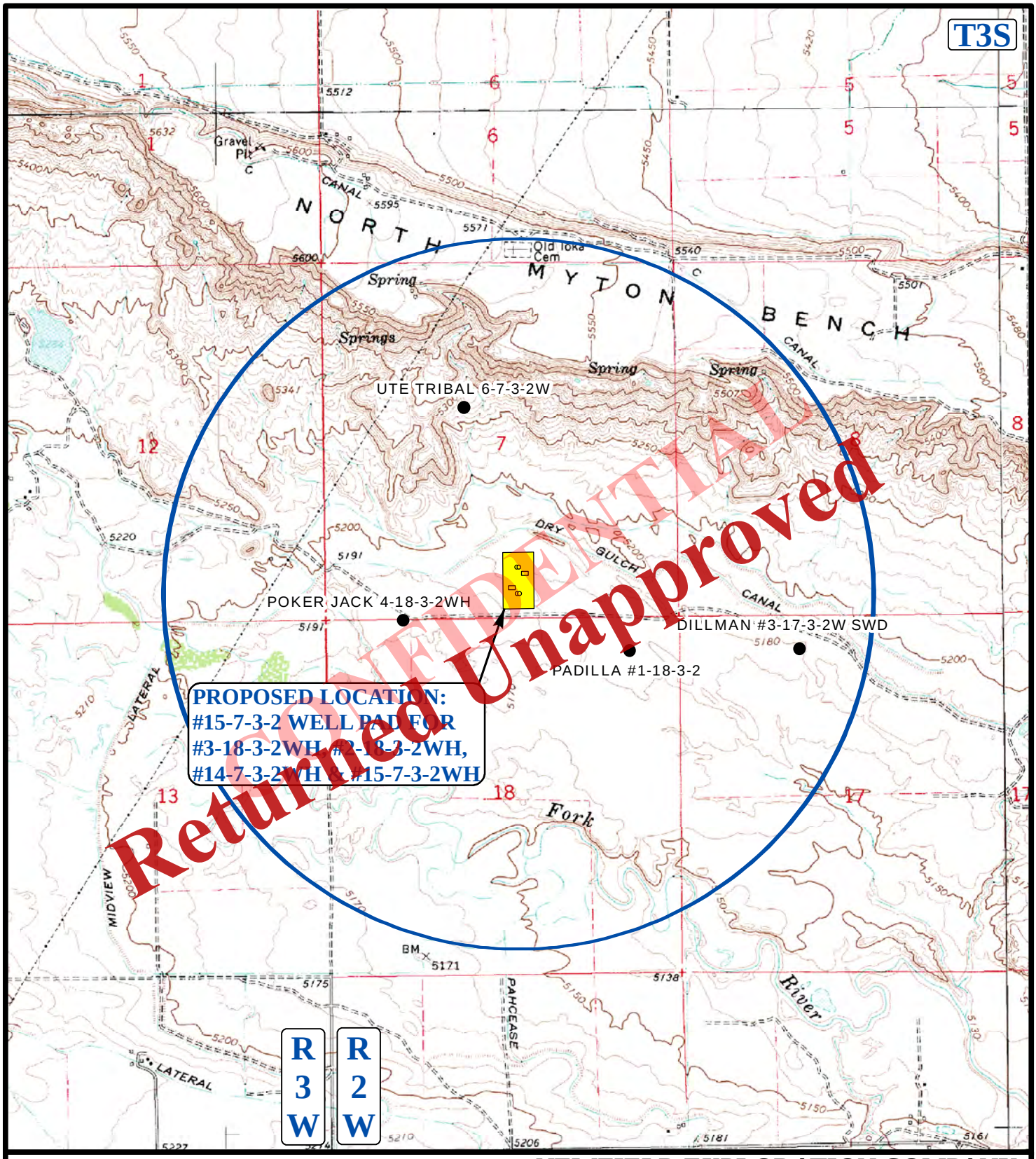
NEWFIELD EXPLORATION COMPANY

#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH
SECTION 7, T3S, R2W, U.S.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

ACCESS ROAD MAP	07 MONTH	15 DAY	13 YEAR	B TOPO
SCALE: 1"= 2000'	DRAWN BY: S.O.	REVISED: 00-00-00		

Received: December 17, 2013



LEGEND:

- DISPOSAL WELLS
- PRODUCING WELLS
- ABANDONED WELLS
- SHUT IN WELLS
- TEMPORARILY ABANDONED

N

NEWFIELD EXPLORATION COMPANY

#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH
SECTION 7, T3S, R2W, U.S.B.&M.
SW 1/4 SE 1/4

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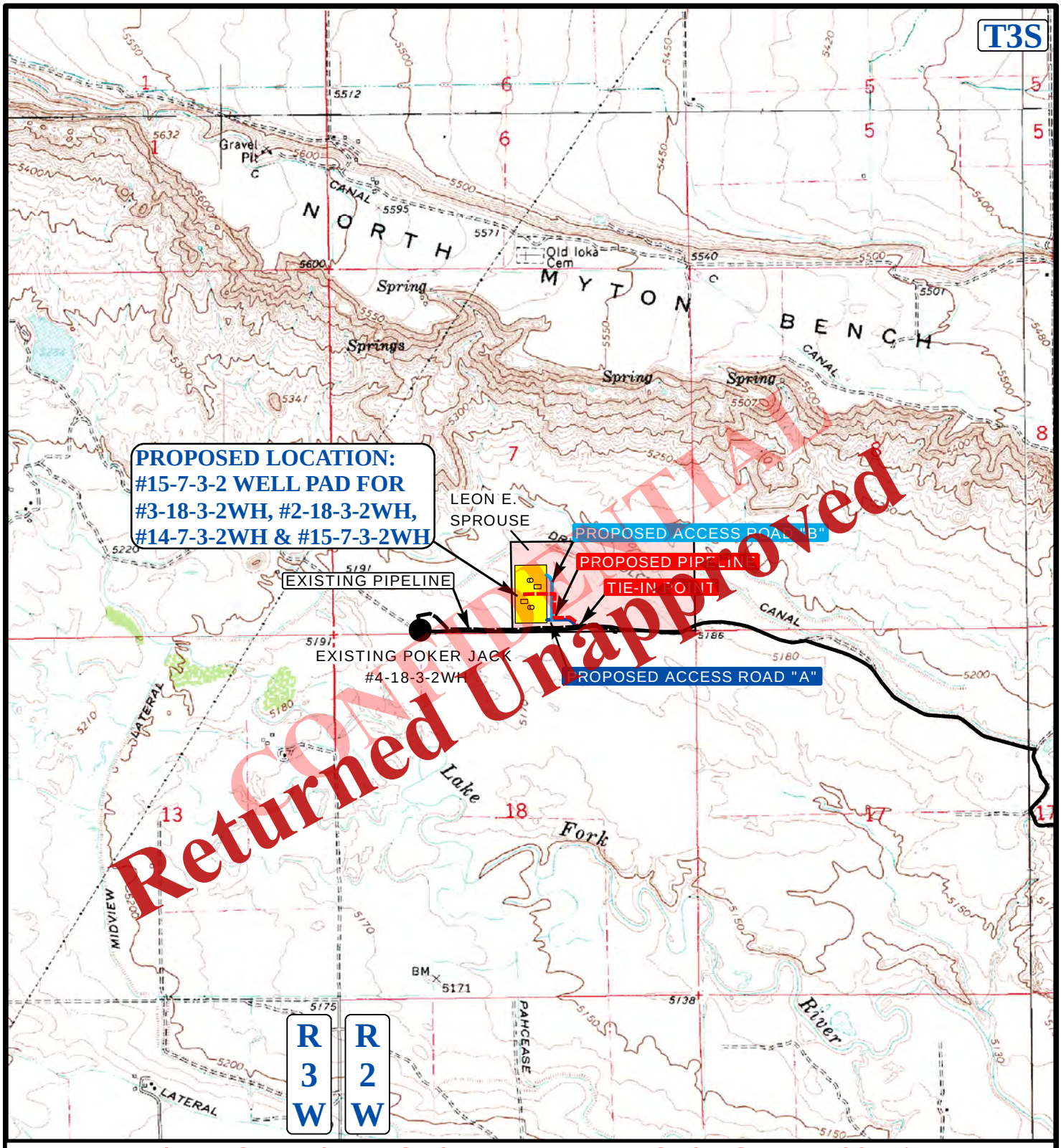
TOPOGRAPHIC MAP	07 MONTH	15 DAY	13 YEAR	C TOPO
SCALE: 1"= 2000'	DRAWN BY: S.O.	REVISED: 00-00-00		

Received: December 17, 2013



APPROXIMATE TOTAL PIPELINE DISTANCE = 1,198' +/-

LEGEND:

- EXISTING ROADS
- PROPOSED ACCESS ROAD "A"
- PROPOSED ACCESS ROAD "B"
- EXISTING PIPELINE
- PROPOSED PIPELINE

N

NEWFIELD EXPLORATION COMPANY

#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH
SECTION 7, T3S, R2W, U.S.B.&M.
SW 1/4 SE 1/4

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP	07 MONTH	15 DAY	13 YEAR	D TOPO
SCALE: 1"= 2000'	DRAWN BY: S.O.	REVISED: 00-00-00		

Received: December 17, 2013

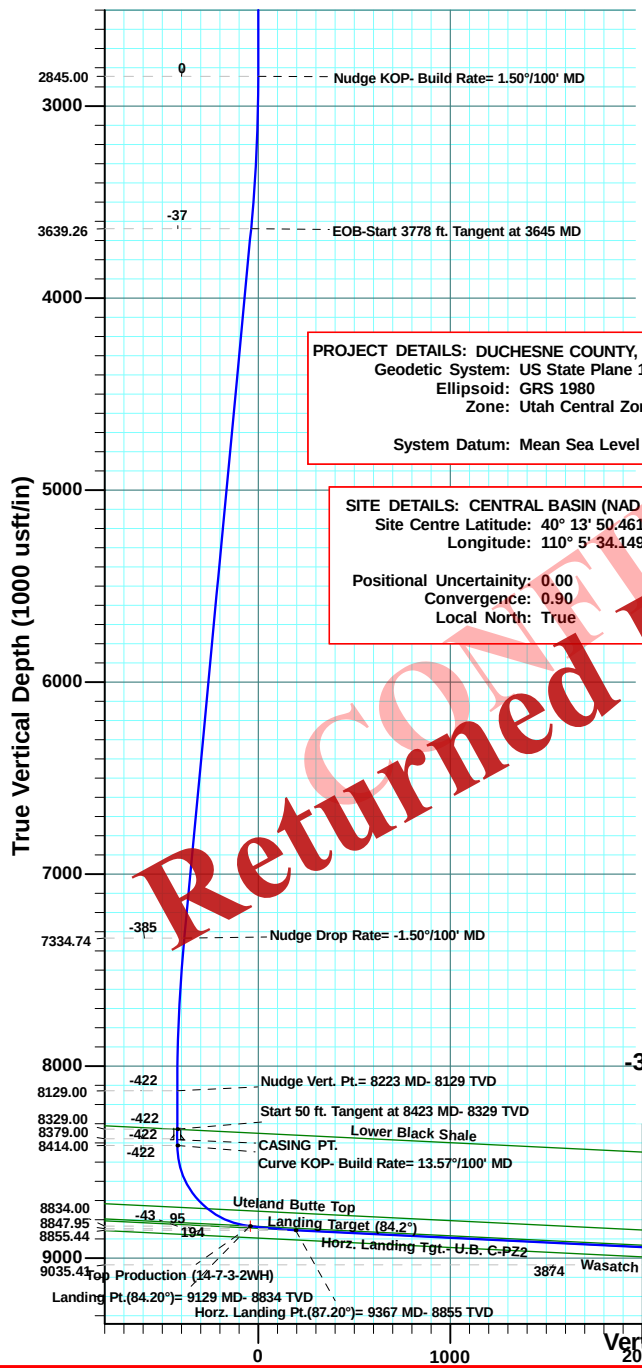
LEAM Drilling Systems, LLC
FOR
NEWFIELD EXPLORATION ROCKY MOUNTAINS
WELL: 14-7-3-2WH (PLAN: Rev00)
SEC. 7, T3S-R2W, DUCHESNE COUNTY, UTAH
RIG: PENDING (KB= 28')
OCTOBER 02, 2013 --- WELL PLAN PLOT

NEWFIELD ROCKY MOUNTAINS

LEAM Drilling Systems LLC

WELL DETAILS: 14-7-3-2WH
Ground Level: 5189.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	7255829.17	2016875.71	40° 13' 52.820 N	110° 9' 5.650 W

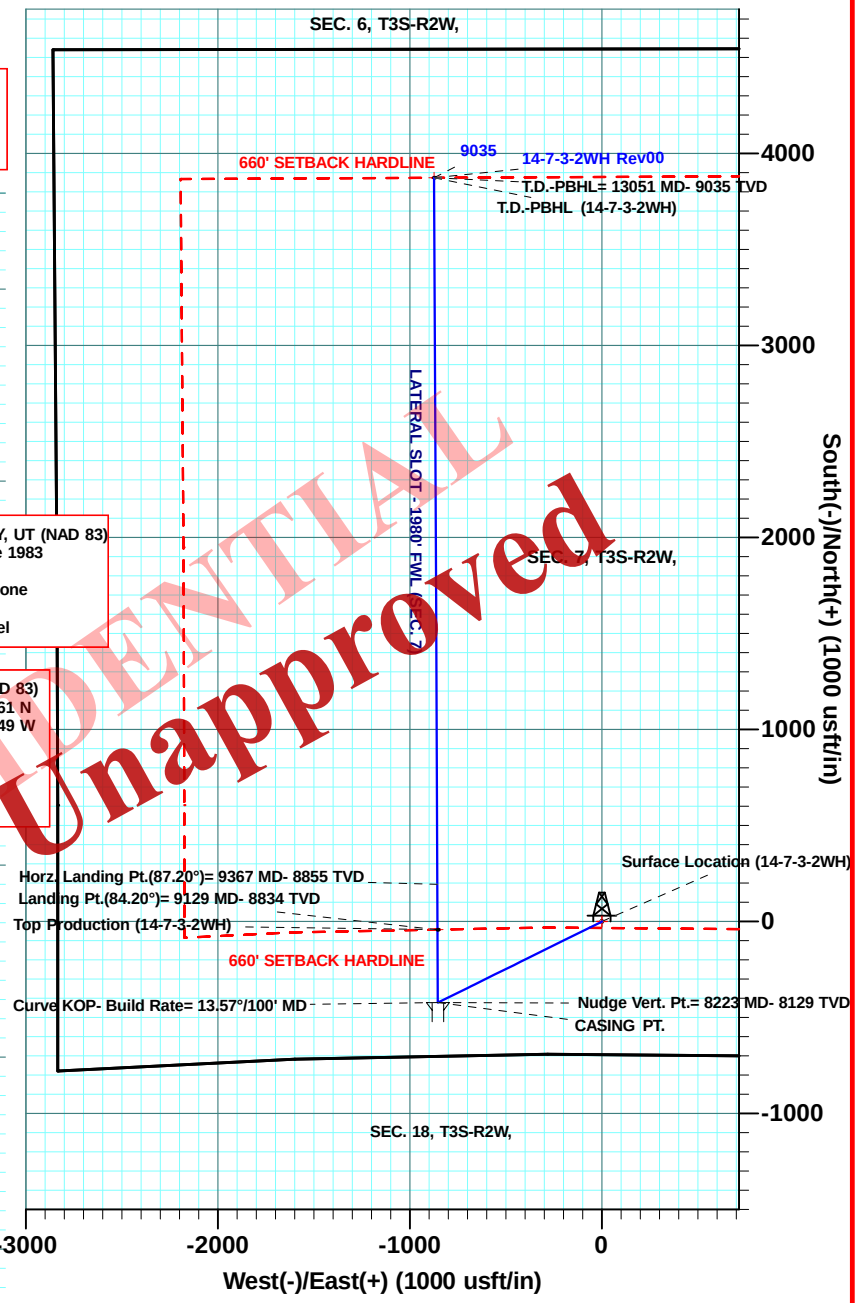


PROJECT DETAILS: DUCHESNE COUNTY, UT (NAD 83)
Geodetic System: US State Plane 1983
Ellipsoid: GRS 1980
Zone: Utah Central Zone

System Datum: Mean Sea Level

SITE DETAILS: CENTRAL BASIN (NAD 83)
Site Centre Latitude: 40° 13' 50.461 N
Longitude: 110° 5' 34.149 W

Positional Uncertainty: 0.00
Convergence: 0.90
Local North: True



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SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	
2845.00	0.00	0.00	2845.00	0.00	0.00	0.00	0.00	0.00	
3645.10	12.00	243.70	3639.26	-36.99	-74.85	1.50	243.70	-36.99	
7423.16	12.00	243.70	7334.74	-385.01	-779.15	0.00	0.00	-385.01	
8223.26	0.00	0.00	8129.00	-422.00	-854.00	1.50	180.00	-422.00	
8423.26	0.00	0.00	8329.00	-422.00	-854.00	0.00	0.00	-422.00	
8473.26	0.00	0.00	8379.00	-422.00	-854.00	0.00	0.00	-422.00	
8508.26	0.00	0.00	8414.00	-422.00	-854.00	0.00	0.00	-422.00	
9128.65	84.20	359.74	8834.00	-42.50	-855.72	13.57	359.74	-42.50	
9266.65	84.20	359.74	8847.95	94.79	-856.35	0.00	0.00	94.79	
9366.65	87.20	359.74	8855.44	194.49	-856.80	3.00	0.00	194.49	
13050.68	87.20	359.74	9035.41	3874.09	-873.50	0.00	0.00	3874.09	T.D.-PBHL (14-7-3-2WH)

T M

Azimuths to True North
Magnetic North: 11.08°

Magnetic Field
Strength: 52134.1snT
Dip Angle: 65.87°
Date: 10/3/2013
Model: IGRF2010

Plan: 14-7-3-2WH Rev00 (14-7-3-2WH/14-7-3-2WH)
Created By: Chad Dubois Date: 9:30, October 02 2013

Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____

Received: December 17, 2013

Database:	EDM 5000.1 Lynn Db	**Local Co-ordinate Reference:**	Well 14-7-3-2WH
Company:	NEWFIELD EXPLORATION ROCKY MOUNTAINS	**TVD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Project:	DUCHESNE COUNTY, UT (NAD 83)	**MD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Site:	CENTRAL BASIN (NAD 83)	**North Reference:**	True
Well:	14-7-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	14-7-3-2WH		
Design:	14-7-3-2WH Rev00		

Project DUCHESNE COUNTY, UT (NAD 83),

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

Site CENTRAL BASIN (NAD 83)

Site Position:		**Northing:**	7,255,843.21 usft	**Latitude:**	40° 13' 50.461 N
From:	Map	**Easting:**	2,033,280.24 usft	**Longitude:**	110° 5' 34.149 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.90 °

Well 14-7-3-2WH

Well Position	**+N/-S**	244.04 usft	**Northing:**	7,255,829.17 usft	**Latitude:**	40° 13' 52.820 N
	+E/-W	-16,402.72 usft	**Easting:**	2,016,875.71 usft	**Longitude:**	110° 9' 5.650 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	5,217.00 usft	**Ground Level:**	5,189.00 usft

Wellbore 14-7-3-2WH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/3/2013	11.08	65.87	52,134

Design 14-7-3-2WH Rev00

Audit Notes:

Version:	Rev00	**Phase:**	PLAN	**Tie On Depth:**	0.00

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

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
2,845.00	0.00	0.00	2,845.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,645.10	12.00	243.70	3,639.26	-36.99	-74.85	1.50	1.50	0.00	243.70	
7,423.16	12.00	243.70	7,334.74	-385.01	-779.15	0.00	0.00	0.00	0.00	
8,223.26	0.00	0.00	8,129.00	-422.00	-854.00	1.50	-1.50	0.00	180.00	
8,423.26	0.00	0.00	8,329.00	-422.00	-854.00	0.00	0.00	0.00	0.00	
8,473.26	0.00	0.00	8,379.00	-422.00	-854.00	0.00	0.00	0.00	0.00	
8,508.26	0.00	0.00	8,414.00	-422.00	-854.00	0.00	0.00	0.00	0.00	
9,128.65	84.20	359.74	8,834.00	-42.50	-855.72	13.57	13.57	0.00	359.74	
9,266.65	84.20	359.74	8,847.95	94.79	-856.35	0.00	0.00	0.00	0.00	
9,366.65	87.20	359.74	8,855.44	194.49	-856.80	3.00	3.00	0.00	0.00	
13,050.68	87.20	359.74	9,035.41	3,874.09	-873.50	0.00	0.00	0.00	0.00	T.D.-PBHL (14-7-3-

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Returned Unapproved

Received: December 17, 2013

Database:	EDM 5000.1 Lynn Db	**Local Co-ordinate Reference:**	Well 14-7-3-2WH
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Project:	DUCHESNE COUNTY, UT (NAD 83)	**MD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Site:	CENTRAL BASIN (NAD 83)	**North Reference:**	True
Well:	14-7-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	14-7-3-2WH		
Design:	14-7-3-2WH Rev00		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	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
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
Start 1345 ft. Tangent at 1500 MD- TVD									
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
2,845.00	0.00	0.00	2,845.00	0.00	0.00	0.00	0.00	0.00	0.00
Nudge KOP- Build Rate= 1.50°/100' MD									
2,900.00	0.83	243.70	2,900.00	-0.18	-0.35	-0.18	1.50	1.50	0.00
3,000.00	2.33	243.70	2,999.96	-1.39	-2.82	-1.39	1.50	1.50	0.00
3,100.00	3.83	243.70	3,099.81	-3.77	-7.63	-3.77	1.50	1.50	0.00
3,200.00	5.33	243.70	3,199.49	-7.30	-14.78	-7.30	1.50	1.50	0.00
3,300.00	6.83	243.70	3,298.92	-11.99	-24.27	-11.99	1.50	1.50	0.00
3,400.00	8.33	243.70	3,398.05	-17.83	-36.08	-17.83	1.50	1.50	0.00
3,500.00	9.83	243.70	3,496.79	-24.82	-50.22	-24.82	1.50	1.50	0.00
3,600.00	11.33	243.70	3,595.09	-32.95	-66.68	-32.95	1.50	1.50	0.00
3,645.10	12.00	243.70	3,639.26	-36.99	-74.85	-36.99	1.50	1.50	0.00
EOB-Start 3778 ft. Tangent at 3645 MD									
3,700.00	12.00	243.70	3,692.96	-42.04	-85.09	-42.04	0.00	0.00	0.00
3,800.00	12.00	243.70	3,790.78	-51.26	-103.73	-51.26	0.00	0.00	0.00
3,900.00	12.00	243.70	3,888.59	-60.47	-122.37	-60.47	0.00	0.00	0.00
4,000.00	12.00	243.70	3,986.40	-69.68	-141.01	-69.68	0.00	0.00	0.00
4,100.00	12.00	243.70	4,084.22	-78.89	-159.65	-78.89	0.00	0.00	0.00
4,200.00	12.00	243.70	4,182.03	-88.10	-178.29	-88.10	0.00	0.00	0.00
4,300.00	12.00	243.70	4,279.85	-97.32	-196.94	-97.32	0.00	0.00	0.00
4,400.00	12.00	243.70	4,377.66	-106.53	-215.58	-106.53	0.00	0.00	0.00
4,500.00	12.00	243.70	4,475.48	-115.74	-234.22	-115.74	0.00	0.00	0.00
4,600.00	12.00	243.70	4,573.29	-124.95	-252.86	-124.95	0.00	0.00	0.00

CONFIDENTIAL
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Project:	DUCHESNE COUNTY, UT (NAD 83)	**MD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Site:	CENTRAL BASIN (NAD 83)	**North Reference:**	True
Well:	14-7-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	14-7-3-2WH		
Design:	14-7-3-2WH Rev00		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,700.00	12.00	243.70	4,671.10	-134.16	-271.50	-134.16	0.00	0.00	0.00
4,800.00	12.00	243.70	4,768.92	-143.37	-290.15	-143.37	0.00	0.00	0.00
4,900.00	12.00	243.70	4,866.73	-152.59	-308.79	-152.59	0.00	0.00	0.00
5,000.00	12.00	243.70	4,964.55	-161.80	-327.43	-161.80	0.00	0.00	0.00
5,100.00	12.00	243.70	5,062.36	-171.01	-346.07	-171.01	0.00	0.00	0.00
5,200.00	12.00	243.70	5,160.18	-180.22	-364.71	-180.22	0.00	0.00	0.00
5,300.00	12.00	243.70	5,257.99	-189.43	-383.35	-189.43	0.00	0.00	0.00
5,400.00	12.00	243.70	5,355.80	-198.64	-402.00	-198.64	0.00	0.00	0.00
5,500.00	12.00	243.70	5,453.62	-207.86	-420.64	-207.86	0.00	0.00	0.00
5,600.00	12.00	243.70	5,551.43	-217.07	-439.28	-217.07	0.00	0.00	0.00
5,700.00	12.00	243.70	5,649.25	-226.28	-457.92	-226.28	0.00	0.00	0.00
5,800.00	12.00	243.70	5,747.06	-235.49	-476.56	-235.49	0.00	0.00	0.00
5,900.00	12.00	243.70	5,844.88	-244.70	-495.21	-244.70	0.00	0.00	0.00
6,000.00	12.00	243.70	5,942.69	-253.92	-513.85	-253.92	0.00	0.00	0.00
6,100.00	12.00	243.70	6,040.50	-263.13	-532.49	-263.13	0.00	0.00	0.00
6,200.00	12.00	243.70	6,138.32	-272.34	-551.13	-272.34	0.00	0.00	0.00
6,300.00	12.00	243.70	6,236.13	-281.55	-569.77	-281.55	0.00	0.00	0.00
6,400.00	12.00	243.70	6,333.95	-290.76	-588.41	-290.76	0.00	0.00	0.00
6,500.00	12.00	243.70	6,431.76	-299.97	-607.06	-299.97	0.00	0.00	0.00
6,600.00	12.00	243.70	6,529.58	-309.19	-625.70	-309.19	0.00	0.00	0.00
6,700.00	12.00	243.70	6,627.39	-318.40	-644.34	-318.40	0.00	0.00	0.00
6,800.00	12.00	243.70	6,725.20	-327.61	-662.98	-327.61	0.00	0.00	0.00
6,900.00	12.00	243.70	6,823.02	-336.82	-681.62	-336.82	0.00	0.00	0.00
7,000.00	12.00	243.70	6,920.83	-346.03	-700.27	-346.03	0.00	0.00	0.00
7,100.00	12.00	243.70	7,018.65	-355.24	-718.91	-355.24	0.00	0.00	0.00
7,200.00	12.00	243.70	7,116.46	-364.46	-737.55	-364.46	0.00	0.00	0.00
7,300.00	12.00	243.70	7,214.27	-373.67	-756.19	-373.67	0.00	0.00	0.00
7,400.00	12.00	243.70	7,312.09	-382.88	-774.83	-382.88	0.00	0.00	0.00
7,423.16	12.00	243.70	7,334.74	-385.01	-779.15	-385.01	0.00	0.00	0.00
Nudge Drop Rate= -1.50°/100' MD									
7,500.00	10.85	243.70	7,410.06	-391.76	-792.80	-391.76	1.50	-1.50	0.00
7,600.00	9.35	243.70	7,508.51	-399.52	-808.52	-399.52	1.50	-1.50	0.00
7,700.00	7.85	243.70	7,607.38	-406.15	-821.92	-406.15	1.50	-1.50	0.00
7,800.00	6.35	243.70	7,706.61	-411.62	-833.00	-411.62	1.50	-1.50	0.00
7,900.00	4.85	243.70	7,806.13	-415.94	-841.74	-415.94	1.50	-1.50	0.00
8,000.00	3.35	243.70	7,905.87	-419.11	-848.15	-419.11	1.50	-1.50	0.00
8,100.00	1.85	243.70	8,005.77	-421.12	-852.22	-421.12	1.50	-1.50	0.00
8,200.00	0.35	243.70	8,105.75	-421.97	-853.94	-421.97	1.50	-1.50	0.00
8,223.26	0.00	0.00	8,129.00	-422.00	-854.00	-422.00	1.50	-1.50	500.09
Nudge Vert. Pt.= 8223 MD- 8129 TVD									
8,300.00	0.00	0.00	8,205.75	-422.00	-854.00	-422.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,305.75	-422.00	-854.00	-422.00	0.00	0.00	0.00
8,423.26	0.00	0.00	8,329.00	-422.00	-854.00	-422.00	0.00	0.00	0.00
Start 50 ft. Tangent at 8423 MD- 8329 TVD									
8,424.62	0.00	0.00	8,330.36	-422.00	-854.00	-422.00	0.00	0.00	0.00
Lower Black Shale									
8,473.26	0.00	0.00	8,379.00	-422.00	-854.00	-422.00	0.00	0.00	0.00
Start 35 ft. Tangent at 8473 MD- 8379 TVD									
8,478.26	0.00	0.00	8,384.00	-422.00	-854.00	-422.00	0.00	0.00	0.00
CASING PT.									
8,508.26	0.00	0.00	8,414.00	-422.00	-854.00	-422.00	0.00	0.00	0.00

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Well:	14-7-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	14-7-3-2WH		
Design:	14-7-3-2WH Rev00		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Curve KOP- Build Rate= 13.57°/100' MD									
8,525.00	2.27	359.74	8,430.74	-421.67	-854.00	-421.67	13.57	13.57	0.00
8,550.00	5.67	359.74	8,455.68	-419.94	-854.01	-419.94	13.57	13.57	0.00
8,575.00	9.06	359.74	8,480.47	-416.73	-854.02	-416.73	13.57	13.57	0.00
8,600.00	12.45	359.74	8,505.02	-412.07	-854.05	-412.07	13.57	13.57	0.00
8,625.00	15.84	359.74	8,529.26	-405.96	-854.07	-405.96	13.57	13.57	0.00
8,650.00	19.24	359.74	8,553.10	-398.43	-854.11	-398.43	13.57	13.57	0.00
8,675.00	22.63	359.74	8,576.44	-389.50	-854.15	-389.50	13.57	13.57	0.00
8,700.00	26.02	359.74	8,599.22	-379.20	-854.19	-379.20	13.57	13.57	0.00
8,725.00	29.42	359.74	8,621.35	-367.57	-854.25	-367.57	13.57	13.57	0.00
8,750.00	32.81	359.74	8,642.75	-354.66	-854.31	-354.66	13.57	13.57	0.00
8,775.00	36.20	359.74	8,663.35	-340.50	-854.37	-340.50	13.57	13.57	0.00
8,800.00	39.60	359.74	8,683.07	-325.14	-854.44	-325.14	13.57	13.57	0.00
8,825.00	42.99	359.74	8,701.85	-308.65	-854.51	-308.65	13.57	13.57	0.00
8,850.00	46.38	359.74	8,719.62	-291.07	-854.59	-291.07	13.57	13.57	0.00
8,875.00	49.77	359.74	8,736.32	-272.47	-854.68	-272.47	13.57	13.57	0.00
8,887.32	51.45	359.74	8,744.14	-262.95	-854.72	-262.95	13.57	13.57	0.00
Uteland Butte Top									
8,900.00	53.17	359.74	8,751.90	-252.92	-854.77	-252.92	13.57	13.57	0.00
8,925.00	56.56	359.74	8,766.28	-232.47	-854.86	-232.47	13.57	13.57	0.00
8,950.00	59.95	359.74	8,779.43	-211.22	-854.96	-211.22	13.57	13.57	0.00
8,975.00	63.35	359.74	8,791.30	-189.22	-855.06	-189.22	13.57	13.57	0.00
9,000.00	66.74	359.74	8,801.85	-166.56	-855.16	-166.56	13.57	13.57	0.00
9,025.00	70.13	359.74	8,811.04	-143.31	-855.26	-143.31	13.57	13.57	0.00
9,050.00	73.53	359.74	8,818.83	-119.56	-855.37	-119.56	13.57	13.57	0.00
9,075.00	76.92	359.74	8,825.21	-95.39	-855.48	-95.39	13.57	13.57	0.00
9,100.00	80.31	359.74	8,830.14	-70.89	-855.59	-70.89	13.57	13.57	0.00
9,125.00	83.70	359.74	8,833.62	-46.13	-855.71	-46.13	13.57	13.57	0.00
9,127.19	84.00	359.74	8,833.85	-43.95	-855.72	-43.95	13.57	13.57	0.00
Landing Target (84.2°)									
9,128.65	84.20	359.74	8,834.00	-42.50	-855.72	-42.50	13.57	13.57	0.00
Landing Pt.(84.20°)= 9129 MD- 8834 TVD									
9,200.00	84.20	359.74	8,841.21	28.48	-856.04	28.48	0.00	0.00	0.00
9,266.65	84.20	359.74	8,847.95	94.79	-856.35	94.79	0.00	0.00	0.00
Curve Build Rate= 3.00°/100' MD									
9,300.00	85.20	359.74	8,851.03	127.99	-856.50	127.99	3.00	3.00	0.00
9,366.65	87.20	359.74	8,855.44	194.49	-856.80	194.49	3.00	3.00	0.00
Horz. Landing Pt.(87.20°)= 9367 MD- 8855 TVD									
9,400.00	87.20	359.74	8,857.07	227.80	-856.95	227.80	0.00	0.00	0.00
9,500.00	87.20	359.74	8,861.96	327.68	-857.40	327.68	0.00	0.00	0.00
9,600.00	87.20	359.74	8,866.84	427.56	-857.86	427.56	0.00	0.00	0.00
9,700.00	87.20	359.74	8,871.73	527.44	-858.31	527.44	0.00	0.00	0.00
9,800.00	87.20	359.74	8,876.61	627.32	-858.76	627.32	0.00	0.00	0.00
9,900.00	87.20	359.74	8,881.50	727.20	-859.21	727.20	0.00	0.00	0.00
10,000.00	87.20	359.74	8,886.38	827.08	-859.67	827.08	0.00	0.00	0.00
10,100.00	87.20	359.74	8,891.27	926.96	-860.12	926.96	0.00	0.00	0.00
10,200.00	87.20	359.74	8,896.15	1,026.84	-860.57	1,026.84	0.00	0.00	0.00
10,300.00	87.20	359.74	8,901.04	1,126.72	-861.03	1,126.72	0.00	0.00	0.00
10,400.00	87.20	359.74	8,905.92	1,226.60	-861.48	1,226.60	0.00	0.00	0.00
10,500.00	87.20	359.74	8,910.81	1,326.48	-861.93	1,326.48	0.00	0.00	0.00
10,600.00	87.20	359.74	8,915.69	1,426.36	-862.39	1,426.36	0.00	0.00	0.00

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Received: December 17, 2013

Database:	EDM 5000.1 Lynn Db	**Local Co-ordinate Reference:**	Well 14-7-3-2WH
Company:	NEWFIELD EXPLORATION ROCKY MOUNTAINS	**TVD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Project:	DUCHESNE COUNTY, UT (NAD 83)	**MD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Site:	CENTRAL BASIN (NAD 83)	**North Reference:**	True
Well:	14-7-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	14-7-3-2WH		
Design:	14-7-3-2WH Rev00		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,700.00	87.20	359.74	8,920.58	1,526.24	-862.84	1,526.24	0.00	0.00	0.00
10,800.00	87.20	359.74	8,925.46	1,626.12	-863.29	1,626.12	0.00	0.00	0.00
10,900.00	87.20	359.74	8,930.35	1,726.00	-863.75	1,726.00	0.00	0.00	0.00
11,000.00	87.20	359.74	8,935.23	1,825.88	-864.20	1,825.88	0.00	0.00	0.00
11,100.00	87.20	359.74	8,940.12	1,925.76	-864.65	1,925.76	0.00	0.00	0.00
11,200.00	87.20	359.74	8,945.00	2,025.64	-865.11	2,025.64	0.00	0.00	0.00
11,300.00	87.20	359.74	8,949.89	2,125.52	-865.56	2,125.52	0.00	0.00	0.00
11,400.00	87.20	359.74	8,954.77	2,225.40	-866.01	2,225.40	0.00	0.00	0.00
11,500.00	87.20	359.74	8,959.66	2,325.28	-866.47	2,325.28	0.00	0.00	0.00
11,600.00	87.20	359.74	8,964.54	2,425.15	-866.92	2,425.15	0.00	0.00	0.00
11,700.00	87.20	359.74	8,969.43	2,525.03	-867.37	2,525.03	0.00	0.00	0.00
11,800.00	87.20	359.74	8,974.31	2,624.91	-867.83	2,624.91	0.00	0.00	0.00
11,900.00	87.20	359.74	8,979.20	2,724.79	-868.28	2,724.79	0.00	0.00	0.00
12,000.00	87.20	359.74	8,984.08	2,824.67	-868.73	2,824.67	0.00	0.00	0.00
12,100.00	87.20	359.74	8,988.97	2,924.55	-869.19	2,924.55	0.00	0.00	0.00
12,200.00	87.20	359.74	8,993.85	3,024.43	-869.64	3,024.43	0.00	0.00	0.00
12,300.00	87.20	359.74	8,998.74	3,124.31	-870.09	3,124.31	0.00	0.00	0.00
12,400.00	87.20	359.74	9,003.62	3,224.19	-870.55	3,224.19	0.00	0.00	0.00
12,500.00	87.20	359.74	9,008.51	3,324.07	-871.00	3,324.07	0.00	0.00	0.00
12,600.00	87.20	359.74	9,013.39	3,423.95	-871.45	3,423.95	0.00	0.00	0.00
12,700.00	87.20	359.74	9,018.28	3,523.83	-871.91	3,523.83	0.00	0.00	0.00
12,800.00	87.20	359.74	9,023.16	3,623.71	-872.36	3,623.71	0.00	0.00	0.00
12,900.00	87.20	359.74	9,028.05	3,723.59	-872.81	3,723.59	0.00	0.00	0.00
13,000.00	87.20	359.74	9,032.93	3,823.47	-873.27	3,823.47	0.00	0.00	0.00
13,050.68	87.20	359.74	9,035.41	3,874.09	-873.50	3,874.09	0.00	0.00	0.00

T.D.-PBHL= 13051 MD- 9035 TVD

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Received: December 17, 2013

Database:	EDM 5000.1 Lynn Db	**Local Co-ordinate Reference:**	Well 14-7-3-2WH
Company:	NEWFIELD EXPLORATION ROCKY MOUNTAINS	**TVD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Project:	DUCHESNE COUNTY, UT (NAD 83)	**MD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Site:	CENTRAL BASIN (NAD 83)	**North Reference:**	True
Well:	14-7-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	14-7-3-2WH		
Design:	14-7-3-2WH Rev00		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Surface Location (14-	0.00	0.00	0.00	0.00	0.00	7,255,829.17	2,016,875.71	40° 13' 52.820 N	110° 9' 5.650 W
- plan hits target center									
- Point									
SEC. 7, T3S-R2W,	0.00	0.00	1.00	-794.19	2,365.47	7,255,070.74	2,019,252.88	40° 13' 44.970 N	110° 8' 35.150 W
- plan misses target center by 2495.23usft at 1.00usft MD (1.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			1.00	0.00	0.00	7,255,070.73	2,019,252.88		
Point 2			1.00	93.00	-1,320.79	7,255,143.81	2,017,930.84		
Point 3			1.00	104.11	-2,650.09	7,255,134.88	2,016,601.52		
Point 4			1.00	77.86	-3,967.00	7,255,088.78	2,015,285.16		
Point 5			1.00	15.23	-5,199.37	7,255,007.58	2,014,053.87		
Point 6			1.00	1,399.46	-5,199.22	7,256,391.66	2,014,033.16		
Point 7			1.00	2,741.20	-5,203.71	7,257,733.18	2,014,008.44		
Point 8			1.00	5,334.63	-5,224.36	7,260,326.00	2,013,948.70		
Point 9			1.00	5,340.64	-42.38	7,260,410.13	2,019,130.00		
Point 10			1.00	0.00	0.00	7,255,070.73	2,019,252.88		
SEC. 7, T3S-R2W, 66	0.00	0.00	1.00	-85.94	1,703.87	7,255,768.93	2,018,580.68	40° 13' 51.970 N	110° 8' 43.680 W
- plan misses target center by 1706.03usft at 1.00usft MD (1.00 TVD, 0.00 N, 0.00 E)									
- Polygon									
Point 1			1.00	0.00	0.00	7,255,768.93	2,018,580.68		
Point 2			1.00	44.50	-632.84	7,255,803.88	2,017,947.24		
Point 3			1.00	35.60	-1,992.37	7,255,794.49	2,016,587.70		
Point 4			1.00	29.34	-3,328.63	7,255,748.09	2,015,251.99		
Point 5			1.00	1.06	-3,877.70	7,255,711.53	2,014,703.40		
Point 6			1.00	692.16	-3,878.42	7,256,402.54	2,014,692.27		
Point 7			1.00	2,035.93	-3,882.18	7,257,746.10	2,014,668.25		
Point 8			1.00	3,953.52	-3,897.52	7,259,663.24	2,014,624.00		
Point 9			1.00	3,971.59	-35.17	7,259,739.54	2,018,485.64		
Point 10			1.00	0.00	0.00	7,255,768.93	2,018,580.68		
Top Production (14-7-	0.00	0.00	8,834.00	-41.46	-855.42	7,255,774.83	2,016,021.01	40° 13' 52.410 N	110° 9' 16.680 W
- plan misses target center by 0.32usft at 9129.69usft MD (8834.11 TVD, -41.47 N, -855.73 E)									
- Point									
T.D.-PBHL (14-7-3-2V	0.00	0.00	9,035.00	3,874.09	-873.12	7,259,689.66	2,015,944.28	40° 14' 31.106 N	110° 9' 16.910 W
- plan misses target center by 0.55usft at 13050.66usft MD (9035.41 TVD, 3874.07 N, -873.50 E)									
- Point									

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Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
8,478.26	8,384.00	CASING PT.	0	0

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,424.62	8,330.36	Lower Black Shale		2.80	0.00
8,887.32	8,744.14	Uteland Butte Top		2.80	0.00
9,127.19	8,833.85	Landing Target (84.2°)		2.80	0.00

Received: December 17, 2013

Database:	EDM 5000.1 Lynn Db	**Local Co-ordinate Reference:**	Well 14-7-3-2WH
Company:	NEWFIELD EXPLORATION ROCKY MOUNTAINS	**TVD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Project:	DUCHESNE COUNTY, UT (NAD 83)	**MD Reference:**	WELL(5189'+ 28'= 5,217'MSL) @ 5217.00usft (RIG (KB= 28'))
Site:	CENTRAL BASIN (NAD 83)	**North Reference:**	True
Well:	14-7-3-2WH	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	14-7-3-2WH		
Design:	14-7-3-2WH Rev00		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,500.00	1,500.00	0.00	0.00	Start 1345 ft. Tangent at 1500 MD- TVD
2,845.00	2,845.00	0.00	0.00	Nudge KOP- Build Rate= 1.50°/100' MD
3,645.10	3,639.26	-36.99	-74.85	EOB-Start 3778 ft. Tangent at 3645 MD
7,423.16	7,334.74	-385.01	-779.15	Nudge Drop Rate= -1.50°/100' MD
8,223.26	8,129.00	-422.00	-854.00	Nudge Vert. Pt.= 8223 MD- 8129 TVD
8,423.26	8,329.00	-422.00	-854.00	Start 50 ft. Tangent at 8423 MD- 8329 TVD
8,473.26	8,379.00	-422.00	-854.00	Start 35 ft. Tangent at 8473 MD- 8379 TVD
8,508.26	8,414.00	-422.00	-854.00	Curve KOP- Build Rate= 13.57°/100' MD
9,128.65	8,834.00	-42.50	-855.72	Landing Pt.(84.20°)= 9129 MD- 8834 TVD
9,266.65	8,847.95	94.79	-856.35	Curve Build Rate= 3.00°/100' MD
9,366.65	8,855.44	194.49	-856.80	Horz. Landing Pt.(87.20°)= 9367 MD- 8855 TVD
13,050.68	9,035.41	3,874.09	-873.50	T.D.-PBHL= 13051 MD- 9035 TVD

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Received: December 17, 2013

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

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

1. My name is Peter Burns. 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 Tommy 14-7-3-2WH well with a surface location to be positioned in the SWSE of Section 7, Township 3 South, Range 2 West (the "Drillsite Location"), with a well bore point of entry in the SESW of Section 7, Township 3 South, Range 2 West and a bottom hole location to be positioned in the NENW of Section 7, Township 3 South, Range 2 West, Duchesne County, Utah. The surface owner of the Drillsite Location is E. Leon Sprouse whose address is P.O. Box 315, Neola, UT 84053 ("Surface Owner").

3. Newfield and the Surface Owner have agreed upon an Easement, Right-of-Way and Surface Use Agreement dated July 8, 2011 covering the Drillsite Location and access to the Drillsite Location.

FURTHER AFFIANT SAYETH NOT.

Peter Burns

ACKNOWLEDGEMENT

STATE OF COLORADO §
§
COUNTY OF DENVER §

Before me, a Notary Public, in and for the State, on this 11th day of December, 2013, personally appeared Peter Burns, 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.

CHRISTIAN CABRIN SIZEMORE
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20134036083
MY COMMISSION EXPIRES JUNE 10, 2017

NOTARY PUBLIC

My Commission Expires:

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Returned Unapproved

Received: December 17, 2013

NEWFIELD

November 18, 2013

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

Newfield Exploration Company
1001 17th Street | Suite 2000
Denver, Colorado 80202
PH 303-893-0102 | FAX 303-893-0103

RE: 14-7-3-2WH

Dear Mr. Hill,

Newfield Production Company ("Newfield") proposes to drill the 14-7-3-2WH from a surface location of 692' FSL and 2364' FEL of Section 7, T3S R2W, to a bottom hole location of 660' FNL and 1980' FWL of Section 7, T3S R2W.

The 14-7-3-2WH is covered by Order No. 139-90, which requires no portion of the producing interval of the wellbore be closer than 660' from the northern or southern section boundaries and no closer than 660' from the eastern or western section boundaries, and requires proper surface and sub-surface authorization be obtained when the surface location is located off of the drilling unit.

In compliance with the above referenced Order, the top of the uppermost producing zone of the 14-7-3-2WH is 660' FSL and 1980' FWL of Section 7, T3S R2W. Newfield shall case and cement the 14-7-3-2WH wellbore from the surface location to the point where the wellbore reaches the legal setback, and the wellbore will only be completed within the legal setback. In the event a future recompletion outside of this setback is proposed, Newfield shall attempt to acquire consent from all the owners of Section 18, T3S R2W, and shall file the appropriate application with the State. The bottom hole location of the 14-7-3-2WH is 660' FNL and 1980' FWL of Section 7, T3S R2W, which is within the legal setback.

In further compliance of the above referenced Order, Newfield has obtained authorization from the surface owner of the drilling location, as is evidenced by the Affidavit of Easement, Right-of-Way and Surface Use Agreement attached to the APD. Both the surface location and bottom hole location are located within the drilling unit.

Based on Newfield's compliance with the requirements of Order No. 139-90, Newfield respectfully requests the approval of our APD for the 14-7-3-2WH.

If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4466 or by email at rnmiller@newfield.com. Your consideration of this matter is greatly appreciated.

Sincerely,

Robert N. Miller II
Landman

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Received: December 17, 2013

NEWFIELD EXPLORATION COMPANY

LOCATION LAYOUT FOR

#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH

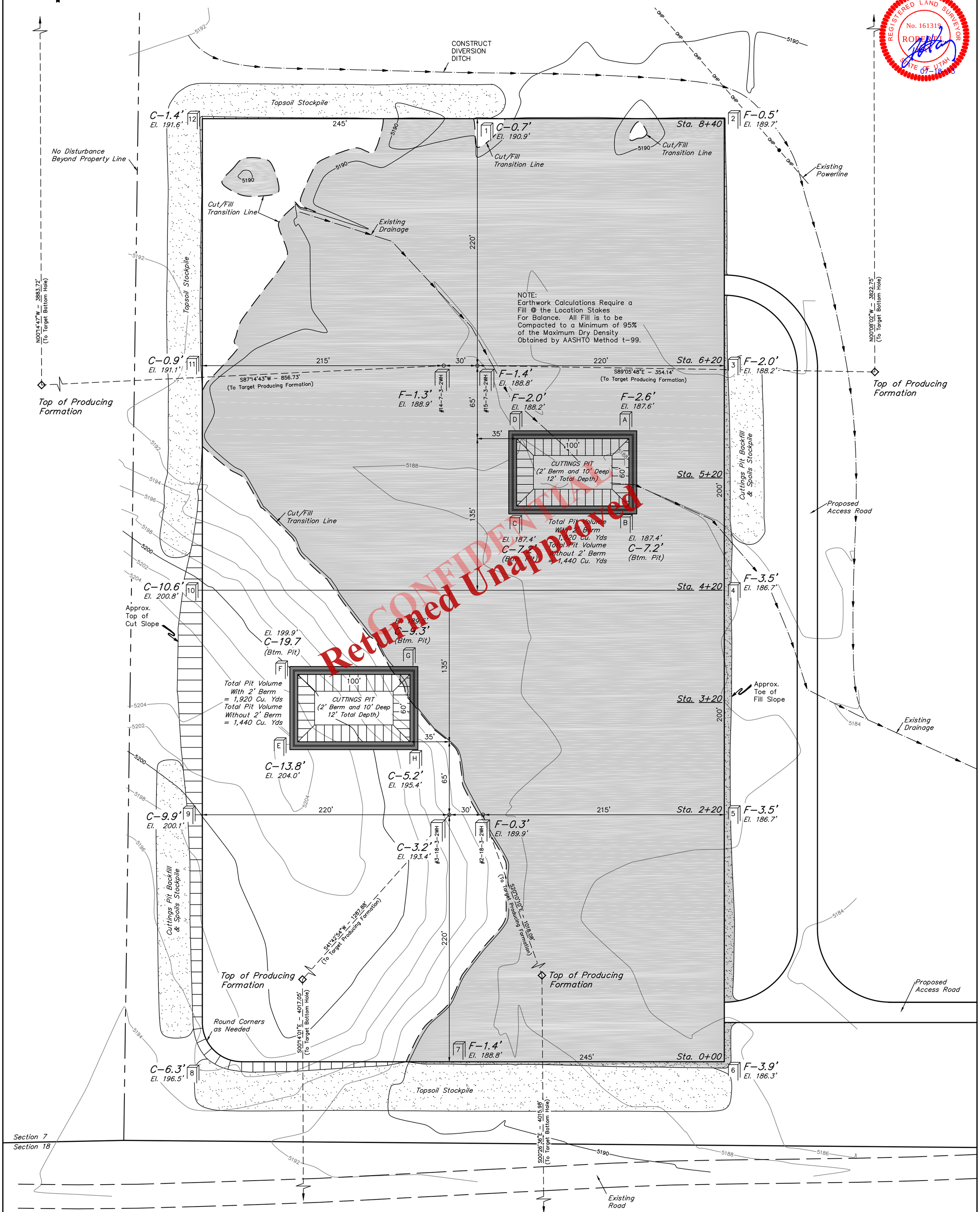
SECTION 7, T3S, R2W, U.S.B.&M.

SW 1/4 SE 1/4

FIGURE #1

SCALE: 1" = 50'
DATE: 05-10-13
DRAWN BY: C.A.G.

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH 07-18-13



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Received: December 17, 2013

NEWFIELD EXPLORATION COMPANY

TYPICAL CROSS SECTIONS FOR

#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH

SECTION 7, T3S, R2W, U.S.B.&M.

SW 1/4 SE 1/4

FIGURE #2

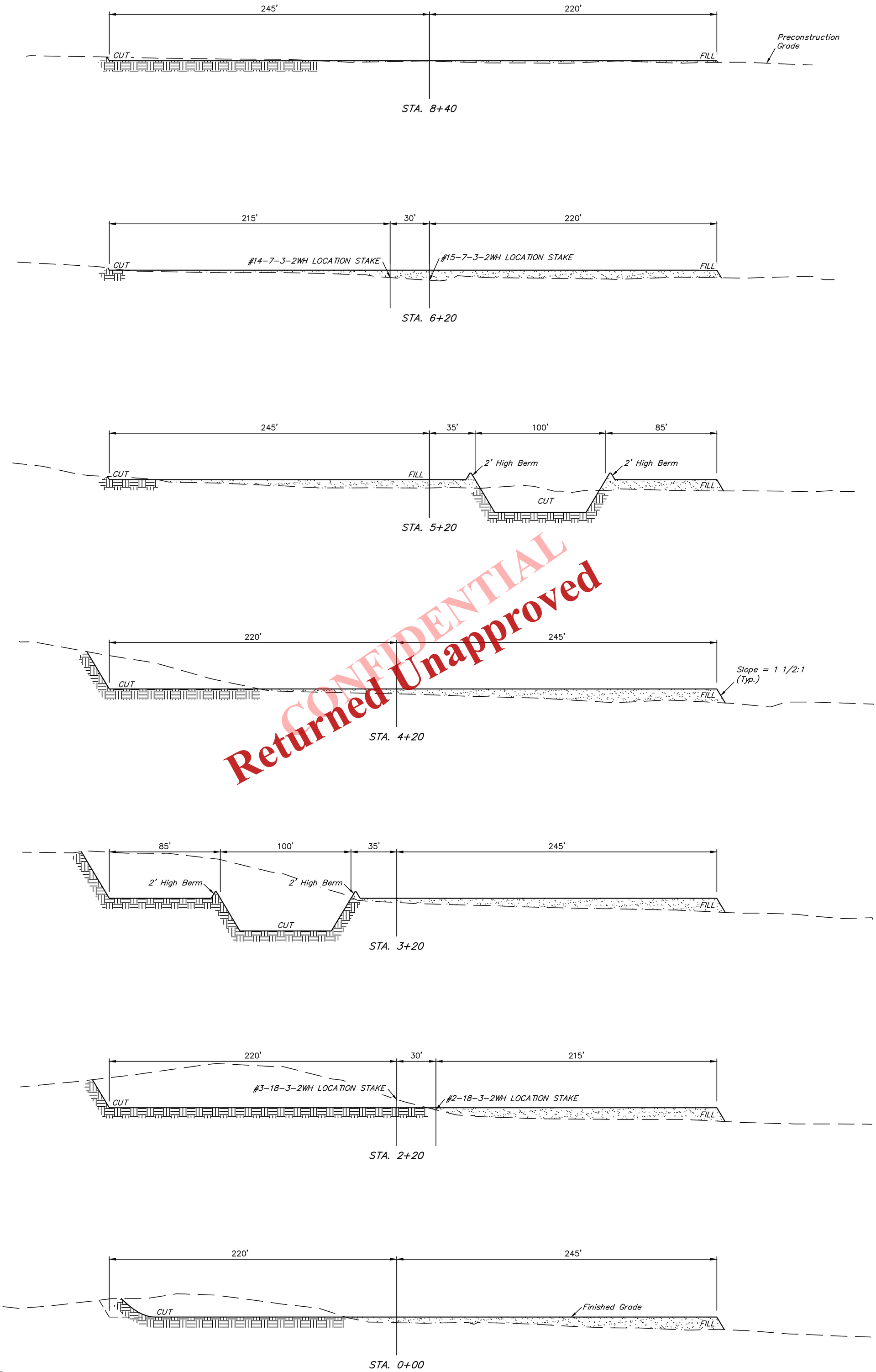
1" = 20' X-Section Scale

1" = 50'

DATE: 05-10-13

DRAWN BY: C.A.G.

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH 07-18-13



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APPROXIMATE YARDAGES

(6") Topsoil Stripping	=	7,510 Cu. Yds.
Remaining Location	=	31,390 Cu. Yds.
TOTAL CUT	=	38,900 CU. YDS.
FILL	=	28,510 CU. YDS.

EXCESS MATERIAL	=	10,390 Cu. Yds.
Topsoil & Pit Backfill (Pit Vol. W/O 2' Berm)	=	10,390 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	0 Cu. Yds.

APPROXIMATE ACREAGE

WELL SITE DISTURBANCE	= ± 12.574 ACRES
ACCESS ROAD DISTURBANCE	= ± 0.747 ACRES
PIPELINE DISTURBANCE	= ± 0.545 ACRES
TOTAL	= ± 13.866 ACRES

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

Received: December 17, 2013

NEWFIELD EXPLORATION COMPANY

TYPICAL RIG LAYOUT FOR

#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH

SECTION 7, T3S, R2W, U.S.B.&M.

SW 1/4 SE 1/4

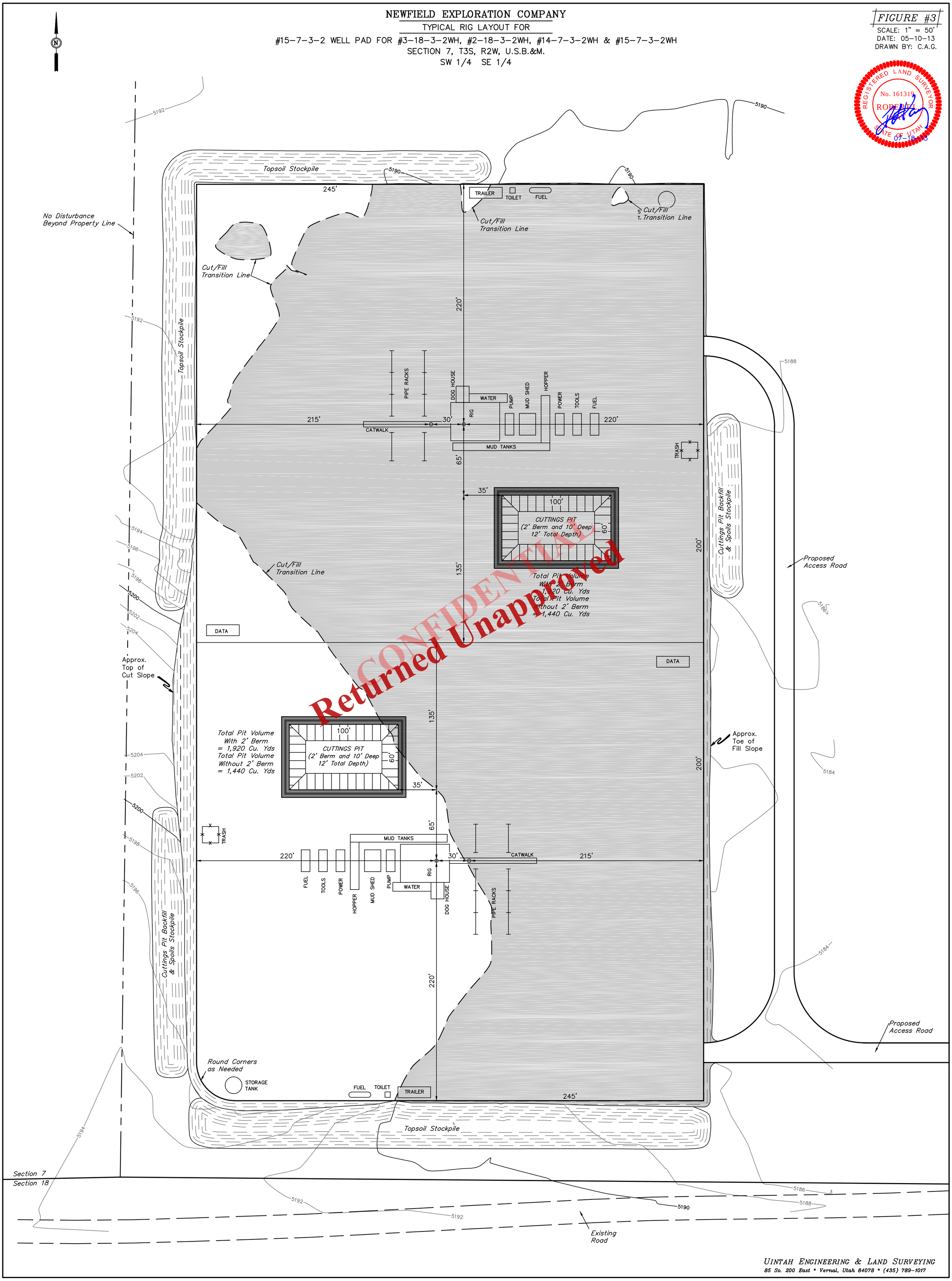
FIGURE #3

SCALE: 1" = 50'

DATE: 05-10-13

DRAWN BY: C.A.G.

REGISTERED LAND SURVEYOR No. 161319 ROBERT L. KAY STATE OF UTAH 07-18-13



CONFIDENTIAL
Returned Unapproved

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

Received: December 17, 2013

NEWFIELD EXPLORATION COMPANY

PRODUCTION FACILITY LAYOUT FOR

#15-7-3-2 WELL PAD FOR #3-18-3-2WH, #2-18-3-2WH, #14-7-3-2WH & #15-7-3-2WH

SECTION 7, T3S, R2W, U.S.B.&M.

SW 1/4 SE 1/4

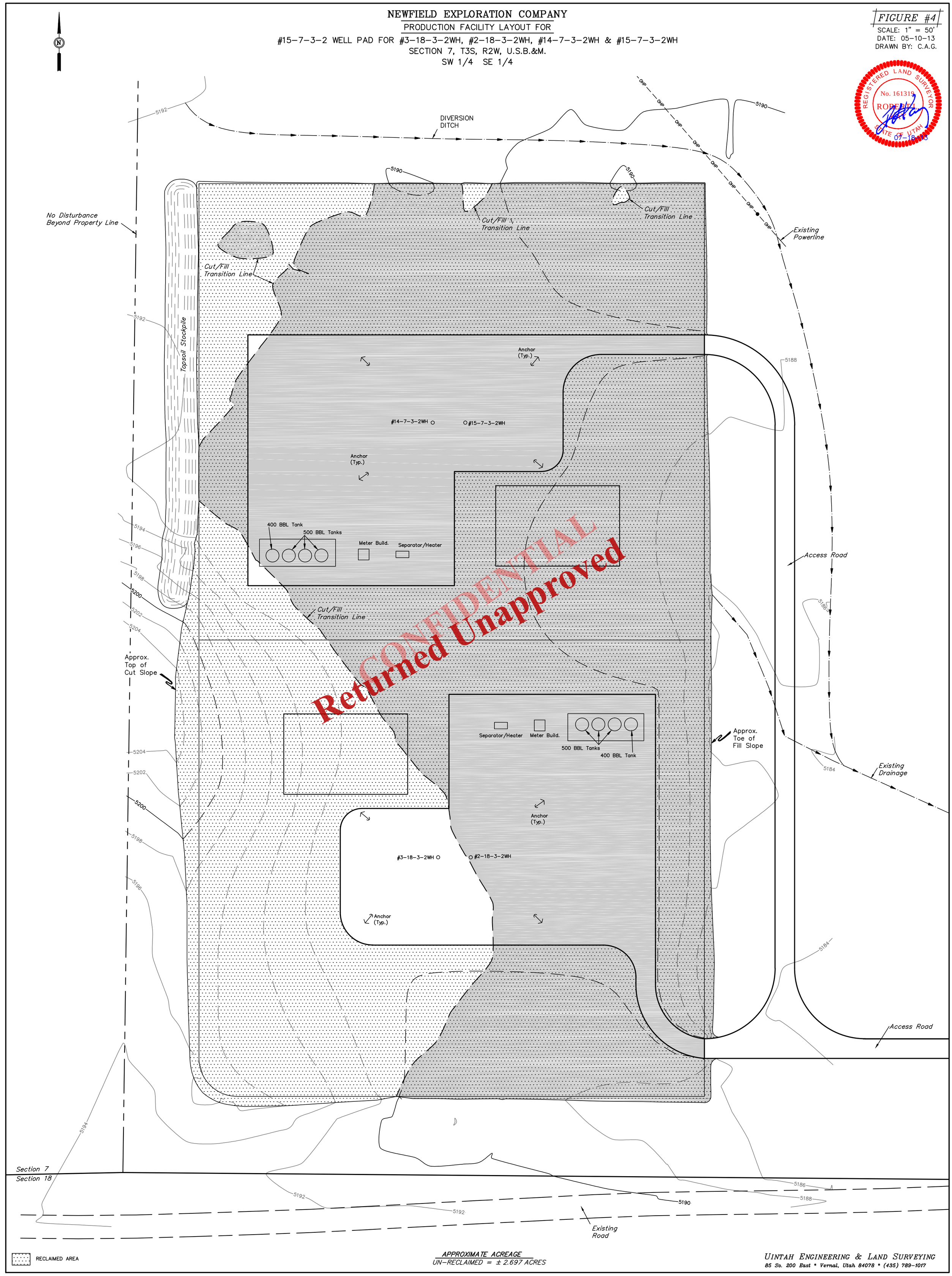
FIGURE #4

SCALE: 1" = 50'

DATE: 05-10-13

DRAWN BY: C.A.G.

REGISTERED LAND SURVEYOR No. 161319 RODNEY L. HALL STATE OF UTAH 07-18-13



CONFIDENTIAL
Returned Unapproved

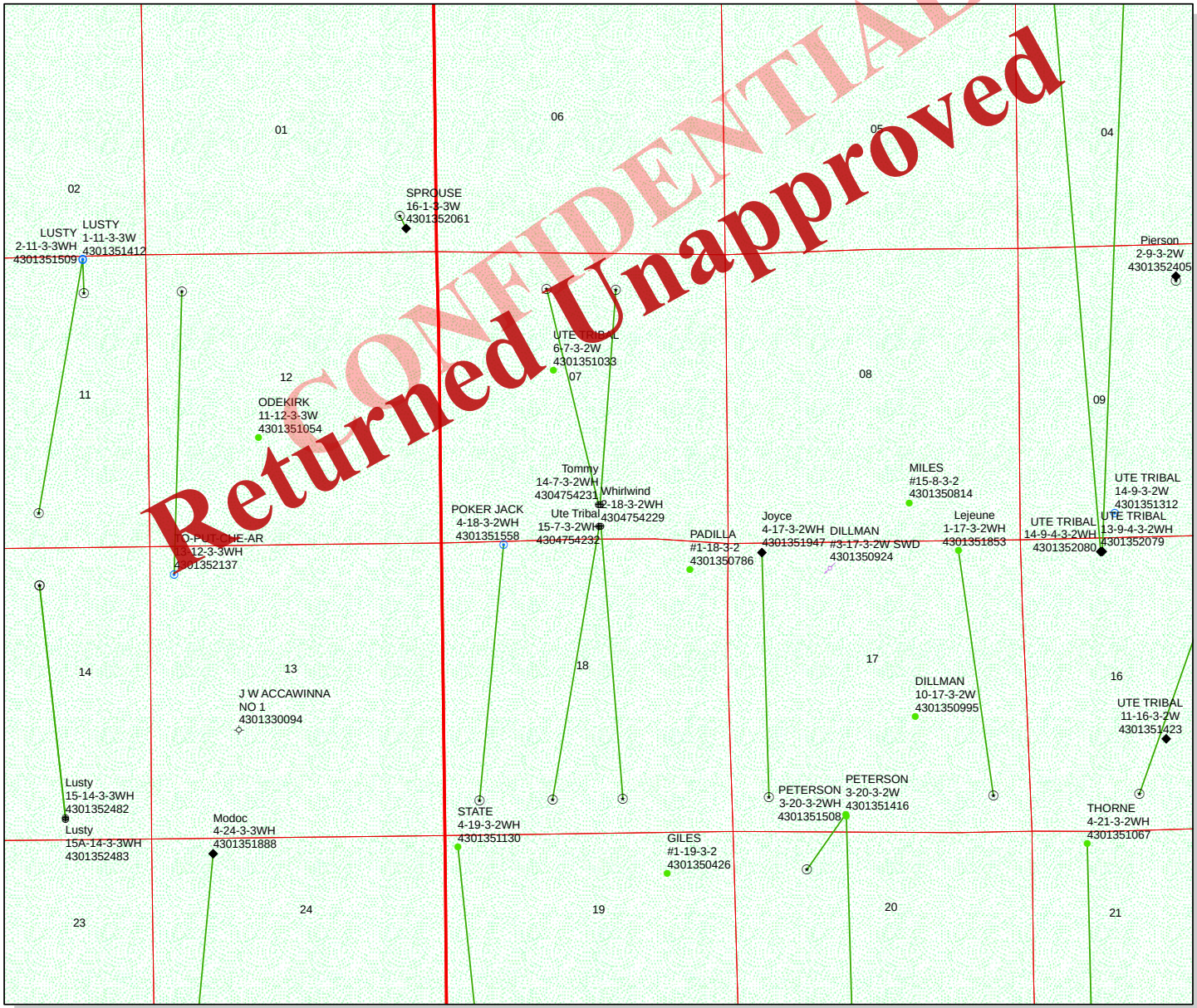
APPROXIMATE ACREAGE

UN-RECLAIMED = ± 2.697 ACRES

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

Received: December 17, 2013



API Number: 4304754231

Well Name: Tommy 14-7-3-2WH

Township: T03.0S Range: R02.0W Section: 07 Meridian: U

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared: 12/19/2013
Map Produced by Diana Mason

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

Units

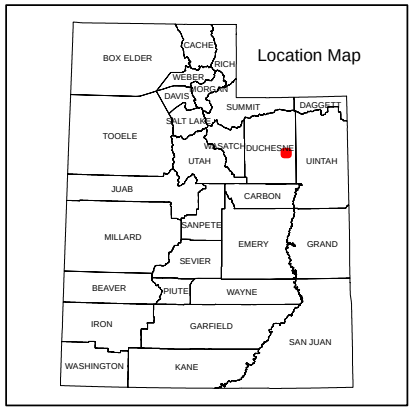
STATUS

- 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



2,300 1,150 0 2,300 Feet

1:22,409

Received: December 19, 2013

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

December 24, 2013

NEWFIELD PRODUCTION
COMPANY
Rt 3 Box 3630
Myton, UT 84052

Re: Application for Permit to Drill - UINTAH County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the Tommy 14-7-3-2WH well, API 43047542310000 that was submitted December 17, 2013 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason
Environmental Scientist

Enclosure
cc: Bureau of Land Management, Vernal, Utah

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR OIL, GAS & MINING