

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 Tomlinson-Berrett 4-7C4							
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ALTAMONT							
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME							
6. NAME OF OPERATOR EP ENERGY E&P COMPANY, L.P.						7. OPERATOR PHONE 713 997-5038							
8. ADDRESS OF OPERATOR 1001 Louisiana, Houston, TX, 77002						9. OPERATOR E-MAIL maria.gomez@epenergy.com							
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) Fee			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>							
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Anthony Berrett						14. SURFACE OWNER PHONE (if box 12 = 'fee') 801-602-5788							
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 580 E 200 N, Orem, UT 84097						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')							
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>							
20. LOCATION OF WELL		FOOTAGES		QTR-QTR		SECTION		TOWNSHIP		RANGE		MERIDIAN	
LOCATION AT SURFACE		1992 FSL 2190 FWL		NESW		7		3.0 S		4.0 W		U	
Top of Uppermost Producing Zone		1400 FSL 1700 FWL		NESW		7		3.0 S		4.0 W		U	
At Total Depth		1400 FSL 1700 FWL		NESW		7		3.0 S		4.0 W		U	
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 1400			23. NUMBER OF ACRES IN DRILLING UNIT 80							
27. ELEVATION - GROUND LEVEL 5941			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2200			26. PROPOSED DEPTH MD: 12538 TVD: 12500							
			28. BOND NUMBER 400JU0708			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Duchesne City							
Hole, Casing, and Cement Information													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight			
COND	17.5	13.375	0 - 600	54.5	J-55 ST&C	0.0	Class G	758	1.15	15.8			
SURF	12.25	9.625	0 - 2200	40.0	N-80 LT&C	0.0	Type V	384	2.36	12.0			
							Class G	195	1.3	14.3			
I1	8.75	7	0 - 9288	29.0	HCP-110 LT&C	10.5	Class G	675	1.91	12.5			
							Class G	298	1.64	13.0			
L1	6.125	5	9138 - 12538	18.0	HCP-110 LT&C	12.8	Class G	203	1.52	14.2			
ATTACHMENTS													
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES													
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN							
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP							
NAME Maria S. Gomez				TITLE Principal Regulatory Analyst				PHONE 713 997-5038					
SIGNATURE				DATE 04/24/2015				EMAIL maria.gomez@epenergy.com					
API NUMBER ASSIGNED 43013532860000				APPROVAL  Permit Manager									

**Tomlinson-Barrett 4-7C4
Sec. 7, T3S, R4W
DUCHESNE COUNTY, UT**

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers

<u>Formation</u>	<u>Depth</u>
Green River (GRRV)	4,348' TVD
Green River (GRTN1)	5,075' TVD
Mahogany Bench	5,947' TVD
L. Green River	7,348' TVD
Wasatch	9,198' TVD
T.D. (Permit)	12,500' TVD / +/- 12,538' MD

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River (GRRV)	4,348' TVD / 4,364' MD
	Green River (GRTN1)	5,075' TVD / 5,098' MD
	Mahogany Bench	5,947' TVD / 5,977' MD
Oil	L. Green River	7,348' TVD / 7,382' MD
Oil	Wasatch	9,198' TVD / 9,236' MD

3. Pressure Control Equipment: (Schematic Attached)

A Diverter System w/ rotating head on structural pipe from 600' to 2,200' MD/TVD. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams used from 2,200' MD/TVD to 9,288' MD / 9,250' TVD. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from 9,288' MD / 9,250' TVD to TD (12,538' MD / 12,500' TVD).

The BOPE and related equipment will meet the requirements of the 5M and 10M system.

We have pre-set numerous wells around the proposed location and had no issues.

There are 23 water wells within 10,000' of the proposed location but none of them are within ½ mile.

There is 1 SWD well within 2.5 miles of the proposed location. No pressure communication is expected to be seen, however it is important to be aware of them.

The Blue Bench 1-13C5 SWD is 3,725' or 0.71 miles to the South West of the proposed location. It is owned by Intercept Energy & is an active SWD well. It is injecting into the Upper/Middle Green River & Upper-most Lower Green River. The injection interval is from 4106'-7528'. The injection rate is now ~500 bbls/day @ 500-600 psi (I just got off the phone with Keith who is with Intercept Energy). The pressure dissipates to 300 psi while down on maintenance. Using 300 psi, the EMW @ 4106' is 10.01 ppg. We should not see any pressure from this well since it is over 1/2 mile away & not on fracture orientation. We have drilled as close as 0.98 miles to this SWD well & **on fracture orientation** and have not seen any pressure while drilling. **If any pressure communication is seen, we can easily weight up to 10.1 ppg MW to control the wellbore. Our intermediate cement design will be 12.5 ppg lead & 13 ppg tail. We will also pump a weighted spacer.**

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1,500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock and floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test / 4,000 psi high test. The 10M BOP will be installed with rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from surface shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

Statement on Accumulator System and Location of Hydraulic Controls:

Precision 406 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

- A) Pason Gas Monitoring 2,200' - TD
- B) Mud logger with gas monitor – 2,200' to TD
- C) Choke manifold with one manual and one hydraulic operated choke
- D) Full opening floor valve with drill pipe thread
- E) Upper and lower Kelly cock
- F) Shaker, de-sander and centrifuge

4. Proposed Casing & Cementing Program:

Please refer to the attached Wellbore Diagram.

All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations for intermediate and production hole will be based on minimum 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. A minimum of 50% excess over gauge volume will be pumped on surface casing.

5. Drilling Fluids Program:

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	Air	Air
Intermediate	WBM	9.4 – 10.5
Production	WBM	11.0 – 12.8

Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. Evaluation Program:

Logs:

Mud Log: 2,200' MD/TVD – TD

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from surface casing shoe to TD.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 12,500' TVD equals approximately 8,320 psi. This is calculated based on a 0.6656 psi/ft gradient (12.8 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 5,570 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 9,250' TVD = 7,400 psi

BOPE and casing design will be based on the lesser of the two MASPs which is 5,570 psi.

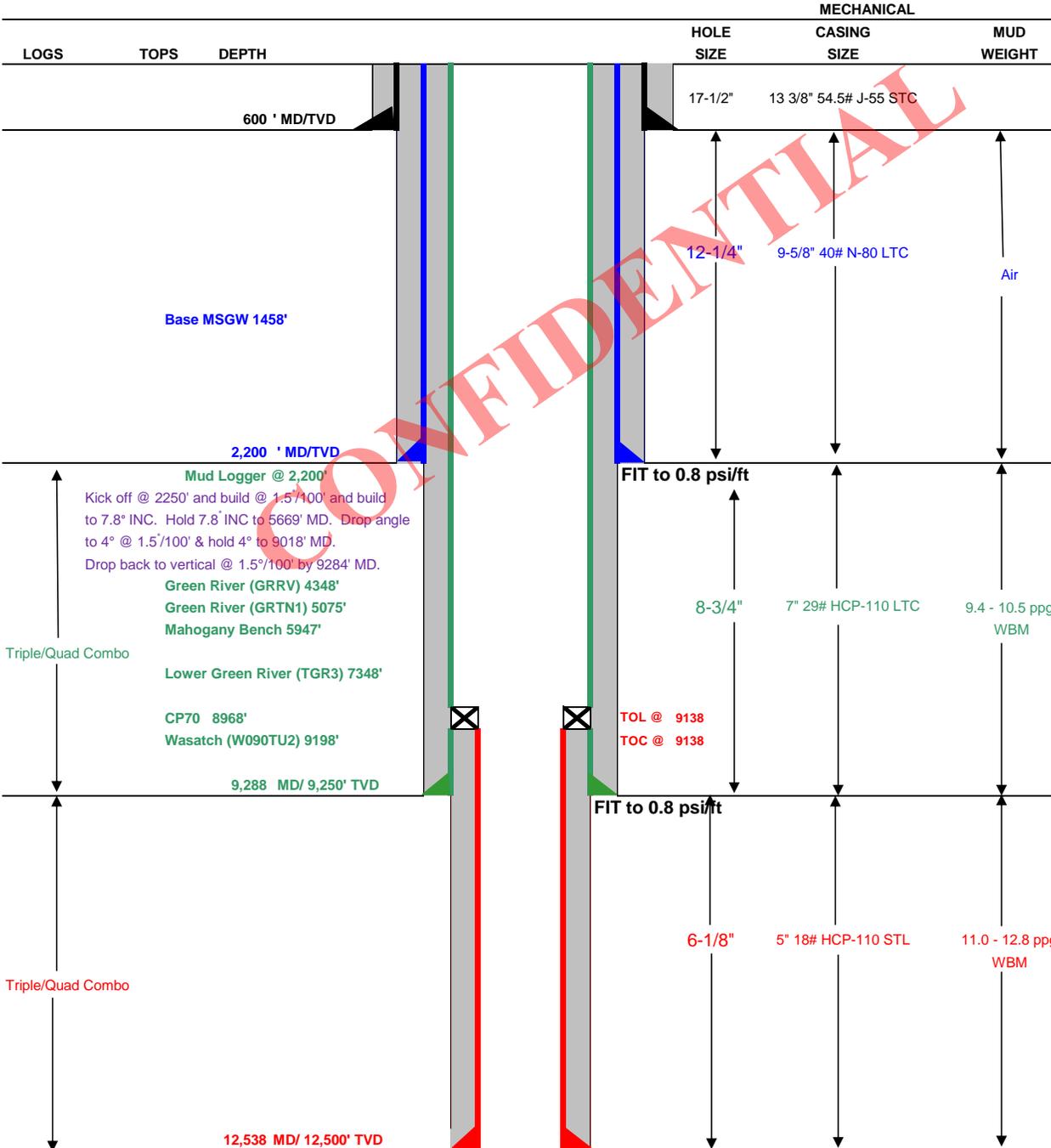
8. **OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.**

CONFIDENTIAL



Drilling Schematic

Company Name: EP ENERGY	Date: May 16, 2015
Well Name: Tomlinson-Berrett 4-7C4	TD: 12,538
Field, County, State: Altamont, Duchesne, Utah	AFE #: TBD
Surface Location: Sec 7 T3S R4W 1992' FSL 2190' FWL	BHL: Sec 7 T3S R4W 1400' FSL 1700' FWL
Objective Zone(s): Green River, Wasatch	Elevation: 5941.4
Rig: Precision 406	Spud (est.): TBD
BOPE Info: Diverter Stack w/ rotating head on structural pipe from 600' to 2,200' . 11 10M BOPE w/ rotating head & 5M annular from 2,200' to 9,288' . 11 10M BOPE w/ rotating head, spacer spool, 5M annular, flex rams, blind rams, single w/ flex rams from 9,288' to TD	



DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	13 3/8"	0 600	54.5	J-55	STC	2,740	1,130	514
SURFACE	9-5/8"	0 2200	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0 9288	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5"	9138 12538	18.00	HCP-110	STL	13,940	15,450	341

CEMENT PROGRAM	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
CONDUCTOR	600	Class G + 3% CACL2	758	100%	15.8 ppg	1.15
SURFACE	Lead	1,700 EXTENDACEM SYSTEM: Type V Cement + 2% Cal-Seal + 0.35% Versaset + 0.3% D-Air 5000 + 6% Salt + 2% Econolite + 0.125 Poly-E-Flake	384	100%	12.0 ppg	2.36
	Tail	500 HALCEM SYSTEM: Class G Cement + 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.3% D-AIR 5000	195	50%	14.3 ppg	1.30
INTERMEDIATE	Lead	6,838 EXTENDACEM SYSTEM: Class G Cement + 6% Bentonite + 0.2% Econolite + 0.3% Versaset + 0.75% HR-5 + 0.3% Super CBL + 0.2% Halad-322 + 0.125 lb/sk Poly-E-Flake	675	35%	12.5 ppg	1.91
	Tail	2,450 EXPANDACEM SYSTEM: Class G Cement + 4% Bentonite + 0.25 Poly-E-Flake + 0.1% Halad-413 + 5 lb/sk Silicalite Compacted + 0.15% SA-1015 + 0.3% HR-5	298	30%	13.0 ppg	1.64
PRODUCTION LINER	3,400	EXTENDACEM SYSTEM: Class G Cement + 0.2% Super CBL + 0.55% SCR-100 + 0.3% Halad-413 + 0.125 lbm/sk Poly-E-Flake + 3 lbm/sk Silicalite Compacted + 20% SS-200 + 0.10% SA-1015	203	30%	14.2 ppg	1.52

FLOAT EQUIPMENT & CENTRALIZERS	
CONDUCTOR	PDC drillable float shoe, 1 joint, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing.
SURFACE	PDC drillable float shoe, 1 joint casing, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	Halliburton's PDC drillable 10M P-110 float shoe, 1 joint, PDC drillable 10M P-110 float collar. Thread lock all float equipment. Maker joint at +/- 7,350'.
LINER	Float shoe, 1 joint, float collar, 1 joint, landing collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Brad MacAfee 713-997-6383

MANAGER: Bob Dodd



TOMLINSON-BERRETT 4-7C4

**WELL LOCATION: NE ¼ OF THE SW ¼ SECTION 7, T.3S, R.4W. U.S.B.&M.
DUCHESNE COUNTY, UTAH**

PROCEED IN A NORTHERLY DIRECTION FROM DUCHESNE, UTAH ALONG STATE HIGHWAY 87 APPROXIMATELY 6.0 MILES TO THE JUNCTION OF THIS ROAD AND 3575 S TO THE SOUTHEAST; TURN RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION APPROXIMATELY 1.0 MILES TO THE JUNCTION OF THIS ROAD AND THE PROPOSED ACCESS ROAD TO THE SOUTH; TURN RIGHT AND FOLLOW ROAD FLAGS IN A SOUTHERLY THEN WESTERLY THEN SOUTHERLY DIRECTION APPROXIMATELY 5,725 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED LOCATION IS APPROXIMATELY 7.0 MILES.

CONFIDENTIAL



**OUTLAW
ENGINEERING INC.**

P.O. BOX 1800
ROOSEVELT, UTAH 84066
(435) 232-4321



TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T.3S, R.4W, U.S.B.&M.
DUCHESNE COUNTY, UTAH



Photo: View of location stake

Camera Angle: Easterly



Photo: View from beginning of proposed access

Camera Angle: Southeasterly



Location Photos

VERSION:	V2
SURVEYED:	3-17-15



MARCH 19, 2015
AUTHOR: BWH

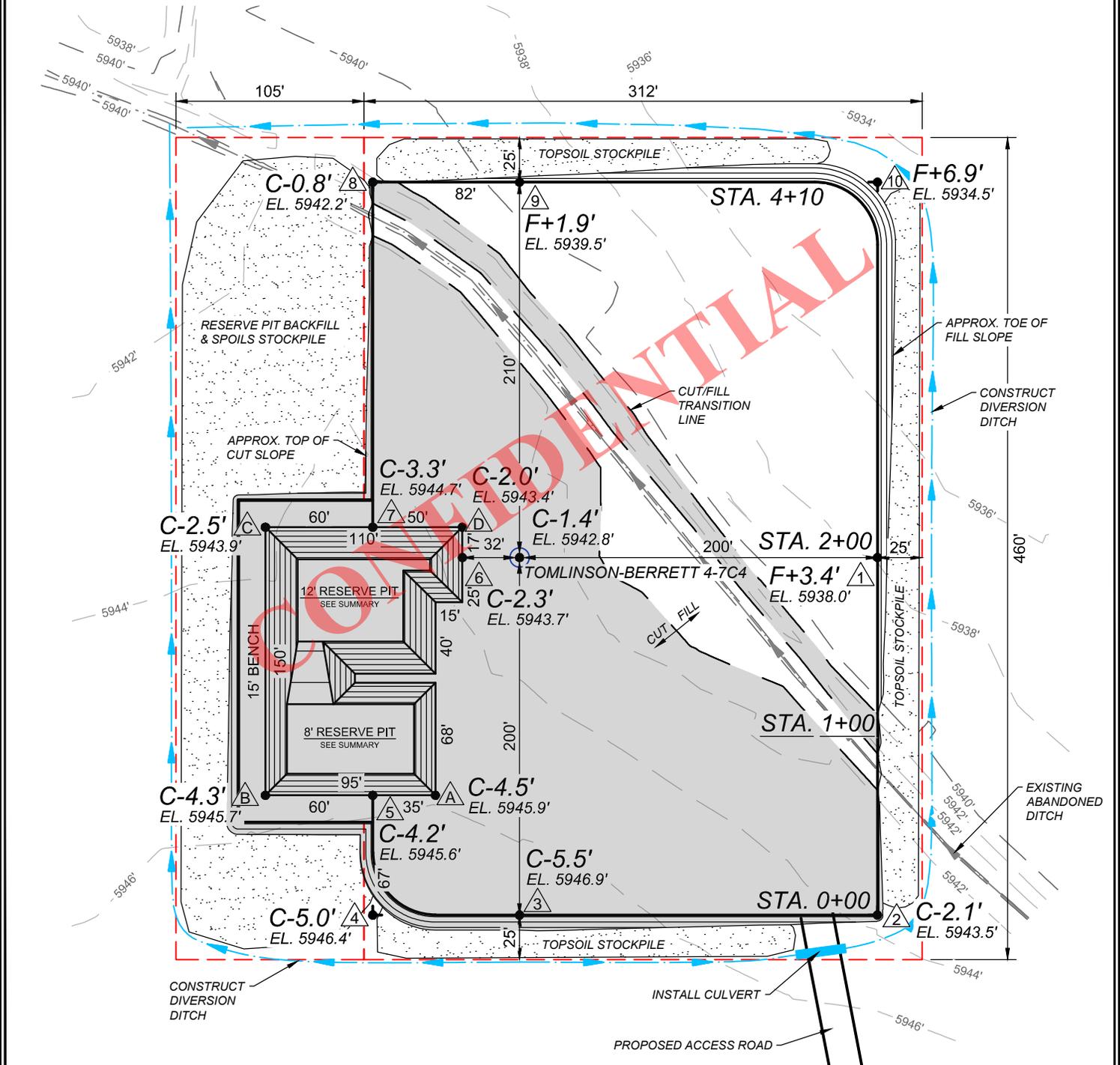
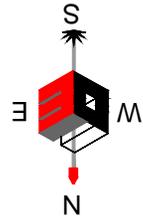
PHOTO

PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY OUTLAW ENGINEERING, INC. AND MAY NOT REFLECT ACTUAL LOCATION OF PROPERTY LINES.



PROPOSED LOCATION LAYOUT
TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH



LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- LIMITS OF DISTURBANCE
- EXISTING ABANDONED DITCH
- DIVERSION DITCH
- CORNER NUMBER
- CUT/FILL NUMBER
- EXISTING GRADE
- PROPOSED WELL LOCATION

OUTLAW ENGINEERING INC.
 P.O. BOX 1800
 ROOSEVELT, UTAH 84066
 (435) 232-4321

HORIZONTAL SCALE: 0, 40, 80

SUMMARY

EXISTING GRADE @ CENTER OF WELL= 5942.8'
 FINISH GRADE ELEVATION = 5941.4'
 CUT SLOPES = 1.5 : 1
 FILL SLOPES = 1.5 : 1
 TOTAL WELL PAD AREA = 2.95 ACRES
 TOTAL WELL PAD DISTURBANCE AREA = 4.40 ACRES

RESERVE PIT
 8' & 12' DEEP, SEE ABOVE
 SLOPE 1.5:1
 PIT VOL. = 3,890 CY

PROPOSED LOCATION LAYOUT
TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

EP ENERGY

MARCH 23, 2015
 SCALE: 1" = 80'
 DESIGN: MA,RFII DRAWN: JMH

PAD/PIT GRADING

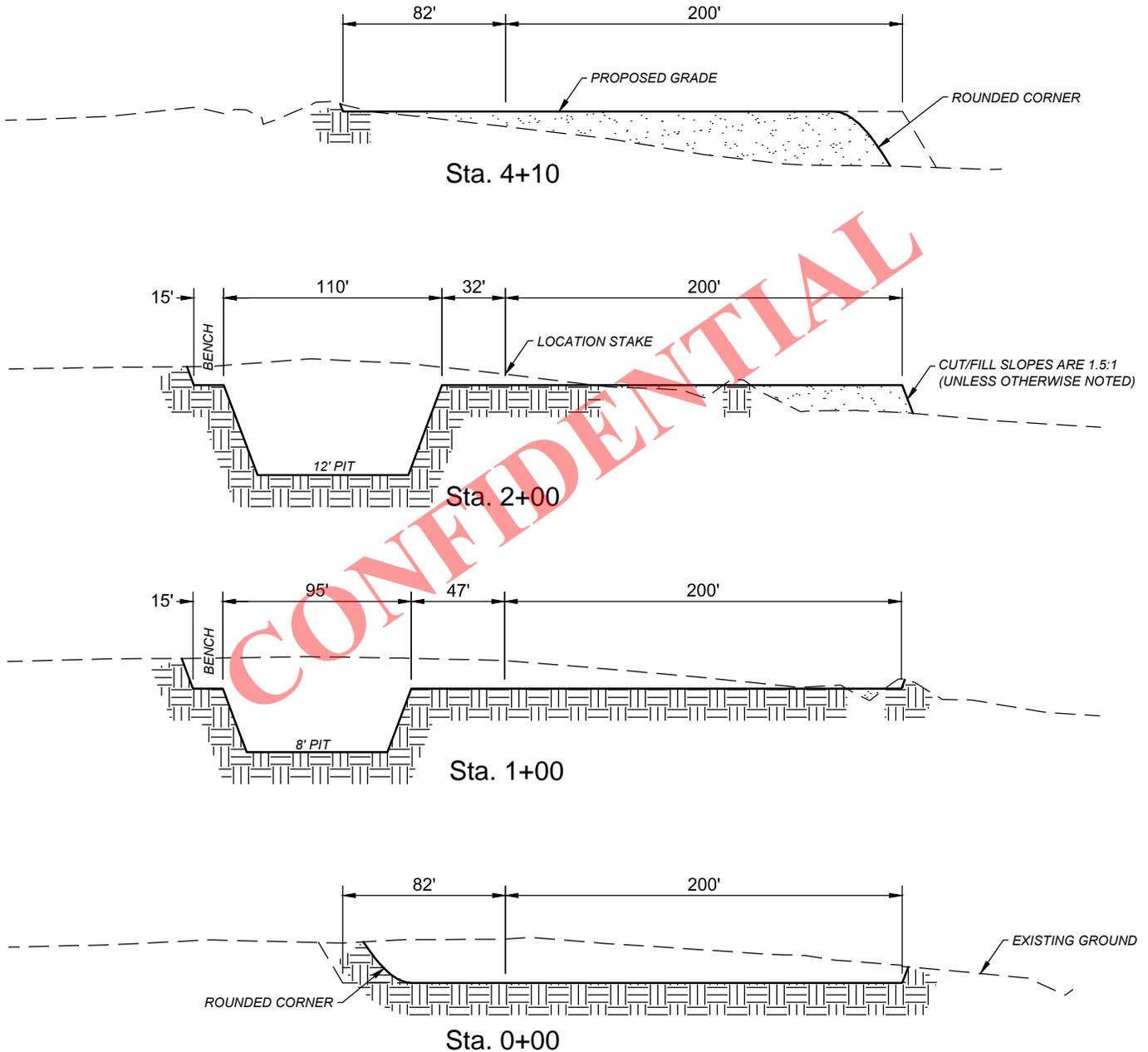
SHEET NO. 2



CROSS SECTIONS
TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

X-Section Scale
 1" = 20'
 1" = 80'



CONFIDENTIAL

LEGEND

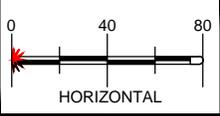
	EXISTING CONTOURS		CUT
	PROPOSED CONTOURS		FILL

ESTIMATED EARTHWORK QUANTITIES
 * NO SHRINK OR SWELL FACTORS HAVE BEEN USED (QUANTITIES EXPRESSED IN CUBIC YARDS)

ITEM	CUT	FILL	EXCESS/IMPORT	6" T.S.*
PAD	6,490	6,490	0	2,540
PIT	3,890	-	0	-

CROSS SECTIONS
TOMLINSON-BERRETT 4-7C4
 WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

OUTLAW ENGINEERING INC.
 P.O. BOX 1800
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*(T.S.) = TOPSOIL STRIPPING

CROSS SECTIONS

MARCH 23, 2015	SHEET NO. 3
SCALE: 1" = 80'	

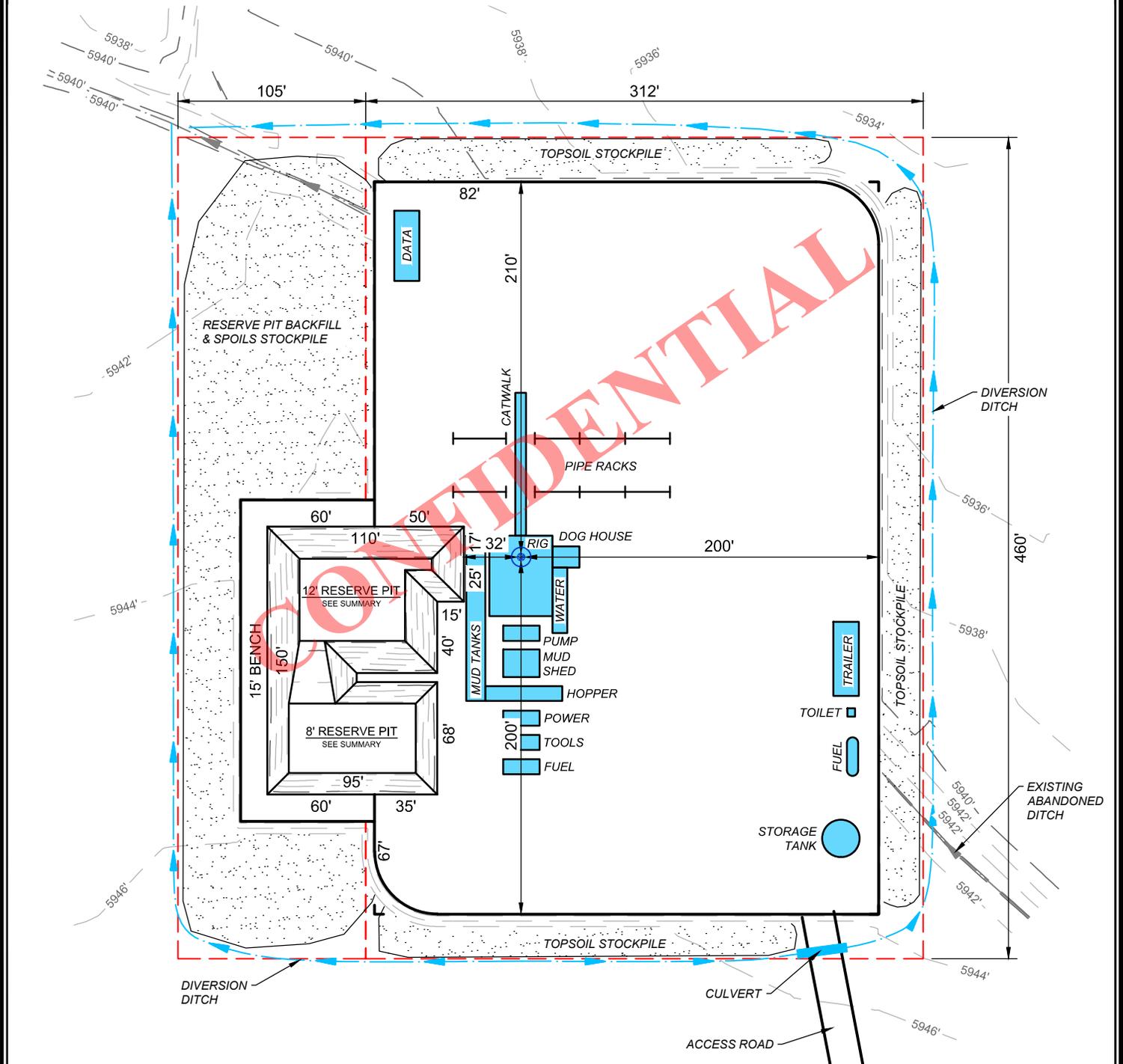
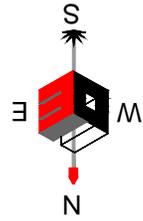
DESIGN: MA,RFII DRAWN: JMH



RIG LAYOUT

TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

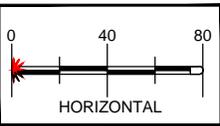


LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS
	LIMITS OF DISTURBANCE
	EXISTING ABANDONED DITCH
	DIVERSION DITCH
	WELL LOCATION

SUMMARY
 SEE CROSS SECTION SHEET FOR QUANTITIES

RIG LAYOUT
TOMLINSON-BERRETT 4-7C4
 WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

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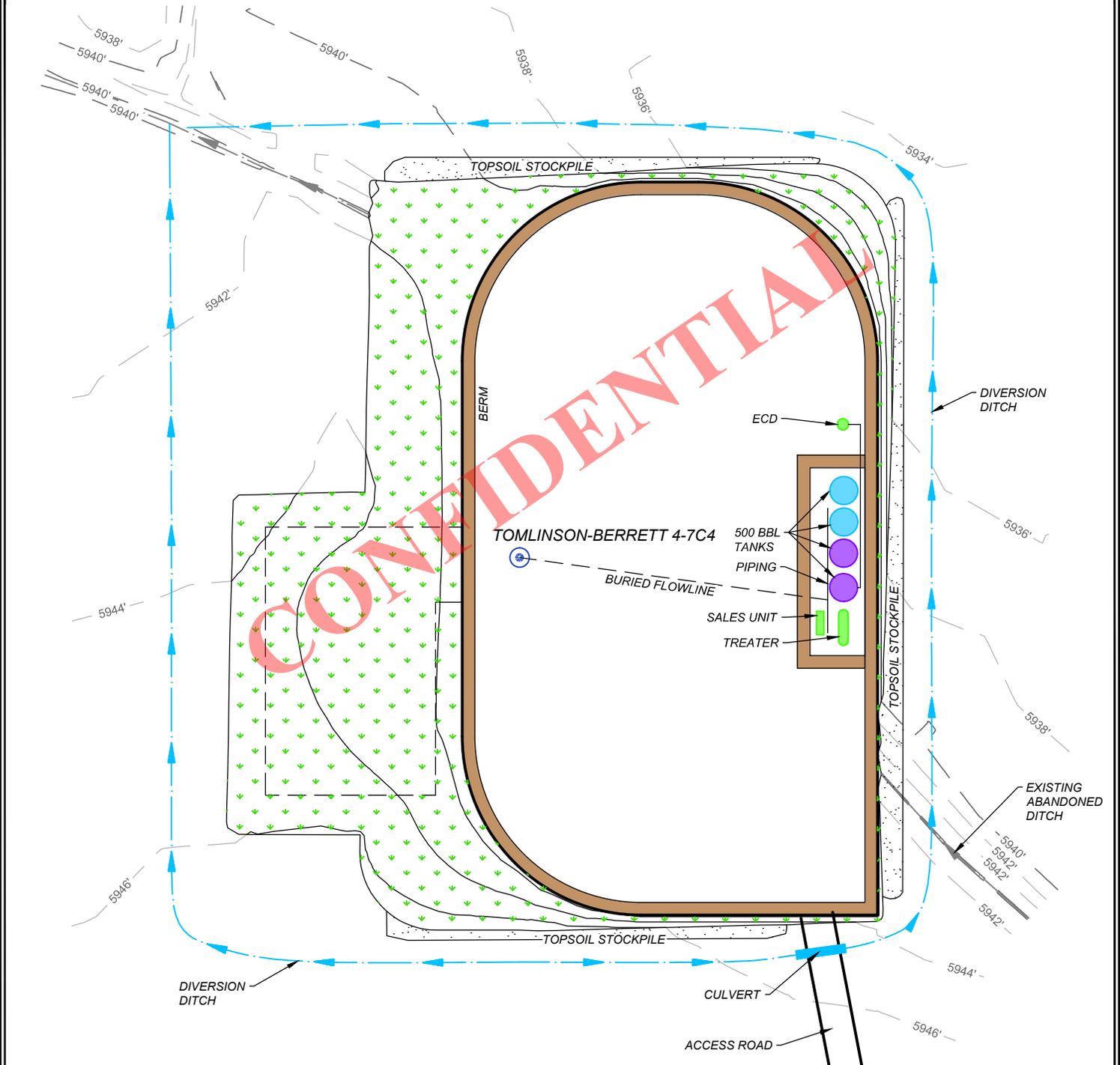
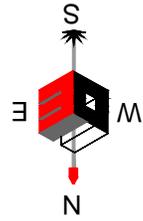
RIG LAYOUT	MARCH 23, 2015	SHEET NO. 4
	SCALE: 1" = 80'	
	DESIGN: MA,RFII DRAWN: JMH	



PRODUCTION FACILITY LAYOUT

TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

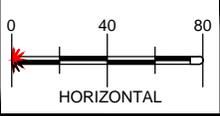


LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS
	LIMITS OF DISTURBANCE
	EXISTING ABANDONED DITCH
	DIVERSION DITCH
	BERM
	WELL LOCATION
	RECLAIMED AREA

SUMMARY
APPROX UN-RECLAIMED AREA = 2.04 ACRES
APPROX RECLAIMED AREA = 0.91 ACRES

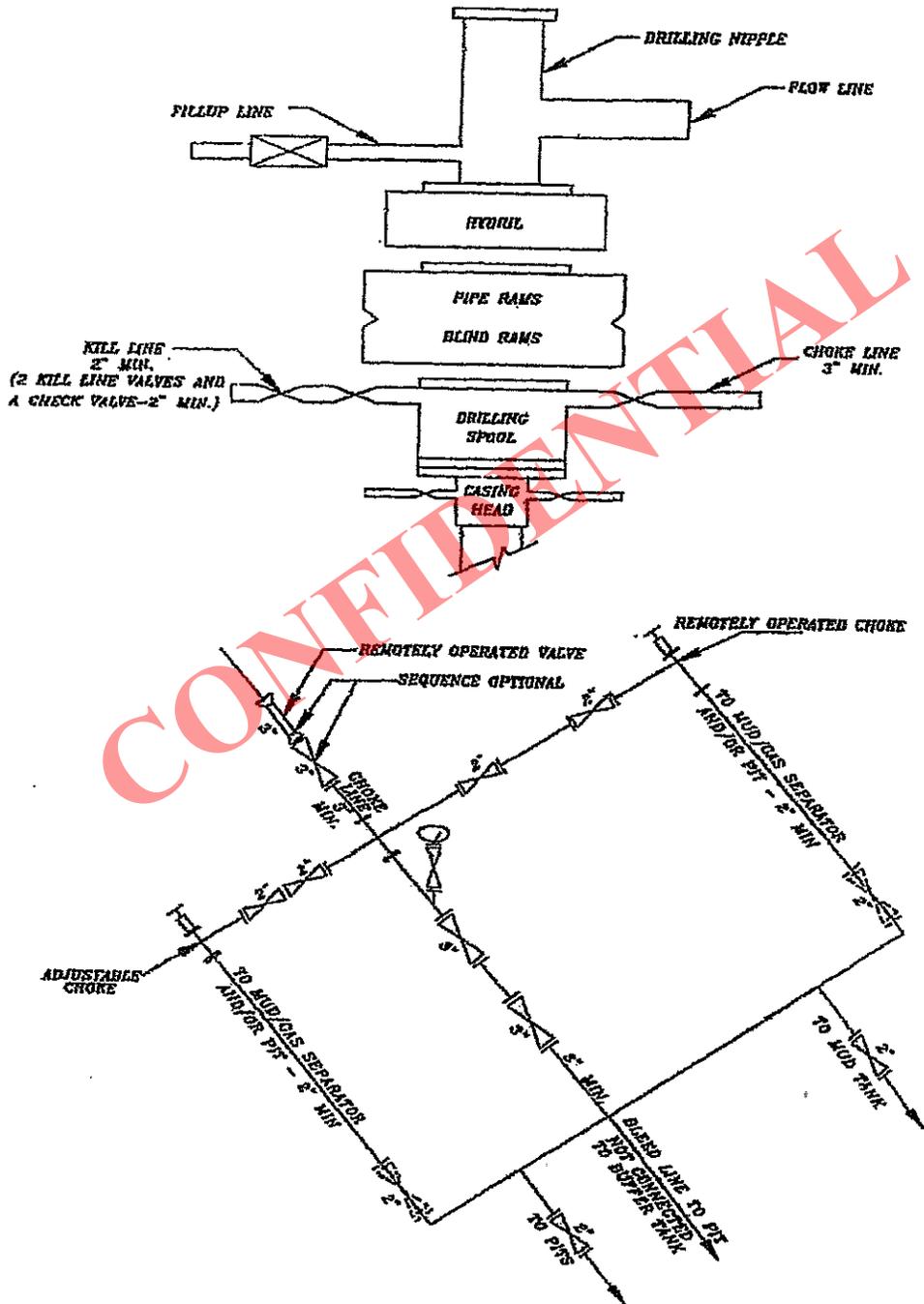
PRODUCTION FACILITY LAYOUT
TOMLINSON-BERRETT 4-7C4
WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7, T3S, R4W, U.S.B.&M.
DUCHESNE COUNTY, UTAH

OUTLAW ENGINEERING INC.
 P.O. BOX 1800
 ROOSEVELT, UTAH 84066
 (435) 232-4321



PRODUCTION LAYOUT	MARCH 23, 2015	SHEET NO. 5
	SCALE: 1" = 80'	
DESIGN: MA,RFH DRAWN: JMH		

5M BOP STACK and CHOKE MANIFOLD SYSTEM



EP ENERGY E&P COMPANY, L.P.

LOCATION SURFACE USE AREA AND RIGHT-OF-WAY SURVEY ON FEE LANDS FOR

TONI L. TOMLINSON; ANTHONY BERRETT; HARRISON L. YOUNG; DAN FAUST; HARRISON L. YOUNG, GRACE M. CREER, CHRISTINE L. SAYER, CAROLINE S. ECKSTROM, NANCY STANEK, MELANIE HUDNALL, JOYCE GASKILL, EARLENE BALLINGER, GLORIA TURNER, LAWRENCE E. PETERSON, JOANNE P. SHURTLEFF, TRACY PIKE, BONNIE P. RUTLEDGE, DONALD E. RUTLEDGE, GWYNN FAMILY TRUST, CRAIG LEE MILLER, GORDON RUSSELL MILLER, JAMES ERWIN MILLER, AND BRENT A. MILLER; & STEPHEN R. DEW REVOCABLE TRUST AGREEMENT

LOCATED IN SECTION 7 TOWNSHIP 3 S., RANGE 4 W., U.S.B.&M., DUCHESNE COUNTY, UTAH

SURVEYOR'S CERTIFICATE

I, JARED L. WATSON DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR AND THAT I HOLD CERTIFICATE NO. 5047065 AS PRESCRIBED UNDER THE LAWS OF THE STATE OF UTAH AND THAT A SURVEY OF THE DESCRIBED PROPERTY HEREIN WAS PERFORMED UNDER MY DIRECTION.



LEGEND

- = FOUND SECTION CORNER
- = CALCULATED SECTION CORNER
- = SECTION LINE
- = QUARTER SECTION LINE
- = SIXTEENTH SECTION LINE
- = EXISTING GAS LINE
- = EXISTING WATERLINE
- = EXISTING GRAVEL ROAD
- = PROPOSED CL RIGHT-OF-WAY

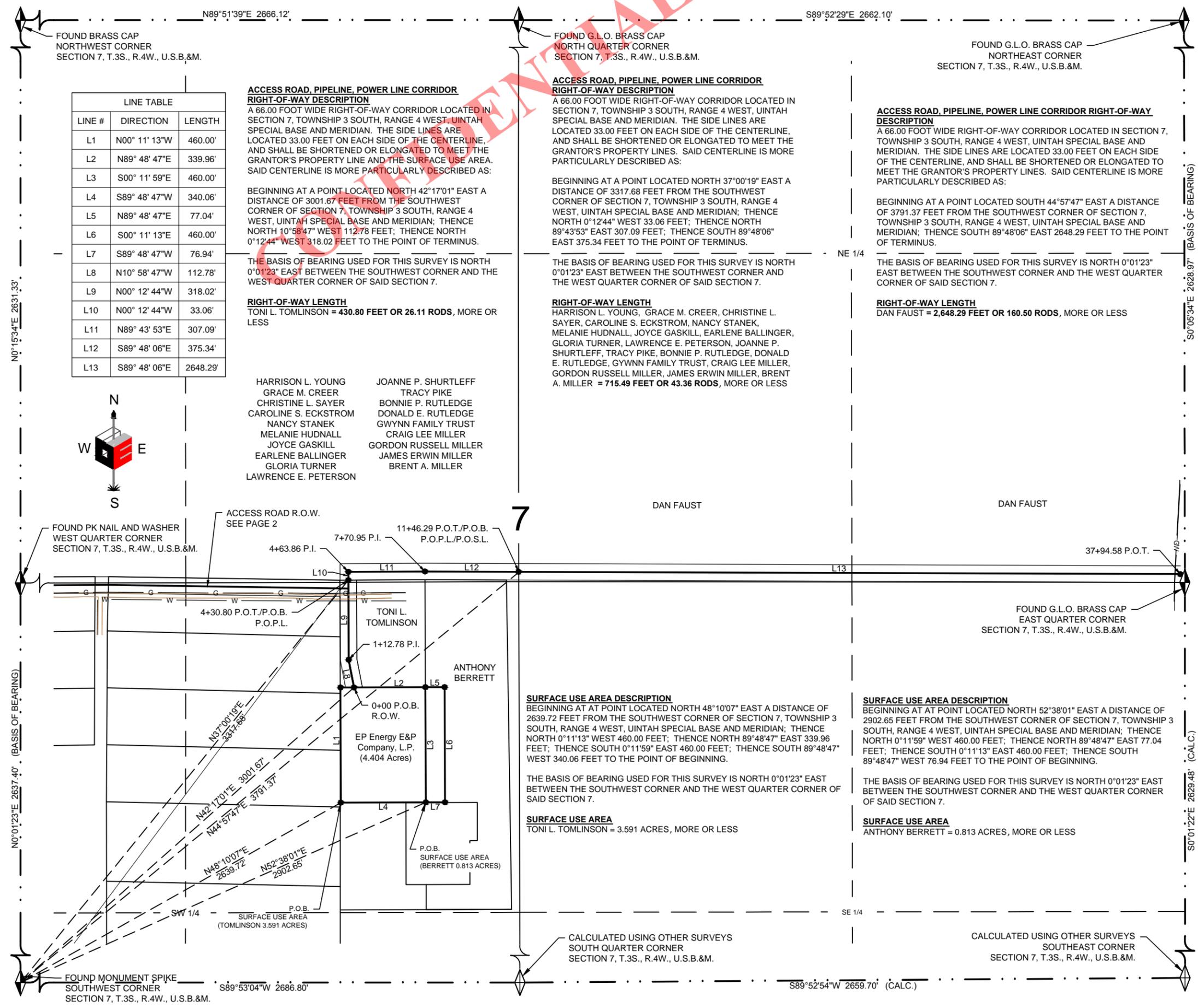
SCALE: 1" = 400'
11X17 SHEET

SHEET
SURFACE USE AREA & RIGHT-OF-WAY PLAT



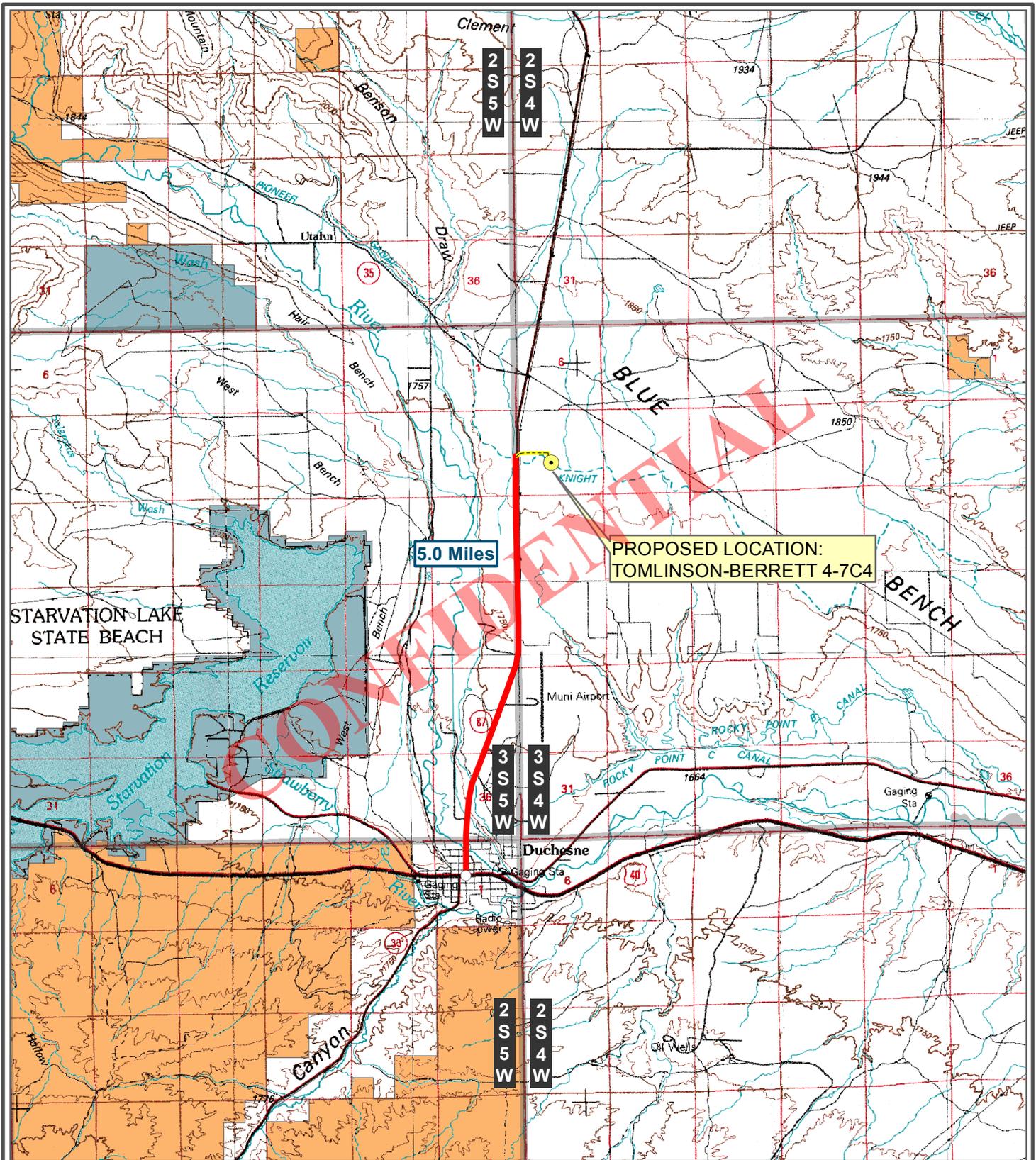
PLAT NO. 320A DATE MAY 4, 2015 SHEET NO. 1 OF 2

RECEIVED: May 27, 2015



LINE #	DIRECTION	LENGTH
L1	N00° 11' 13"W	460.00'
L2	N89° 48' 47"E	339.96'
L3	S00° 11' 59"E	460.00'
L4	S89° 48' 47"W	340.06'
L5	N89° 48' 47"E	77.04'
L6	S00° 11' 13"E	460.00'
L7	S89° 48' 47"W	76.94'
L8	N10° 58' 47"W	112.78'
L9	N00° 12' 44"W	318.02'
L10	N00° 12' 44"W	33.06'
L11	N89° 43' 53"E	307.09'
L12	S89° 48' 06"E	375.34'
L13	S89° 48' 06"E	2648.29'

- | | |
|----------------------|-----------------------|
| HARRISON L. YOUNG | JOANNE P. SHURTLEFF |
| GRACE M. CREER | TRACY PIKE |
| CHRISTINE L. SAYER | BONNIE P. RUTLEDGE |
| CAROLINE S. ECKSTROM | DONALD E. RUTLEDGE |
| NANCY STANEK | GWYNN FAMILY TRUST |
| MELANIE HUDNALL | CRAIG LEE MILLER |
| JOYCE GASKILL | GORDON RUSSELL MILLER |
| EARLENE BALLINGER | JAMES ERWIN MILLER |
| GLORIA TURNER | BRENT A. MILLER |
| LAWRENCE E. PETERSON | |



**PROPOSED LOCATION:
TOMLINSON-BERRETT 4-7C4**

5.0 Miles

STARVATION LAKE
STATE BEACH

Duchesne



**OUTLAW
ENGINEERING INC.**

P. O. BOX 1800
ROOSEVELT, UTAH 84066
(435) 232-4321



PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY OUTLAW ENGINEERING, INC. AND MAY NOT REFLECT ACTUAL LOCATION OF PROPERTY LINES

LEGEND

- Tomlinson-Berrett 4-7C4 Site Location
- Proposed Access Road
- Existing Access Road

- Federal
- Private
- State
- Tribal

TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7,
T.3S, R.4W, U.S.B.&M.
DUCHESE COUNTY, UTAH



Site Location

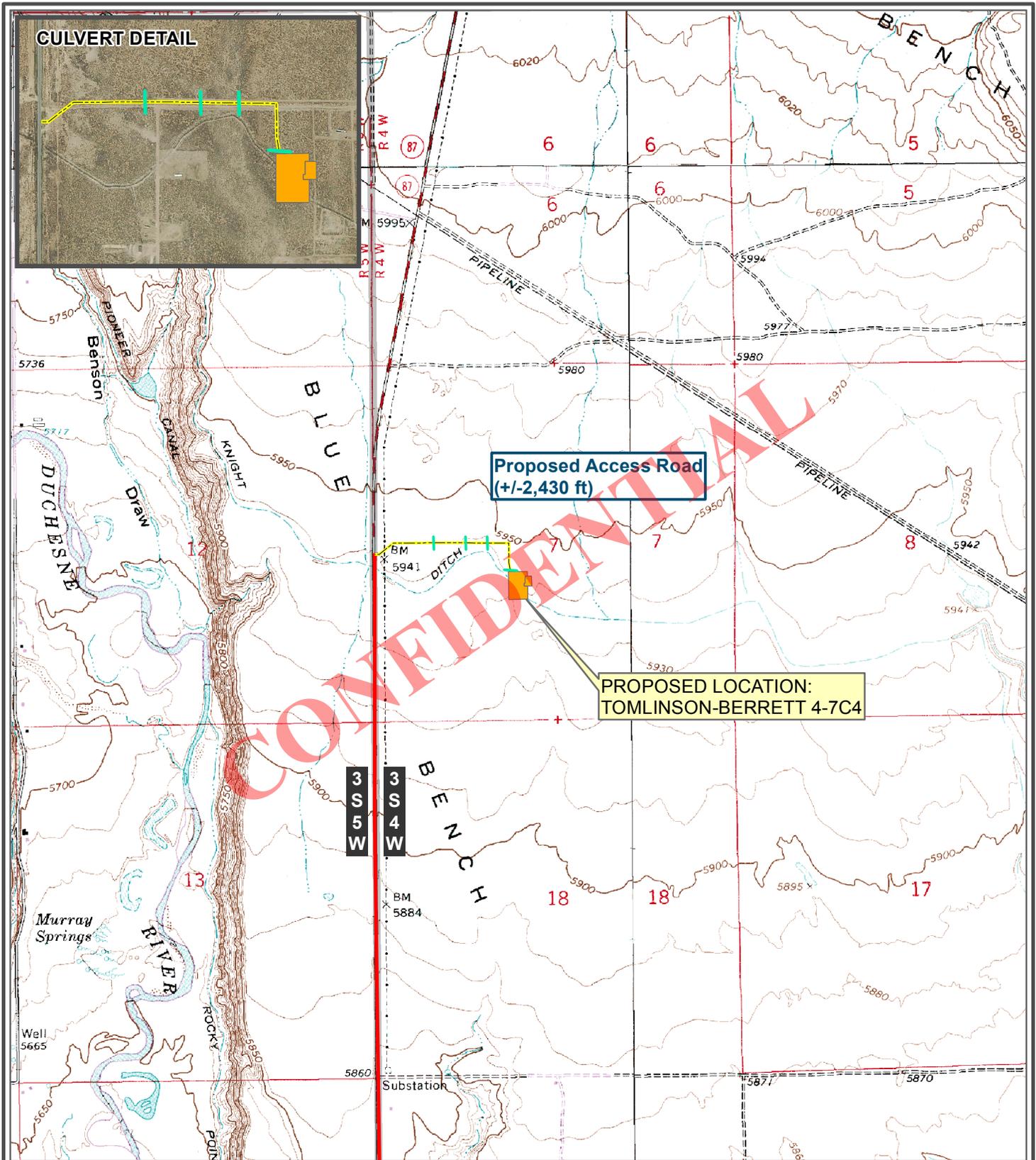
0 2,000 4,000 6,000 8,000 Feet

VERSION: **V3**
SURVEYED: **5-1-15**

USGS 7.5'
Duchesne
Quadrangle

MARCH 19, 2015
SCALE: 1" = 8,342'
AUTHOR: BWH

SHEET
A



**Proposed Access Road
(+/-2,430 ft)**

**PROPOSED LOCATION:
TOMLINSON-BERRETT 4-7C4**



**OUTLAW
ENGINEERING INC.**

P. O. BOX 1800
ROOSEVELT, UTAH 84066
(435) 232-4321



PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY OUTLAW ENGINEERING, INC. AND MAY NOT REFLECT ACTUAL LOCATION OF PROPERTY LINES

**Proposed Access
Road**



VERSION: **V3**
SURVEYED: **5-1-15**

LEGEND

- Proposed Access Road
- Culvert Required
- Existing Access Road
- Proposed Pad

- Federal
- Private
- State
- Tribal

TOMLINSON-BERRETT 4-7C4

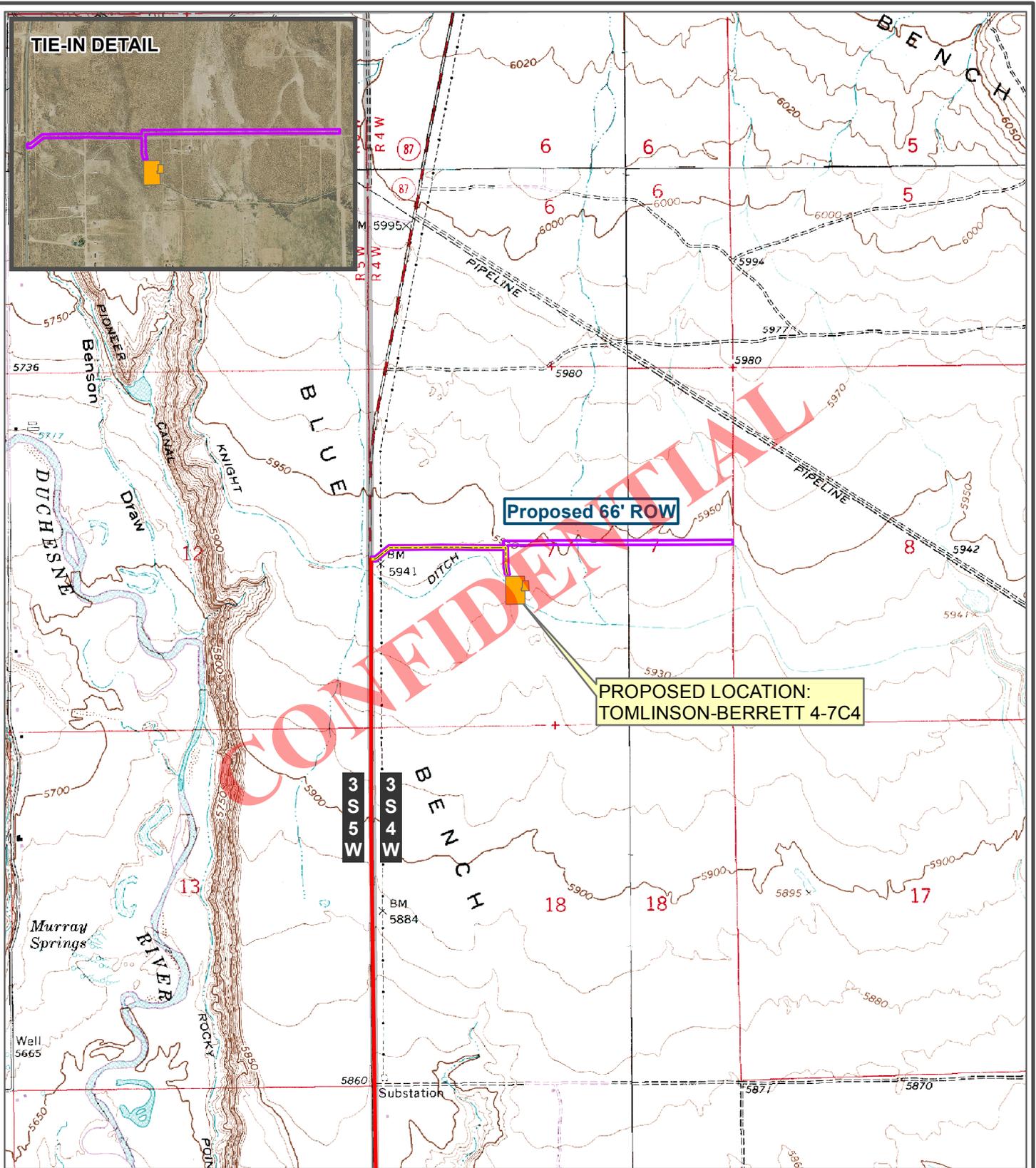
WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7,
T.3S, R.4W, U.S.B.&M.
DUCHEсне COUNTY, UTAH



USGS 7.5'
Duchesne
Quadrangle
2014 NAIP Imagery

MARCH 19, 2015
SCALE: 1" = 2,000'
AUTHOR: BWH

SHEET
B



OUTLAW ENGINEERING INC.
 P.O. BOX 1800
 ROOSEVELT, UTAH 84066
 (435) 232-4321

PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY OUTLAW ENGINEERING, INC. AND MAY NOT REFLECT ACTUAL LOCATION OF PROPERTY LINES

Proposed ROW

VERSION: **V3**
 SURVEYED: **5-1-15**

0 500 1,000 1,500 2,000 Feet

Legend for land ownership:
 Federal (Yellow), Private (White), State (Light Blue), Tribal (Orange)

LEGEND

- Proposed ROW (Purple line)
- Proposed Access Road (Yellow line)
- Existing Access Road (Red line)
- Proposed Pad (Yellow square)

TOMLINSON-BERRET 4-7C4

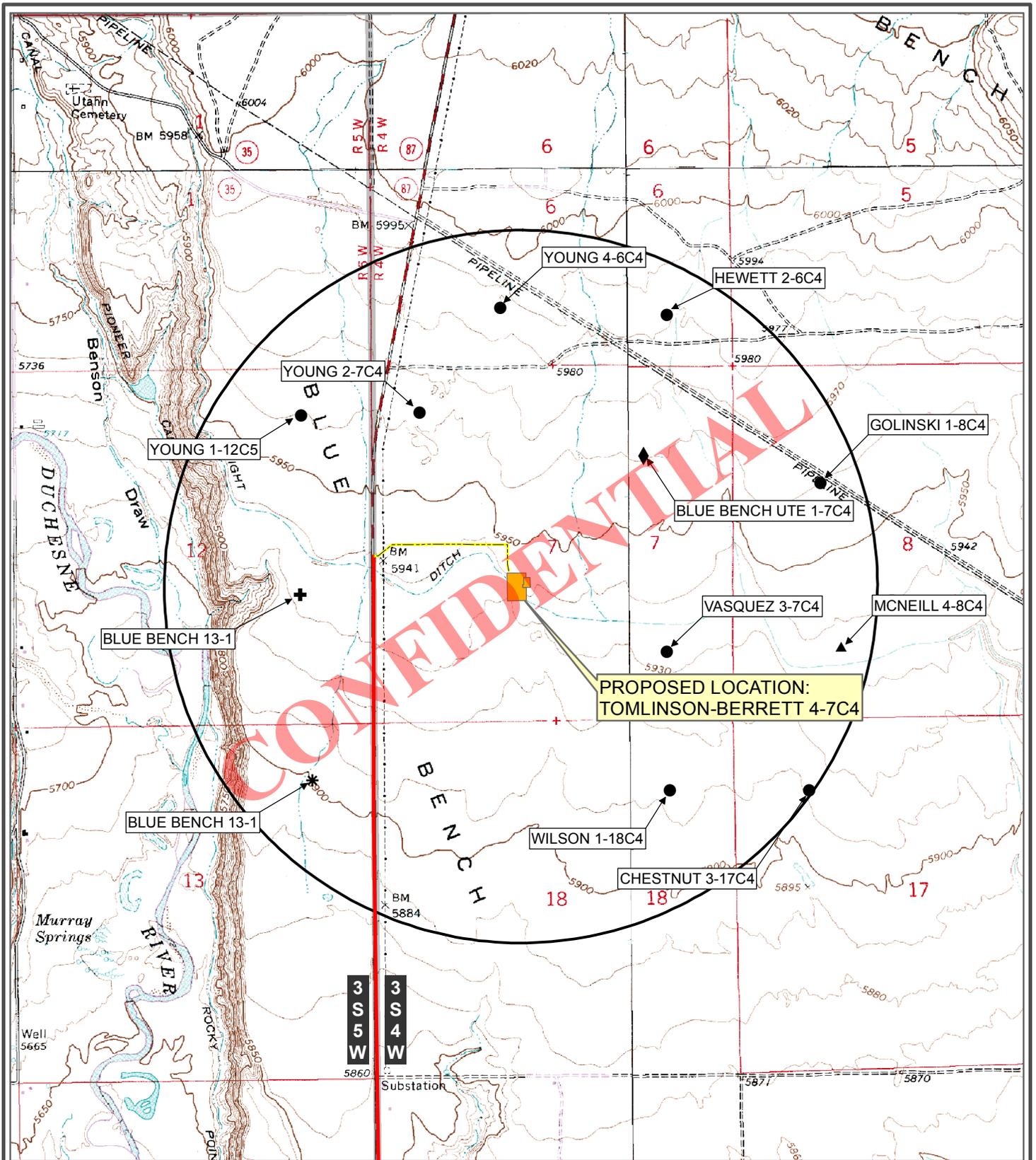
WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7,
 T.3S, R.4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

EP ENERGY

USGS 7.5' Duchesne Quadrangle 2014 NAIP Imagery

MARCH 19, 2015
 SCALE: 1" = 2,000'
 AUTHOR: BWH

SHEET **C**



OUTLAW ENGINEERING INC.
 P.O. BOX 1800
 ROOSEVELT, UTAH 84066
 (435) 232-4321

PARCEL INFORMATION SHOWN HAS NOT BEEN SURVEYED BY OUTLAW ENGINEERING, INC. AND MAY NOT REFLECT ACTUAL LOCATION OF PROPERTY LINES

Surrounding Wells

0 500 1,000 1,500 2,000 Feet

VERSION: **V3**
 SURVEYED: **5-1-15**

Legend for Surrounding Wells:
 Yellow: Federal
 White: Private
 Blue: State
 Orange: Tribal

LEGEND

- ▲ Approved Permit
- + Drilling
- Producing
- * Active
- ◆ Plugged & Abandoned
- One Mile Radius

TOMLINSON-BERRETT 4-7C4

WELL LOCATION: NE 1/4 OF THE SW 1/4 SECTION 7,
 T.3S, R.4W, U.S.B.&M.
 DUCHESNE COUNTY, UTAH

EP ENERGY

USGS 7.5' Duchesne Quadrangle | MARCH 19, 2015 | SCALE: 1" = 2,000' | AUTHOR: BWH

SHEET **D**



EP Energy E&P Company, L.P.

Duchesne Co, UT
Tomlinson-Berrett 4-7C4
4-7C4

OH

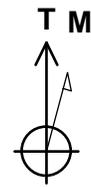
Plan: Design #1

Standard Survey Report

01 April, 2015

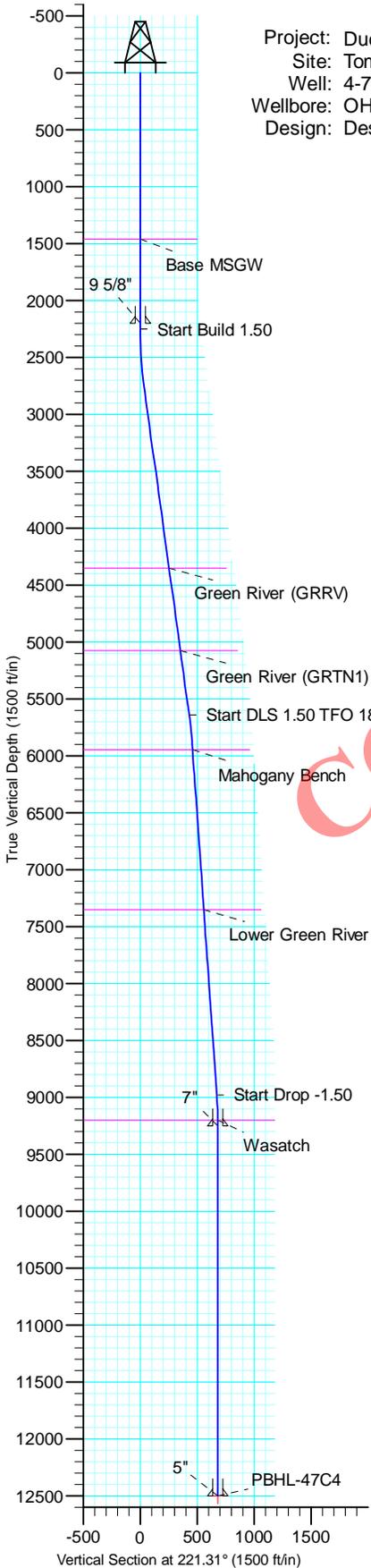
CONFIDENTIAL





Azimuths to True North
Magnetic North: 11.12°

Magnetic Field
Strength: 51812.4snT
Dip Angle: 65.78°
Date: 4/1/2015
Model: BGGM2014



Project: Duchesne Co, UT
Site: Tomlinson-Berrett 4-7C4
Well: 4-7C4
Wellbore: OH
Design: Design #1

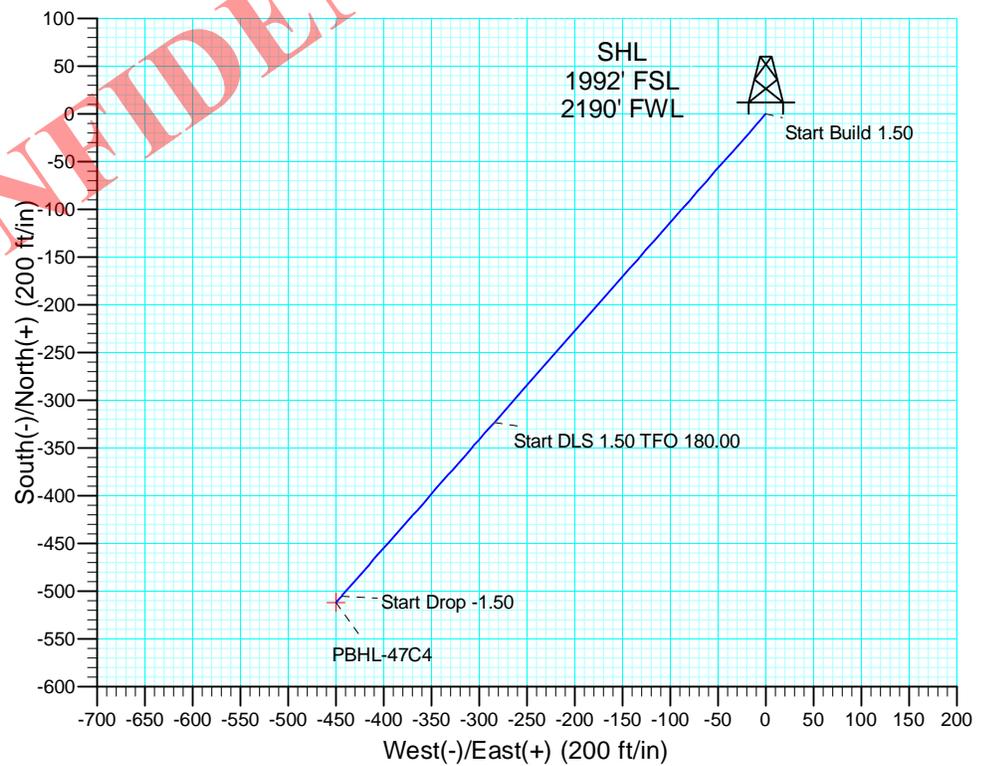
Site Center Latitude: 40° 13' 58.61 N
Site Center Longitude: 110° 22' 53.22 W

Positional Uncertainty: 0.00
Convergence: 0.72
Local North: True

Duchesne Co, UT

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

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2250.00	0.00	0.00	2250.00	0.00	0.00	0.00	0.00	0.00	
2772.00	7.83	221.31	2770.38	-26.75	-23.51	1.50	221.31	35.61	PBHL-47C4
5668.63	7.83	221.31	5640.00	-323.16	-284.02	0.00	0.00	430.23	
5923.96	4.00	221.31	5893.93	-342.92	-301.39	1.50	180.00	456.54	PBHL-47C4
9017.57	4.00	221.31	8980.00	-505.01	-443.86	0.00	0.00	672.34	
9284.24	0.00	0.00	9246.45	-512.00	-450.00	1.50	180.00	681.64	
12537.79	0.00	0.00	12500.00	-512.00	-450.00	0.00	0.00	681.64	PBHL-47C4



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Departure	Annotation	
2250.00	2250.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50	
5640.00	5668.63	7.83	221.31	-26.75	-23.51	35.61	35.61	Start DLS 1.50 TFO 180.00	
8980.00	9017.57	7.83	221.31	-323.16	-284.02	430.23	430.23	Start Drop -1.50	
12500.00	12537.79	4.00	221.31	-342.92	-301.39	456.54	456.54	TD at 12537.79	





Company:	EP Energy E&P Company, L.P.	Local Co-ordinate Reference:	Well 4-7C4
Project:	Duchesne Co, UT	TVD Reference:	WELL @ 5958.00ft (Original Well Elev)
Site:	Tomlinson-Berrett 4-7C4	MD Reference:	WELL @ 5958.00ft (Original Well Elev)
Well:	4-7C4	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	RyanUS R5000

Project	Duchesne Co, UT		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site	Tomlinson-Berrett 4-7C4		
Site Position:		Northing:	7,255,529.94 usft
From:	Lat/Long	Easting:	1,952,693.31 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "
		Latitude:	40° 13' 58.61 N
		Longitude:	110° 22' 53.22 W
		Grid Convergence:	0.72 °

Well	4-7C4					
Well Position	+N/-S	0.00 ft	Northing:	7,255,529.94 usft	Latitude:	40° 13' 58.61 N
	+E/-W	0.00 ft	Easting:	1,952,693.31 usft	Longitude:	110° 22' 53.22 W
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,941.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	4/1/2015	11.12	65.78	51,812

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	221.31	

Survey Tool Program	Date 4/1/2015				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	12,537.53	Design #1 (OH)	Ryan-MWD+BGGM	OWSG MWD - BGGM	

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	0.00
100.00	0.00	0.00	100.00	0.00	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	0.00
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	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	0.00
700.00	0.00	0.00	700.00	0.00	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	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Company:	EP Energy E&P Company, L.P.	Local Co-ordinate Reference:	Well 4-7C4
Project:	Duchesne Co, UT	TVD Reference:	WELL @ 5958.00ft (Original Well Elev)
Site:	Tomlinson-Berrett 4-7C4	MD Reference:	WELL @ 5958.00ft (Original Well Elev)
Well:	4-7C4	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	RyanUS R5000

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)	
1,000.00	0.00	0.00	1,000.00	0.00	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	0.00
1,200.00	0.00	0.00	1,200.00	0.00	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	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,458.00	0.00	0.00	1,458.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Base MSGW										
1,500.00	0.00	0.00	1,500.00	0.00	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	0.00
1,700.00	0.00	0.00	1,700.00	0.00	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	0.00
1,900.00	0.00	0.00	1,900.00	0.00	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	0.00
2,100.00	0.00	0.00	2,100.00	0.00	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	0.00
9 5/8"										
2,250.00	0.00	0.00	2,250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50										
2,300.00	0.75	221.31	2,300.00	-0.25	-0.22	0.33	1.50	1.50	0.00	0.00
2,400.00	2.25	221.31	2,399.96	-2.21	-1.94	2.94	1.50	1.50	0.00	0.00
2,500.00	3.75	221.31	2,499.82	-6.14	-5.40	8.18	1.50	1.50	0.00	0.00
2,600.00	5.25	221.31	2,599.51	-12.04	-10.58	16.02	1.50	1.50	0.00	0.00
2,700.00	6.75	221.31	2,698.96	-19.89	-17.48	26.48	1.50	1.50	0.00	0.00
2,772.00	7.83	221.31	2,770.38	-26.75	-23.51	35.61	1.50	1.50	0.00	0.00
2,800.00	7.83	221.31	2,798.12	-29.61	-26.03	39.43	0.00	0.00	0.00	0.00
2,900.00	7.83	221.31	2,897.18	-39.85	-35.02	53.05	0.00	0.00	0.00	0.00
3,000.00	7.83	221.31	2,996.25	-50.08	-44.02	66.67	0.00	0.00	0.00	0.00
3,100.00	7.83	221.31	3,095.32	-60.31	-53.01	80.30	0.00	0.00	0.00	0.00
3,200.00	7.83	221.31	3,194.39	-70.55	-62.00	93.92	0.00	0.00	0.00	0.00
3,300.00	7.83	221.31	3,293.45	-80.78	-71.00	107.54	0.00	0.00	0.00	0.00
3,400.00	7.83	221.31	3,392.52	-91.01	-79.99	121.17	0.00	0.00	0.00	0.00
3,500.00	7.83	221.31	3,491.59	-101.24	-88.98	134.79	0.00	0.00	0.00	0.00
3,600.00	7.83	221.31	3,590.66	-111.48	-97.98	148.41	0.00	0.00	0.00	0.00
3,700.00	7.83	221.31	3,689.72	-121.71	-106.97	162.04	0.00	0.00	0.00	0.00
3,800.00	7.83	221.31	3,788.79	-131.94	-115.97	175.66	0.00	0.00	0.00	0.00
3,900.00	7.83	221.31	3,887.86	-142.18	-124.96	189.28	0.00	0.00	0.00	0.00
4,000.00	7.83	221.31	3,986.93	-152.41	-133.95	202.91	0.00	0.00	0.00	0.00
4,100.00	7.83	221.31	4,086.00	-162.64	-142.95	216.53	0.00	0.00	0.00	0.00
4,200.00	7.83	221.31	4,185.06	-172.87	-151.94	230.16	0.00	0.00	0.00	0.00
4,300.00	7.83	221.31	4,284.13	-183.11	-160.93	243.78	0.00	0.00	0.00	0.00
4,364.47	7.83	221.31	4,348.00	-189.70	-166.73	252.56	0.00	0.00	0.00	0.00
Green River (GRRV)										
4,400.00	7.83	221.31	4,383.20	-193.34	-169.93	257.40	0.00	0.00	0.00	0.00
4,500.00	7.83	221.31	4,482.27	-203.57	-178.92	271.03	0.00	0.00	0.00	0.00



Company:	EP Energy E&P Company, L.P.	Local Co-ordinate Reference:	Well 4-7C4
Project:	Duchesne Co, UT	TVD Reference:	WELL @ 5958.00ft (Original Well Elev)
Site:	Tomlinson-Berrett 4-7C4	MD Reference:	WELL @ 5958.00ft (Original Well Elev)
Well:	4-7C4	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	RyanUS R5000

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)	
4,600.00	7.83	221.31	4,581.33	-213.81	-187.92	284.65	0.00	0.00	0.00	
4,700.00	7.83	221.31	4,680.40	-224.04	-196.91	298.27	0.00	0.00	0.00	
4,800.00	7.83	221.31	4,779.47	-234.27	-205.90	311.90	0.00	0.00	0.00	
4,900.00	7.83	221.31	4,878.54	-244.50	-214.90	325.52	0.00	0.00	0.00	
5,000.00	7.83	221.31	4,977.60	-254.74	-223.89	339.14	0.00	0.00	0.00	
5,098.31	7.83	221.31	5,075.00	-264.80	-232.73	352.54	0.00	0.00	0.00	
Green River (GRTN1)										
5,100.00	7.83	221.31	5,076.67	-264.97	-232.88	352.77	0.00	0.00	0.00	
5,200.00	7.83	221.31	5,175.74	-275.20	-241.88	366.39	0.00	0.00	0.00	
5,300.00	7.83	221.31	5,274.81	-285.44	-250.87	380.01	0.00	0.00	0.00	
5,400.00	7.83	221.31	5,373.88	-295.67	-259.86	393.64	0.00	0.00	0.00	
5,500.00	7.83	221.31	5,472.94	-305.90	-268.86	407.26	0.00	0.00	0.00	
5,600.00	7.83	221.31	5,572.01	-316.13	-277.85	420.88	0.00	0.00	0.00	
5,668.63	7.83	221.31	5,640.00	-323.16	-284.02	430.23	0.00	0.00	0.00	
Start DLS 1.50 TFO 180.00										
5,700.00	7.36	221.31	5,671.10	-326.27	-286.76	434.38	1.50	-1.50	0.00	
5,800.00	5.86	221.31	5,770.43	-334.92	-294.36	445.89	1.50	-1.50	0.00	
5,900.00	4.36	221.31	5,870.03	-341.61	-300.24	454.79	1.50	-1.50	0.00	
5,923.96	4.00	221.31	5,893.93	-342.92	-301.39	456.54	1.50	-1.50	0.00	
5,977.17	4.00	221.31	5,947.00	-345.70	-303.84	460.25	0.00	0.00	0.00	
Mahogany Bench										
6,000.00	4.00	221.31	5,969.78	-346.90	-304.89	461.84	0.00	0.00	0.00	
6,100.00	4.00	221.31	6,069.54	-352.14	-309.50	468.82	0.00	0.00	0.00	
6,200.00	4.00	221.31	6,169.29	-357.38	-314.10	475.80	0.00	0.00	0.00	
6,300.00	4.00	221.31	6,269.05	-362.62	-318.71	482.77	0.00	0.00	0.00	
6,400.00	4.00	221.31	6,368.80	-367.86	-323.31	489.75	0.00	0.00	0.00	
6,500.00	4.00	221.31	6,468.56	-373.10	-327.92	496.72	0.00	0.00	0.00	
6,600.00	4.00	221.31	6,568.32	-378.34	-332.52	503.70	0.00	0.00	0.00	
6,700.00	4.00	221.31	6,668.07	-383.58	-337.13	510.67	0.00	0.00	0.00	
6,800.00	4.00	221.31	6,767.83	-388.82	-341.73	517.65	0.00	0.00	0.00	
6,900.00	4.00	221.31	6,867.59	-394.06	-346.34	524.63	0.00	0.00	0.00	
7,000.00	4.00	221.31	6,967.34	-399.30	-350.94	531.60	0.00	0.00	0.00	
7,100.00	4.00	221.31	7,067.10	-404.54	-355.55	538.58	0.00	0.00	0.00	
7,200.00	4.00	221.31	7,166.86	-409.78	-360.15	545.55	0.00	0.00	0.00	
7,300.00	4.00	221.31	7,266.61	-415.02	-364.76	552.53	0.00	0.00	0.00	
7,381.59	4.00	221.31	7,348.00	-419.29	-368.52	558.22	0.00	0.00	0.00	
Lower Green River										
7,400.00	4.00	221.31	7,366.37	-420.26	-369.36	559.50	0.00	0.00	0.00	
7,500.00	4.00	221.31	7,466.12	-425.49	-373.97	566.48	0.00	0.00	0.00	
7,600.00	4.00	221.31	7,565.88	-430.73	-378.58	573.46	0.00	0.00	0.00	
7,700.00	4.00	221.31	7,665.64	-435.97	-383.18	580.43	0.00	0.00	0.00	
7,800.00	4.00	221.31	7,765.39	-441.21	-387.79	587.41	0.00	0.00	0.00	
7,900.00	4.00	221.31	7,865.15	-446.45	-392.39	594.38	0.00	0.00	0.00	
8,000.00	4.00	221.31	7,964.91	-451.69	-397.00	601.36	0.00	0.00	0.00	



Company:	EP Energy E&P Company, L.P.	Local Co-ordinate Reference:	Well 4-7C4
Project:	Duchesne Co, UT	TVD Reference:	WELL @ 5958.00ft (Original Well Elev)
Site:	Tomlinson-Berrett 4-7C4	MD Reference:	WELL @ 5958.00ft (Original Well Elev)
Well:	4-7C4	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	RyanUS R5000

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)	
8,100.00	4.00	221.31	8,064.66	-456.93	-401.60	608.33	0.00	0.00	0.00	
8,200.00	4.00	221.31	8,164.42	-462.17	-406.21	615.31	0.00	0.00	0.00	
8,300.00	4.00	221.31	8,264.18	-467.41	-410.81	622.28	0.00	0.00	0.00	
8,400.00	4.00	221.31	8,363.93	-472.65	-415.42	629.26	0.00	0.00	0.00	
8,500.00	4.00	221.31	8,463.69	-477.89	-420.02	636.24	0.00	0.00	0.00	
8,600.00	4.00	221.31	8,563.45	-483.13	-424.63	643.21	0.00	0.00	0.00	
8,700.00	4.00	221.31	8,663.20	-488.37	-429.23	650.19	0.00	0.00	0.00	
8,800.00	4.00	221.31	8,762.96	-493.61	-433.84	657.16	0.00	0.00	0.00	
8,900.00	4.00	221.31	8,862.71	-498.85	-438.44	664.14	0.00	0.00	0.00	
9,000.00	4.00	221.31	8,962.47	-504.09	-443.05	671.11	0.00	0.00	0.00	
9,017.57	4.00	221.31	8,980.00	-505.01	-443.86	672.34	0.00	0.00	0.00	
Start Drop -1.50										
9,100.00	2.76	221.31	9,062.28	-508.66	-447.07	677.20	1.50	-1.50	0.00	
9,200.00	1.26	221.31	9,162.22	-511.30	-449.38	680.72	1.50	-1.50	0.00	
9,235.79	0.73	221.31	9,198.00	-511.77	-449.80	681.34	1.50	-1.50	0.00	
Wasatch										
9,284.24	0.00	0.00	9,246.45	-512.00	-450.00	681.64	1.50	-1.50	0.00	
9,287.79	0.00	0.00	9,250.00	-512.00	-450.00	681.64	0.00	0.00	0.00	
7"										
9,300.00	0.00	0.00	9,262.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,362.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
9,500.00	0.00	0.00	9,462.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,562.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,662.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
9,800.00	0.00	0.00	9,762.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
9,900.00	0.00	0.00	9,862.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,000.00	0.00	0.00	9,962.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,100.00	0.00	0.00	10,062.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,200.00	0.00	0.00	10,162.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,300.00	0.00	0.00	10,262.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,400.00	0.00	0.00	10,362.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,500.00	0.00	0.00	10,462.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,600.00	0.00	0.00	10,562.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,700.00	0.00	0.00	10,662.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,800.00	0.00	0.00	10,762.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
10,900.00	0.00	0.00	10,862.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,000.00	0.00	0.00	10,962.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,100.00	0.00	0.00	11,062.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,200.00	0.00	0.00	11,162.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,300.00	0.00	0.00	11,262.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,400.00	0.00	0.00	11,362.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,500.00	0.00	0.00	11,462.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,600.00	0.00	0.00	11,562.21	-512.00	-450.00	681.64	0.00	0.00	0.00	
11,700.00	0.00	0.00	11,662.21	-512.00	-450.00	681.64	0.00	0.00	0.00	



Company:	EP Energy E&P Company, L.P.	Local Co-ordinate Reference:	Well 4-7C4
Project:	Duchesne Co, UT	TVD Reference:	WELL @ 5958.00ft (Original Well Elev)
Site:	Tomlinson-Berrett 4-7C4	MD Reference:	WELL @ 5958.00ft (Original Well Elev)
Well:	4-7C4	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	RyanUS R5000

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)
11,800.00	0.00	0.00	11,762.21	-512.00	-450.00	681.64	0.00	0.00	0.00
11,900.00	0.00	0.00	11,862.21	-512.00	-450.00	681.64	0.00	0.00	0.00
12,000.00	0.00	0.00	11,962.21	-512.00	-450.00	681.64	0.00	0.00	0.00
12,100.00	0.00	0.00	12,062.21	-512.00	-450.00	681.64	0.00	0.00	0.00
12,200.00	0.00	0.00	12,162.21	-512.00	-450.00	681.64	0.00	0.00	0.00
12,300.00	0.00	0.00	12,262.21	-512.00	-450.00	681.64	0.00	0.00	0.00
12,400.00	0.00	0.00	12,362.21	-512.00	-450.00	681.64	0.00	0.00	0.00
12,500.00	0.00	0.00	12,462.21	-512.00	-450.00	681.64	0.00	0.00	0.00
12,537.79	0.00	0.00	12,500.00	-512.00	-450.00	681.64	0.00	0.00	0.00
TD at 12537.79 - 5" - PBHL-47C4									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL-47C4	0.00	0.00	12,500.00	-512.00	-450.00	7,255,012.36	1,952,249.75	40° 13' 53.55 N	110° 22' 59.02 W
- hit/miss target - Shape - plan hits target center - Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
2,200.00	2,200.00	9 5/8"	9-5/8	12-1/4	
9,287.79	9,250.00	7"	7	8-3/4	
12,537.79	12,500.00	5"	5	6	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,458.00	1,458.00	Base MSGW		0.00	
4,364.47	4,348.00	Green River (GRRV)		0.00	
5,098.31	5,075.00	Green River (GRTN1)		0.00	
5,977.17	5,947.00	Mahogany Bench		0.00	
7,381.59	7,348.00	Lower Green River		0.00	
9,235.79	9,198.00	Wasatch		0.00	



Company:	EP Energy E&P Company, L.P.	Local Co-ordinate Reference:	Well 4-7C4
Project:	Duchesne Co, UT	TVD Reference:	WELL @ 5958.00ft (Original Well Elev)
Site:	Tomlinson-Berrett 4-7C4	MD Reference:	WELL @ 5958.00ft (Original Well Elev)
Well:	4-7C4	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Design #1	Database:	RyanUS R5000

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N-S (ft)	+E-W (ft)	
2250	2250	0	0	Start Build 1.50
5669	5640	-27	-24	Start DLS 1.50 TFO 180.00
9018	8980	-323	-284	Start Drop -1.50
12,538	12,500	-343	-301	TD at 12537.79

Checked By: _____ Approved By: _____ Date: _____

CONFIDENTIAL

AFFIDAVIT OF DAMAGE SETTLEMENT AND RELEASE

Jacquelyn L. Lynch personally appeared before me, and, being duly sworn, deposes and says:

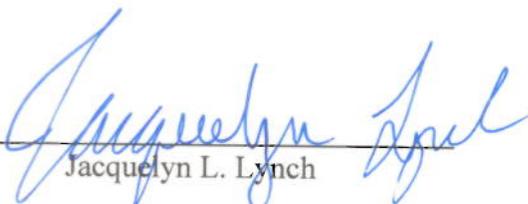
1. My name is Jacquelyn L. Lynch. I am a Landman for EP Energy E&P Company, L.P., whose address is 1001 Louisiana St., Houston, Texas 77002 ("EP Energy").
2. EP Energy is the operator of the proposed Tomlinson-Berrett 4-7C4 well (the "Well") to be located in the NE/4SW/4 of Section 7, Township 3 South, Range 4 West, USM, Duchesne County, Utah (the "Drillsite Location"). The surface owners of the Drillsite Location are as follows:

Anthony Berrett
 580 East 200 North
 Orem, Utah 84097
 (801) 602-5788

Toni Tomlinson Sly
 1136 North Regent Court
 Orem, Utah 84057
 (541) 288-8262

3. EP Energy and the Surface Owners have entered into a Damage Settlement and Release Agreements to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operations associated with the drilling of the Well.

FURTHER AFFIANT SAYETH NOT.



 Jacquelyn L. Lynch

ACKNOWLEDGMENT

STATE OF TEXAS §
 §
 COUNTY OF HARRIS §

Sworn to and subscribed before me on May 11, 2015, by Jacquelyn L. Lynch, as Landman for EP Energy E&P Company, L.P., a Delaware limited partnership.



 NOTARY PUBLIC

My Commission Expires:



EP Energy E&P Company, L.P.

Related Surface Information

1. Current Surface Use:

- Livestock Grazing and Oil and Gas Production.

2. Proposed Surface Disturbance:

- The road will be crown and ditch. Water wings will be constructed on the access road as needed.
- The topsoil will be windrowed and re-spread in the borrow area.
- New road to be constructed will be approximately 1.08 miles in length and 66 feet wide.
- All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

3. Location Of Existing Wells:

- Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

4. Location And Type Of Drilling Water Supply:

- Drilling water: Duchesne City Water

5. Existing/Proposed Facilities For Productive Well:

- There are no existing facilities that will be utilized for this well.
- A pipeline corridor 1.08 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line and one 2 inch gas line and one 2 inch Salt Water disposal line. Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
- Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

6. Construction Materials:

- Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

7. Methods For Handling Waste Disposal:

- The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be placed in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
- Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
- Sewage will be handled in Portable Toilets.
- Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a later date.
- Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

8. Ancillary Facilities:

- There will be no ancillary facilities associated with this project.

9. Surface Reclamation Plans:

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15th, and prior to ground frost, or seed will be planted after the frost has left and before May 15th. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
 1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
 2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
 3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.
- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.
 1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
 2. Landowner will be contacted for rehabilitation requirements.

10. Surface Ownership:

Anthony Barrett
580 E 200 N
Orem, UT 84097
Phone: 801-602-5788

Toni Tomlinson Sly
1136 N Regent Ct.
Orem, UT 84057
Phone: 541-288-8262

Other Information:

- The surface soil consists of clay, and silt.
- Flora – vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna – antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses – Livestock grazing and mineral exploration and production.

• **Operator and Contact Persons:**

Construction and Reclamation:

EP Energy E&P Company, L.P.
Wayne Garner
PO Box 410
Altamont, Utah 84001
435-454-3394 – Office
435-823-1490 – Cell

Regarding This APD

EP Energy E&P Company, L.P.
Maria S. Gomez
1001 Louisiana, Rm 2730D
Houston, Texas 77002
713-997-5038 – Office

Drilling

EP Energy E&P Company, L.P.
Brad MacAfee – Drilling Engineer
1001 Louisiana, Rm 2660D
Houston, Texas 77002
713-997-6383 – office
281-813-0902 – Cell



April 17, 2015

Mr. Brad Hill
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84116-5801

RE: Directional Well

Surface Hole Location: 1,992' FSL, 2,190' FWL (NESW) Section 7-3S-4W
Bottom Hole Location: 1,400' FSL, 1,700' FWL (NESW) Section 7-3S-4W
U.S.B.&M. Duchesne County, Utah

Dear Mr. Hill,

As a supplement to EP Energy E&P Company, L.P.'s ("EPE") Application for Permit to Drill the above referenced well, we hereby submit this letter in accordance with Oil & Gas Conservation Rule R649-3-11, which pertains to the Location and Siting of Directional Wells.

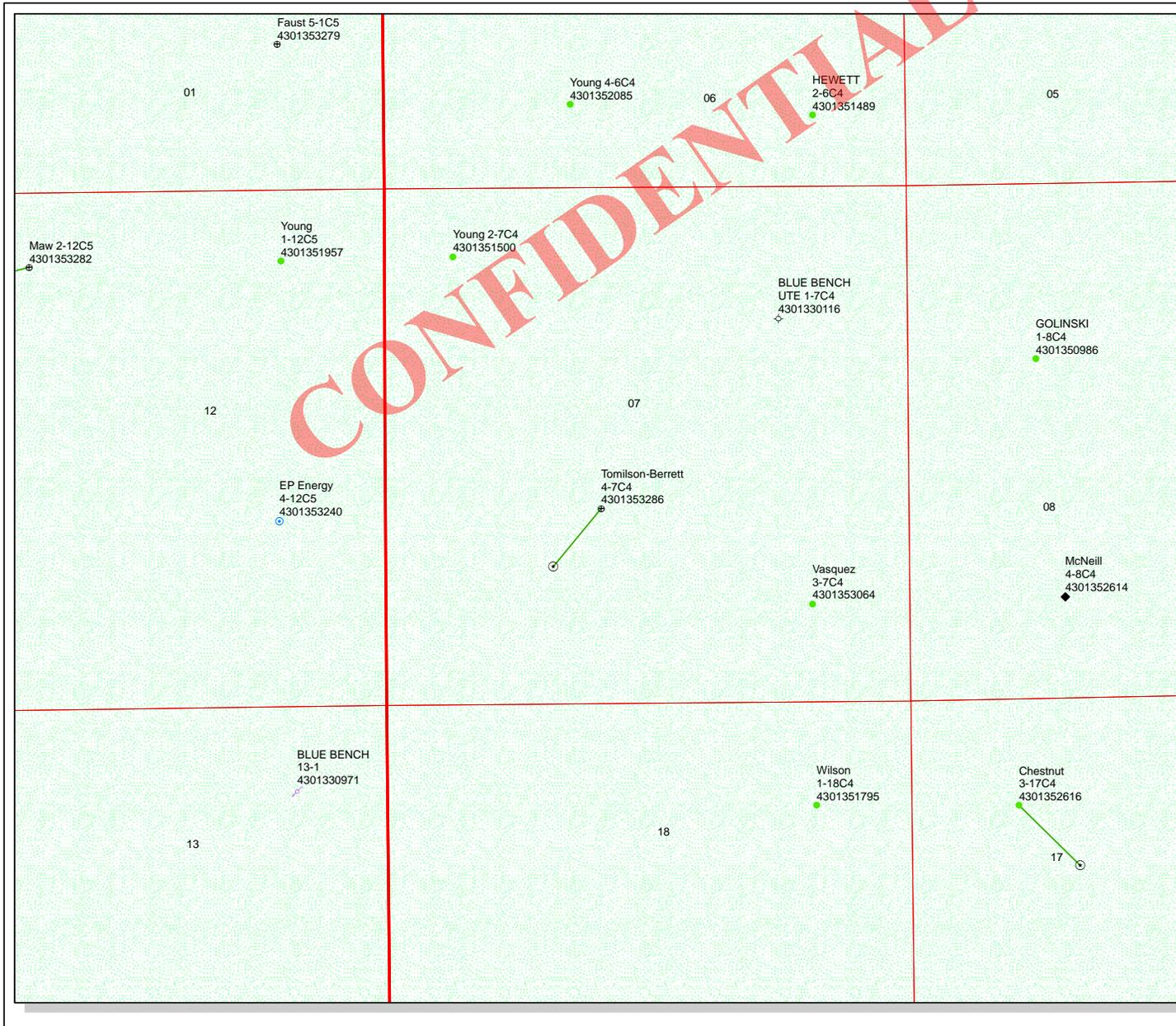
We plan to drill the above referenced well as directional well due to surface owner concerns.

EPE hereby certifies that EPE owns rights to existing oil and gas leases under all tracts that are on or within 460' of the proposed wellbore path to drill and produce. All such tracts are entirely within the 640 acre drilling unit for the well.

Best regards,

A handwritten signature in blue ink, appearing to read "Jacquelyn Lynch".

Jacquelyn L. Lynch
Sr. Landman
713-997-5747
Jacquelyn.Lynch@EpEnergy.com



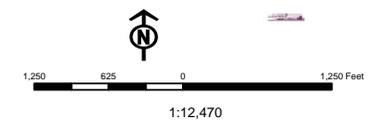
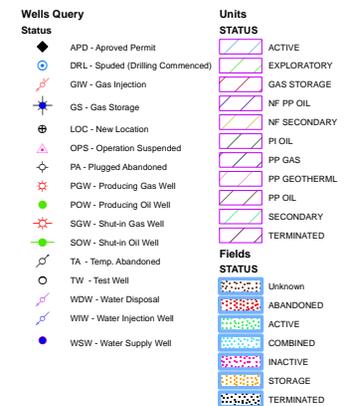
API Number: 4301353286

Well Name: Tomilson-Berrett 4-7C4

Township: T03.0S Range: R04.0W Section: 07 Meridian: U

Operator: EP ENERGY E&P COMPANY, L.P.

Map Prepared: 4/30/2015
Map Produced by Diana Mason



Well Name	EP ENERGY E&P COMPANY, L.P. Tomilson-Berrett 4-7C4 4301353286			
String	COND	SURF	I1	L1
Casing Size(")	13.375	9.625	7.000	5.000
Setting Depth (TVD)	600	2200	9250	12500
Previous Shoe Setting Depth (TVD)	0	600	2200	9250
Max Mud Weight (ppg)	8.3	8.3	10.5	12.8
BOPE Proposed (psi)	0	1000	10000	10000
Casing Internal Yield (psi)	2730	5750	11220	13940
Operators Max Anticipated Pressure (psi)	8320			12.8

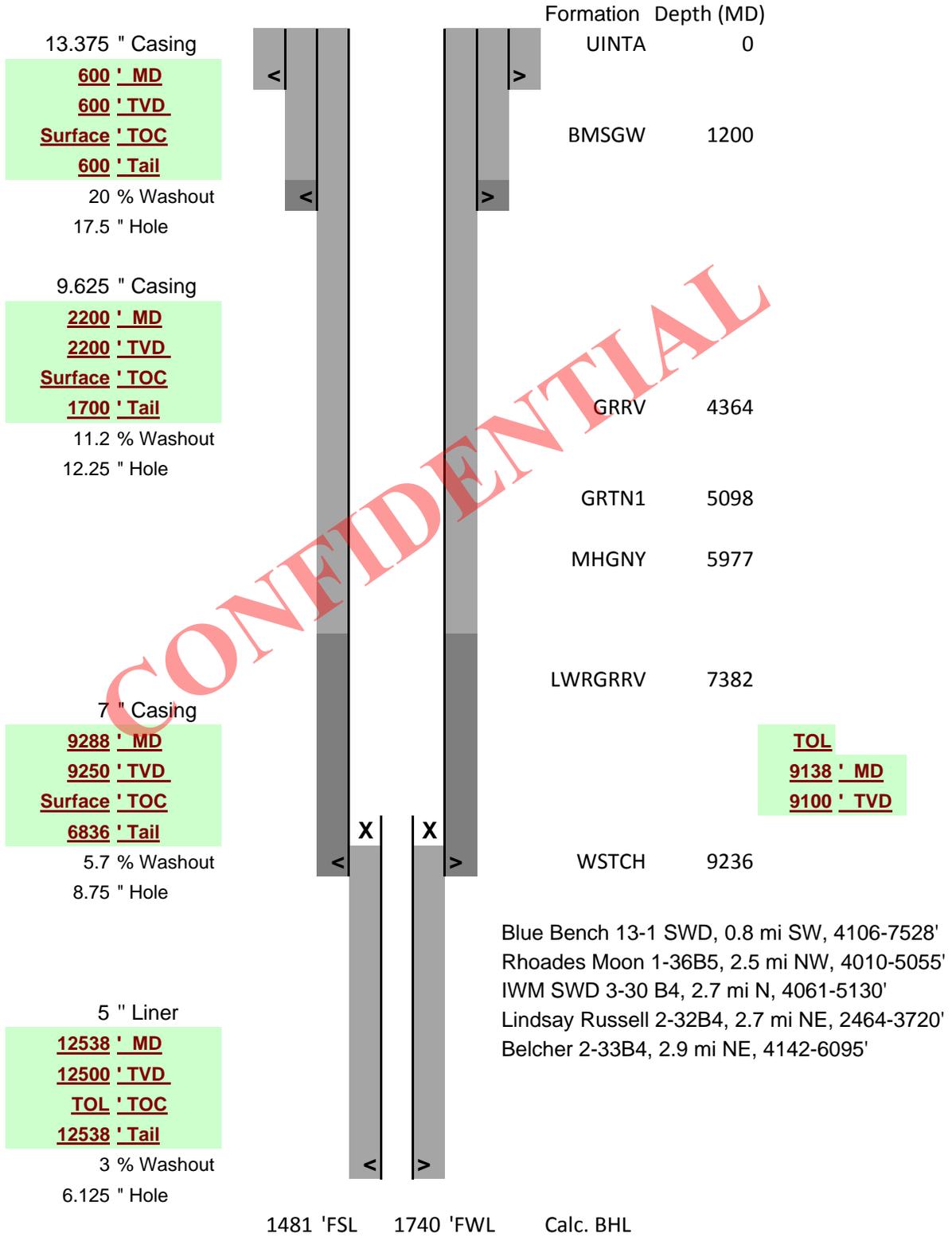
Calculations	COND String	13.375	"
Max BHP (psi)	.052*Setting Depth*MW=	259	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	187	NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	127	NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	127	NO OK
Required Casing/BOPE Test Pressure=		600	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

Calculations	SURF String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	950	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	686	YES rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	466	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	598	YES OK
Required Casing/BOPE Test Pressure=		2200	psi
*Max Pressure Allowed @ Previous Casing Shoe=		600	psi *Assumes 1psi/ft frac gradient

Calculations	I1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	5051	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3941	YES 10M rams, 5M annular
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	3016	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3500	NO OK
Required Casing/BOPE Test Pressure=		7854	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2200	psi *Assumes 1psi/ft frac gradient

Calculations	L1 String	5.000	"
Max BHP (psi)	.052*Setting Depth*MW=	8320	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	6820	YES 10M rams, 5M annular
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	5570	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	7605	YES
Required Casing/BOPE Test Pressure=		9758	psi
*Max Pressure Allowed @ Previous Casing Shoe=		9250	psi *Assumes 1psi/ft frac gradient

**EP ENERGY E&P COMPANY, L.P.
Tomilson-Berrett 4-7C4
43013532860000**



**EP ENERGY E&P COMPANY, L.P.
Tomilson-Berrett 4-7C4
43013532860000**

		1.125			1		1.8					
	MAASP	Collapse Strength (psi)	Collapse Load (psi)	Collapse DF	Burst Strength (psi)	Burst Load (psi)	Burst DF	Tension Strength (kips)	Tension DF	Neutral Point (ft)	Tension Air (kips)	Tension Buoyed (kips)
13.375 " Casing	187	1130	259	4.37	2730	597	4.58	514	15.72	524	32.7	28.7
	MW (ppg)	Internal Grad. (psi)	Backup Mud (ppg)	Internal Mud (ppg)	Max Shoe Pressure (psi)*	CSG Wt (lbs/ft)	CSG Grade	CSG Collar	Cement Lead (sx)	Lead Yield	Cement Tail (sx)	Tail Yield
	8.3	0.12	0.0	0.0	597	55	J-55	STC	758	1.15	0	0.00
	MAASP	Collapse Strength (psi)	Collapse Load (psi)	Collapse DF	Burst Strength (psi)	Burst Load (psi)	Burst DF	Tension Strength (kips)	Tension DF	Neutral Point (ft)	Tension Air (kips)	Tension Buoyed (kips)
9.625 " Casing	465	3090	949	3.26	5750	2200	2.61	737	9.55	1921	88.0	77.1
	MW (ppg)	Internal Grad. (psi)	Backup Mud (ppg)	Internal Mud (ppg)	Max Shoe Pressure (psi)*	CSG Wt (lbs/ft)	CSG Grade	CSG Collar	Cement Lead (sx)	Lead Yield	Cement Tail (sx)	Tail Yield
	8.3	0.22	0.0	0.0	3495	40.0	N-80	LTC	384	2.36	195	1.30
	MAASP	Collapse Strength (psi)	Collapse Load (psi)	Collapse DF	Burst Strength (psi)	Burst Load (psi)	Burst DF	Tension Strength (kips)	Tension DF	Neutral Point (ft)	Tension Air (kips)	Tension Buoyed (kips)
7 " Casing	5562	9200	5046	1.82	11220	7597	1.48	797	3.52	7765	269.4	226.7
	MW (ppg)	Internal Grad. (psi)	Backup Mud (ppg)	Internal Mud (ppg)	Max Shoe Pressure (psi)*	CSG Wt (lbs/ft)	CSG Grade	CSG Collar	Cement Lead (sx)	Lead Yield	Cement Tail (sx)	Tail Yield
	10.5	0.22	0.0	0.0	7597	29.0	HCP-110	LTC	675.0	1.91	298.0	1.64
	MAASP	Collapse Strength (psi)	Collapse Load (psi)	Collapse DF	Burst Strength (psi)	Burst Load (psi)	Burst DF	Tension Strength (kips)	Tension DF	Neutral Point (ft)	Tension Air (kips)	Tension Buoyed (kips)
5 " Casing	5562	13418	8312	1.61	13940	8312	1.68	495	10.05	11873	61.2	49.3
	MW (ppg)	Internal Grad. (psi)	Backup Mud (ppg)	Internal Mud (ppg)	Max Shoe Pressure (psi)*	CSG Wt (lbs/ft)	CSG Grade	CSG Collar	Cement Lead (sx)	Lead Yield	Cement Tail (sx)	Tail Yield
	12.8	0.22	0.0	0.0	9138	18.0	HCP-110	LTC	203.0	1.52	0.0	0.00

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator EP ENERGY E&P COMPANY, L.P.
Well Name Tomlinson-Berrett 4-7C4
API Number 43013532860000 **APD No** 11163 **Field/Unit** ALTAMONT
Location: 1/4,1/4 NESW **Sec** 7 **Tw** 3.0S **Rng** 4.0W 1992 FSL 2190 FWL
GPS Coord (UTM) 552617 4453800 **Surface Owner** Anthony Berrett

Participants

Paul Sorenson & Tony Barrett (surface owners); Jeff Crozier (EP Energy Lands); Kelsey Carter (Land consultant); Randy Fredrick (EP Energy construction); Dennis Ingram (UDOGM)

Regional/Local Setting & Topography

The Tomilson-Berrett 4-7C4 well is proposed in northeastern Utah Approximately 6.0 miles north of Duchesne along Highway 87, then east for 1.0 miles into the well site. The topography at the proposed well site slopes to the southwest showing a 5.0' cut needed along the northeastern corner and 6.9' of fill at the southwest corner. A portion of the old historic "Blue Bench Irrigation Canal" crosses this proposed location just south of the northwest corner and exists immediately north of the southeastern corner. This irrigation system was supplied by the Knight Ditch Canal and flumes that were constructed between 1913-14 to bring Duchesne River water to the arid lands on Blue Bench, which enabled early Uintah Basin farmers to grow alfalfa or other crops. To the north and east is open bench-type lands with scattered housing typically found across the Blue Bench area. Approximately one mile to the west the topography drops off into the Duchesne River Valley that runs south, then turns east just north of Duchesne.

Surface Use Plan

Current Surface Use
 Deer Winter Range
 Residential

New Road Miles	Well Pad	Src Const Material	Surface Formation
1.08	Width 282 Length 410	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Dense sagebrush covering, bunch grass, prickly pear cactus, rabbit brush;

Potential mule deer winter range, jack and cotton-tailed rabbits, coyote, horned toad, prairie dog, closest nesting for birds is 1.0 plus miles to the southwest.

Soil Type and Characteristics

Reddish brown, fine-grained sandy loam with underlying cobbles.

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

RE-route old abandoned irrigation ditch around location to the east and south

Berm Required? Y**Erosion Sedimentation Control Required? N****Paleo Survey Run? N Paleo Potential Observed? Cultural Survey Run? N Cultural Resources? Y****Reserve Pit****Site-Specific Factors****Site Ranking**

Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)		20
Native Soil Type	High permeability	20
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)		0
Affected Populations		
Presence Nearby Utility Conduits	Present	15
Final Score		60

1 Sensitivity Level

Characteristics / Requirements

Proposed reserve pit off the east side of the location in cut, measuring 110' wide by 150' long by 12' deep.

Closed Loop Mud Required? Liner Required? Y Liner Thickness 20 Pit Underlayment Required?**Other Observations / Comments**

surface owner of proposed access road did not attend, surface owner along east side of well pad did, EP Energy owns most of this surface at the pad site, landowner agreement in place, old Blue Bench Irrigation ditch enters proposed pad just south of corner number 2 and leaves along southwest corner number 8, will be diverted south along western side of pad draining south, then easterly and tied back into existing ditch to limit erosion, diversion ditches also north of pad draining west, also ditch draining south along east side of pad. Top soil storage along western side of well pad. Tony Berrett, the surface owner, has a home to the east of this well pad.

Dennis Ingram

5/7/2015

Evaluator

Date / Time

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**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
11163	43013532860000	LOCKED	OW	P	No
Operator	EP ENERGY E&P COMPANY, L.P.		Surface Owner-APD	Anthony Berrett	
Well Name	Tomlinson-Berrett 4-7C4		Unit		
Field	ALTAMONT		Type of Work	DRILL	
Location	NESW 7 3S 4W U 1992 FSL 2190 FWL GPS Coord (UTM) 552624E 4453798N				

Geologic Statement of Basis

EP proposes to set 60 feet of conductor and 2,200 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled with air. The estimated depth to the base of moderately saline ground water is 1,200 feet. A search of Division of Water Rights records indicates that there are 21 water wells within a 10,000 foot radius of the center of Section 7. Wells range between 35 and 500 feet in depth and are used for irrigation, stock watering, domestic, oil exploration and municipal. The deeper wells probably produce from the Duchesne River Formation with the shallower wells producing from alluvial sediments along the Duchesne River. The Duchesne River Formation is made up of sandstones with interbedded shales and is the most prominent fresh water aquifer in the area. The conductor should be extended or the surface casing should be shortened to more closely match the base of the moderately saline ground water.

Brad Hill
APD Evaluator

5/14/2015
Date / Time

Surface Statement of Basis

Diversions ditches need to be cut around the north, east, and west side of location. The old Blue Bench Irrigation Ditch crosses the location just south of corner number 2 and leaves immediately north of corner number 8. The operator should attempt to divert this dry canal south along and west of the well pad and tie it back into the original ditch south of the southeast corner if possible to prevent potential storm water from causing erosion. Topsoil storage planned off the west side of location.

A reserve pit is staked off the east side of the location in cut, and will require a 20 mil synthetic liner and felt sub liner to contain drilling fluids in this blow sand soil. This pit shall also be fenced to keep wildlife from entering same.

A presite was scheduled and performed on May 7, 2015 to address construction and drilling issues on the Tomlinson-Barrett 4-7C4 well. The access road is owned by one party while the surface well pad is owned by EP energy and a second person. According to EP Energy, landowner damage and surface agreements have been obtained and submitted to the Division.

Dennis Ingram
Onsite Evaluator

5/7/2015
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 20 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit should be located on the east side of the location.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location. The old irrigation ditch shall also be diverted around well pad and tied back into existing ditch southeast of corner number 8.

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WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/24/2015

API NO. ASSIGNED: 43013532860000

WELL NAME: Tomlinson-Berrett 4-7C4

OPERATOR: EP ENERGY E&P COMPANY, L.P. (N3850)

PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: NESW 07 030S 040W

Permit Tech Review:

SURFACE: 1992 FSL 2190 FWL

Engineering Review:

BOTTOM: 1400 FSL 1700 FWL

Geology Review:

COUNTY: DUCHESNE

LATITUDE: 40.23297

LONGITUDE: -110.38139

UTM SURF EASTINGS: 552624.00

NORTHINGS: 4453798.00

FIELD NAME: ALTAMONT

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee

PROPOSED PRODUCING FORMATION(S): GREEN RIVER(LWR)-WASATCH

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: STATE/FEE - 400JU0708
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: Duchesne City
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 139-124
- Effective Date: 11/6/2014
- Siting: 8 WELLS PER SECTION
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhll
9 - Cement casing to Surface - ddoucet
15 - Directional - dmason
25 - Surface Casing - ddoucet



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

Permit To Drill

Well Name: Tomlinson-Berrett 4-7C4
API Well Number: 43013532860000
Lease Number: Fee
Surface Owner: FEE (PRIVATE)
Approval Date: 6/2/2015

Issued to:

EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

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 139-124. The expected producing formation or pool is the GREEN RIVER(LWR)-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

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

General:

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

Conditions of Approval:

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

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

The cement volumes for the 7" casing shall be determined from actual hole conditions and the setting depth of the casing in order to place cement from the pipe setting depth back to the surface and tail cement back to 6838' (500' above the Lower Green River formation) as proposed in submitted drilling plan.

Surface casing shall be cemented to the surface.

Additional Approvals:

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

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

Notification Requirements:

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

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

Contact Information:

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

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

Reporting Requirements:

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

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

Approved by:

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

For John Rogers
Associate Director, Oil & Gas



Alexis Huefner <alexishuefner@utah.gov>

Casing & Cementing Notice

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Wed, Jun 17, 2015 at 8:49 AM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Roy Derden) (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

Tomlinson-Berrett 4-7C4

API # 43013532860000

ALTAMONT FIELD

DUCHESNE COUNTY

1992 FSL 2190 FWL
NESW 7 BS 4W

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Leon Ross spudded in on 06-16-15 @ 17:30 hrs. We plan on running and cementing 13-3/8" Conductor Casing to +/- 600' within 24hrs.

Thanks,

Lloyd Rowell / Morgan Harden

EP Energy / PD 406

713-997-1220 (Rig)

435-823-1764 (Cell)

THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.



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Carol Daniels <caroldaniels@utah.gov>

NESW 5-07 T035 804W

24hr Notice, Run & Cement Casing

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Wed, Jul 1, 2015 at 6:44 AM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Roy Derden) (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

Tomlinson-Berrett 4-7C4

API # 43013532860000

ALTAMONT FIELD

DUCHESNE COUNTY

We plan on running & cementing 7" 29# HCP-110 LT&C Intermediate casing to +/- 8,974' within 24hrs.

Regards,

Tony Wilkerson / Bill Owen

EP Energy LLC

PD Rig 406

Rig: 713-997-1220

Cell: 435-823-1764

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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9
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: Fee
	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Tomlinson-Berrett 4-7C4
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.	9. API NUMBER: 4301353286000
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston, TX, 77002	PHONE NUMBER: 713 997-5038 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1992 FSL 2190 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 07 Township: 03.0S Range: 04.0W Meridian: U	9. FIELD and POOL or WILDCAT: ALTAMONT
	COUNTY: DUCHESNE
	STATE: UTAH

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

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/31/2015	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> OTHER	OTHER: <input type="text" value="Initial Completion"/>

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

EP plans to complete into the Wasatch. Please see attached for details.

Approved by the
July 30, 2015
Oil, Gas and Mining

Date: _____

By: DeKQ Quif

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A	DATE 7/30/2015	

Tomlinson Berrett 4-7C4

Initial Completion

API # : 4301353286

The following precautions will be taken until the RCA for the Conover is completed:

1. Review torque turning and running of the 7" and 5" liner of anomalies.
2. Test and chart casing for 30 minutes, noting pressure if any on surface casing.
3. Test all lubricators, valves and BOP's to working pressure.
4. A frac tree with BOP equipment will be utilized during the stimulation treatment.
5. Monitor the surface casing during frac:
 - a. Lay a flowline to the flow back tank and keep the valve open.
 - b. This line will remain in place until a wire line set retrievable packer is in place isolating the casing after the frac.
6. 2 7/8" tubing will be run to isolate the casing during the flow back of the well.
7. Well pressure and annulus pressure would be monitored during this time until the well is ready for pump.

Completion Information (Wasatch Formation)

- | | |
|-----------------|---|
| Stage #1 | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11482' – 11783' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of THS 30/50. Total clean water volume is 3699 bbls. |
| Stage #2 | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~11191' – 11415' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of THS 30/50. Total clean water volume is 3690 bbls. |
| Stage #3 | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10794' – 11093' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of THS 30/50. Total clean water volume is 3683 bbls. |
| Stage #4 | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10458' – 10726' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3677 bbls. |
| Stage #5 | RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~10184' – 10417' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3673 bbls. |

Stage #6 RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~9916' – 10150' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3668 bbls.

Stage #7 RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~9666' – 9876' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3663 bbls.

Stage #8 RU WL unit with 10K lubricator and test to 10,000 psi with glycol. Perforations from ~9383' – 9642' with ~5000 gallons of 15% HCL acid, ~3000 # of 100 mesh sand and ~150000 # of TLC 30/50. Total clean water volume is 3658 bbls.

Stimulation Summary

	Top Perf	Btm. Perf	Gross Interval	Plug Depth	Net Perf Length	Total Shots	Perf Intervals	Type of Prop	Lbs of Prop	Lbs/ft	Lbs of 100 Mesh	Gals of HCL (15%)	BBLs of Clean H2O	BBLs of Slurry
Stage #1	11,482	11,783	301	NA	23	69	17	THS 30/50	150,000	498	3,000	5,000	3,699	4,111
Stage #2	11,191	11,415	224	11,430	23	69	16	THS 30/50	150,000	670	3,000	5,000	3,690	4,103
Stage #3	10,794	11,093	299	11,108	23	69	17	THS 30/50	150,000	502	3,000	5,000	3,683	4,095
Stage #4	10,458	10,726	268	10,741	23	69	17	TLC 30/50	150,000	560	3,000	5,000	3,677	4,078
Stage #5	10,184	10,417	233	10,432	21	63	17	TLC 30/50	150,000	644	3,000	5,000	3,673	4,073
Stage #6	9,916	10,150	234	10,165	23	69	17	TLC 30/50	150,000	641	3,000	5,000	3,668	4,068
Stage #7	9,666	9,876	210	9,891	22	66	17	TLC 30/50	150,000	714	3,000	5,000	3,663	4,064
Stage #8	9,383	9,642	259	-	-	-	-	TLC 30/50	150,000	579	3,000	5,000	3,658	4,059
Average per Stage			254		23	68	17		150,000	601	3,000	5,000	3,676	4,081
Totals per Well			2,028		158	474	118		1,200,000		24,000	40,000	29,411	32,651

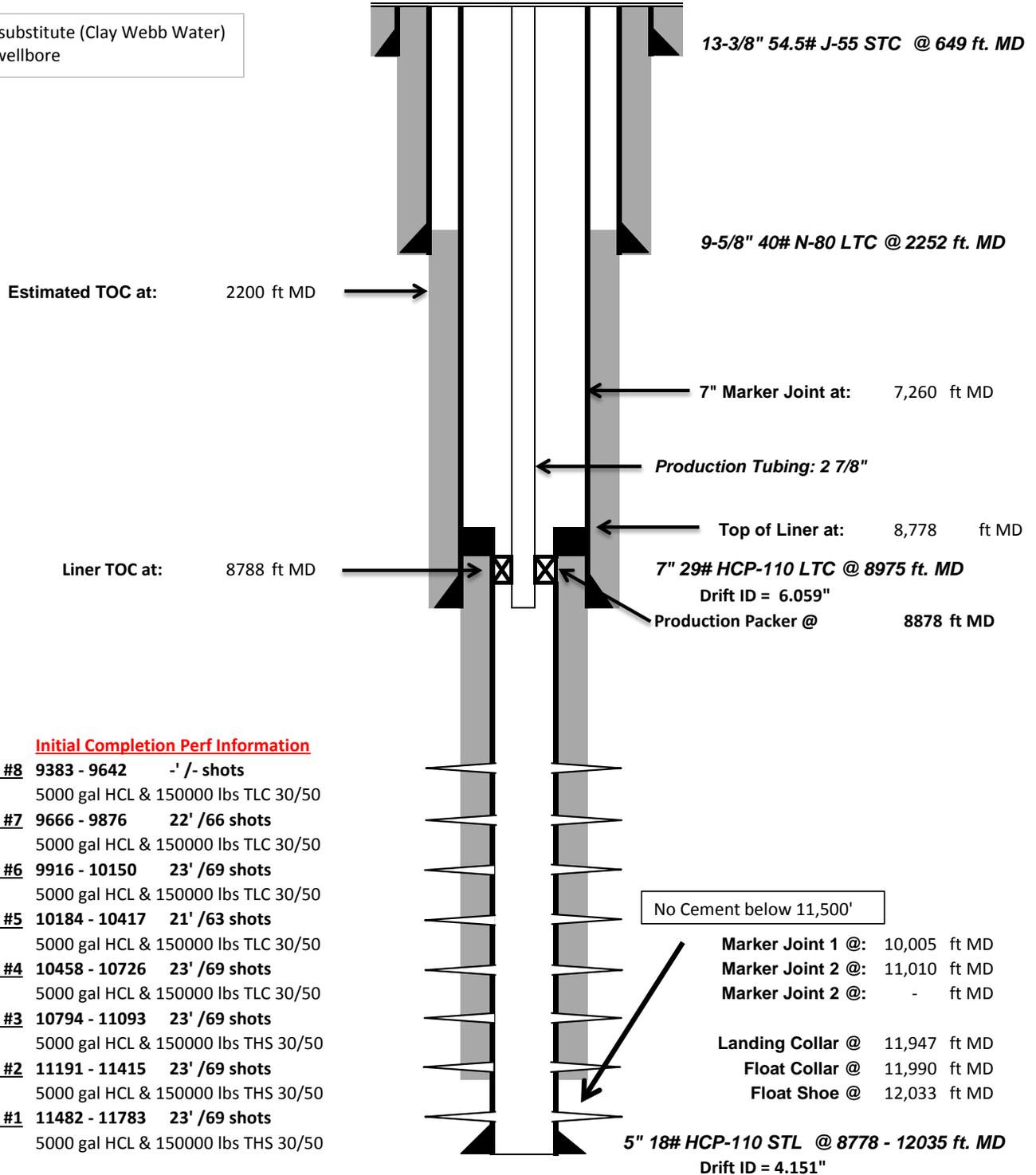


Post-Completion Wellbore Schematic

Well Name: **Tomlinson Berrett 4-7C4**
 Company Name: **EP Energy E&P Company, L.P.**
 Field, County, State: **Altamont, Duchesne, Utah**
 Surface Location: **Lat: 40 13' 58.768"N Long: 110 22' 50.661"W**
 Producing Zone(s): **Wasatch**

Last Updated: **7/30/2015**
 By: **Lauren Pratt**
 TD: **12,033**
 API: **4301353286**
 AFE: **161141**

8.43 ppg KCL substitute (Clay Webb Water) water in the wellbore



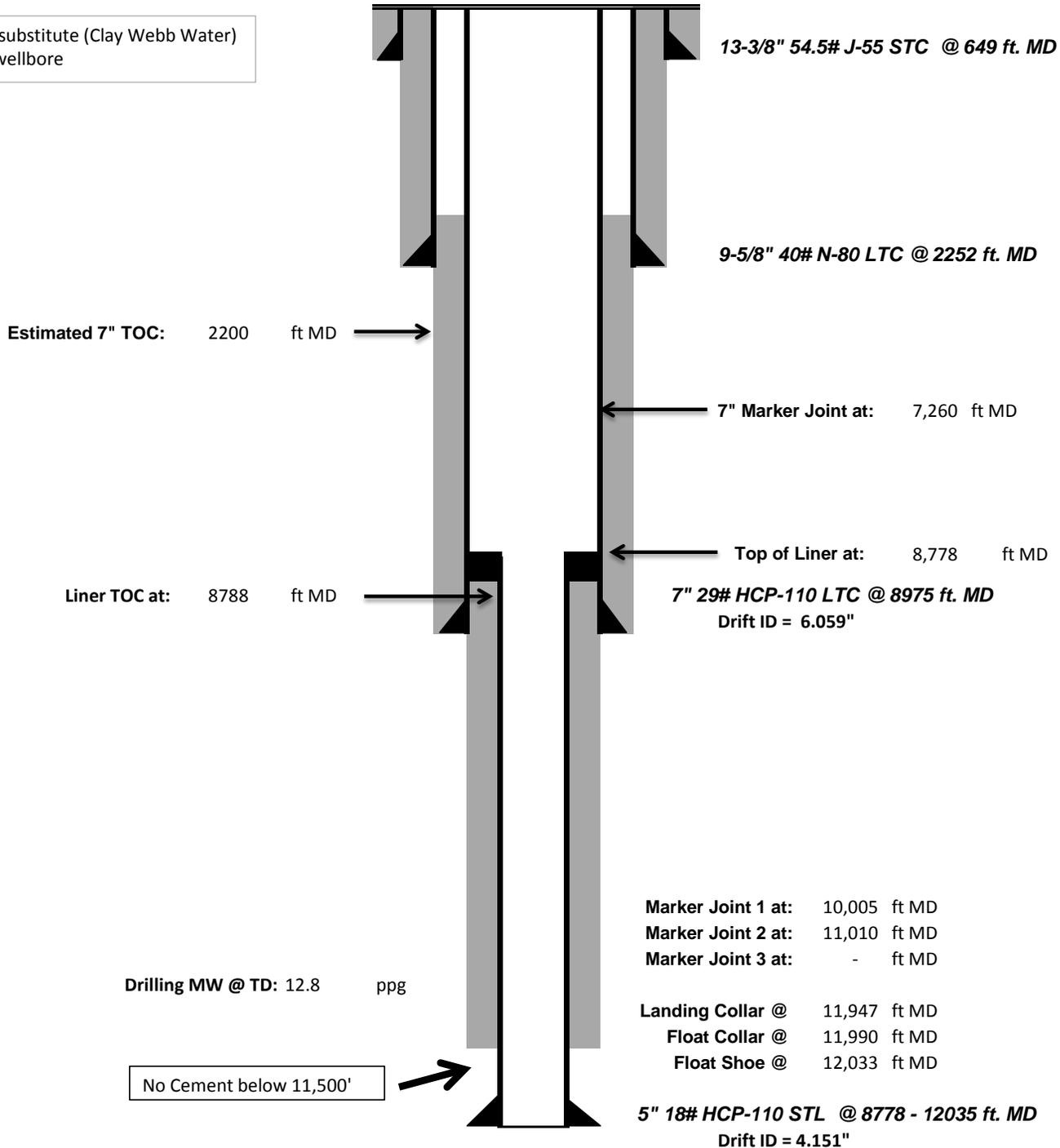


Pre-Completion Wellbore Schematic

Well Name: **Tomlinson Berrett 4-7C4**
 Company Name: **EP Energy E&P Company, L.P.**
 Field, County, State: **Altamont, Duchesne, Utah**
 Surface Location: **Lat: 40 13' 58.768"N Long: 110 22' 50.661"W**
 Producing Zone(s): **Wasatch**

Last Updated: **7/21/2015**
 By: **Lauren Pratt**
 TD: **12,033**
 API: **4301353286**
 AFE: **161141**

8.43 ppg KCL substitute (Clay Webb Water) water in the wellbore



13-3/8" 54.5# J-55 STC @ 649 ft. MD

9-5/8" 40# N-80 LTC @ 2252 ft. MD

Estimated 7" TOC: 2200 ft MD

7" Marker Joint at: 7,260 ft MD

Liner TOC at: 8788 ft MD

Top of Liner at: 8,778 ft MD

7" 29# HCP-110 LTC @ 8975 ft. MD
 Drift ID = 6.059"

Drilling MW @ TD: 12.8 ppg

Marker Joint 1 at: 10,005 ft MD
 Marker Joint 2 at: 11,010 ft MD
 Marker Joint 3 at: - ft MD

Landing Collar @ 11,947 ft MD
 Float Collar @ 11,990 ft MD
 Float Shoe @ 12,033 ft MD

No Cement below 11,500'

5" 18# HCP-110 STL @ 8778 - 12035 ft. MD
 Drift ID = 4.151"

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

AMENDED REPORT FORM 8
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT or CA AGREEMENT NAME

8. WELL NAME and NUMBER:

9. API NUMBER:

10 FIELD AND POOL, OR WILDCAT

11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:

12. COUNTY

13. STATE

UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL GAS WELL DRY OTHER _____

b. TYPE OF WORK: NEW WELL HORIZ. LATS. DEEP-EN RE-ENTRY DIFF. RESVR. OTHER _____

2. NAME OF OPERATOR:

3. ADDRESS OF OPERATOR: CITY STATE ZIP PHONE NUMBER:

4. LOCATION OF WELL (FOOTAGES)
AT SURFACE:

AT TOP PRODUCING INTERVAL REPORTED BELOW:

AT TOTAL DEPTH:

14. DATE SPUDDED: 15. DATE T.D. REACHED: 16. DATE COMPLETED: ABANDONED READY TO PRODUCE 17. ELEVATIONS (DF, RKB, RT, GL):

18. TOTAL DEPTH: MD TVD 19. PLUG BACK T.D.: MD TVD 20. IF MULTIPLE COMPLETIONS, HOW MANY? * 21. DEPTH BRIDGE PLUG SET: MD TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) 23. WAS WELL CORED? NO YES (Submit analysis)
WAS DST RUN? NO YES (Submit report)
DIRECTIONAL SURVEY? NO YES (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)
(A)				
(B)				
(C)				
(D)				

27. PERFORATION RECORD

INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
			Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. See attached for further information on #27 & #28.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL

29. ENCLOSED ATTACHMENTS: All logs are submitted to UDOGM by vendor.

- ELECTRICAL/MECHANICAL LOGS
- SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION
- GEOLOGIC REPORT
- CORE ANALYSIS
- DST REPORT
- OTHER: _____
- DIRECTIONAL SURVEY

30. WELL STATUS:

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. 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.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) _____ TITLE _____

SIGNATURE _____ DATE _____

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Attachment to Well Completion Report**Form 8 Dated September 1, 2015****Well Name: Tomlinson-Berrett 4-7C4****Items #27 and #28 Continued****27. Perforation Record**

Interval (Top/Bottom – MD)	Size	No. of Holes	Perf. Status
10184'-10417'	.38	63	Open
9916'-10150'	.38	69	Open
9666'-9876'	.38	66	Open
9383'-9642'	.38	69	Open

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10458'-10726'	5000 gal acid, 3000# 100 mesh, 150400# 30/50 TLC
10184'-10417'	5000 gal acid, 3000# 100 mesh, 150400# 30/50 TLC
9916'-10150'	5000 gal acid, 3000# 100 mesh, 150400# 30/50 TLC
9666'-9876'	5000 gal acid, 3000# 100 mesh, 150400# 30/50 TLC
9383'-9642'	5000 gal acid, 3000# 100 mesh, 150400# 30/50 TLC



Company: EP Energy **Job Number:** _____
Well: Tomlinson-Berrett 4-7C4 **Mag Decl.:** _____
Location: Duchesne, UT **Dir Driller:** _____
Rig: Precision 406 **MWD Eng:** _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')		
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth					
Tie In	0.00	0.00	0.00												
1	100.00	0.30	203.77	100.00	100.00	-0.24	0.24	S	0.11	W	0.26	203.77	0.30	0.30	203.77
2	200.00	0.46	175.21	100.00	200.00	-0.87	0.87	S	0.18	W	0.89	191.47	0.24	0.16	-28.56
3	300.00	0.41	167.21	100.00	299.99	-1.61	1.61	S	0.07	W	1.62	182.33	0.08	-0.05	-8.00
4	400.00	0.19	126.20	100.00	399.99	-2.06	2.06	S	0.14	E	2.06	176.00	0.29	-0.22	-41.01
5	500.00	0.24	135.83	100.00	499.99	-2.30	2.30	S	0.42	E	2.34	169.68	0.06	0.05	9.63
6	600.00	0.21	148.70	100.00	599.99	-2.60	2.60	S	0.66	E	2.69	165.82	0.06	-0.03	12.87
7	700.00	0.43	163.71	100.00	699.99	-3.12	3.12	S	0.86	E	3.24	164.62	0.24	0.22	15.00
8	800.00	0.44	201.37	100.00	799.99	-3.85	3.85	S	0.82	E	3.93	167.91	0.28	0.01	37.67
9	900.00	0.67	223.75	100.00	899.98	-4.63	4.63	S	0.28	E	4.64	176.54	0.31	0.23	22.37
10	1000.00	0.67	256.12	100.00	999.98	-5.19	5.19	S	0.69	W	5.23	187.59	0.37	0.00	32.38
11	1100.00	0.85	244.72	100.00	1099.97	-5.64	5.64	S	1.93	W	5.96	198.84	0.23	0.18	-11.41
12	1200.00	0.64	253.09	100.00	1199.96	-6.12	6.12	S	3.13	W	6.87	207.05	0.23	-0.21	8.38
13	1300.00	0.44	254.15	100.00	1299.95	-6.39	6.39	S	4.03	W	7.55	212.24	0.20	-0.20	1.05
14	1400.00	0.42	271.21	100.00	1399.95	-6.49	6.49	S	4.77	W	8.05	216.33	0.13	-0.02	17.06
15	1500.00	0.24	283.45	100.00	1499.95	-6.43	6.43	S	5.34	W	8.36	219.73	0.19	-0.18	12.24
16	1600.00	0.20	258.80	100.00	1599.95	-6.41	6.41	S	5.72	W	8.60	221.74	0.10	-0.04	-24.65
17	1700.00	0.10	182.68	100.00	1699.95	-6.54	6.54	S	5.90	W	8.80	222.05	0.20	-0.10	-76.12
18	1800.00	0.18	138.03	100.00	1799.95	-6.75	6.75	S	5.79	W	8.89	220.66	0.13	0.08	-44.65
19	1900.00	0.48	134.71	100.00	1899.95	-7.16	7.16	S	5.39	W	8.96	216.97	0.30	0.30	-3.32
20	2000.00	0.65	161.81	100.00	1999.94	-8.00	8.00	S	4.91	W	9.39	211.58	0.31	0.17	27.10
21	2100.00	0.90	154.91	100.00	2099.93	-9.25	9.25	S	4.40	W	10.24	205.46	0.27	0.25	-6.90
22	2158.00	0.95	176.96	58.00	2157.92	-10.14	10.14	S	4.18	W	10.97	202.42	0.62	0.08	38.01
23	2306.00	1.20	184.00	148.00	2305.90	-12.91	12.91	S	4.23	W	13.59	198.12	0.19	0.17	4.76
24	2402.00	2.10	211.50	96.00	2401.86	-15.42	15.42	S	5.22	W	16.28	198.69	1.22	0.94	28.65
25	2498.00	3.00	222.00	96.00	2497.76	-18.78	18.78	S	7.82	W	20.35	202.59	1.05	0.94	10.94
26	2594.00	4.20	222.00	96.00	2593.57	-23.26	23.26	S	11.85	W	26.11	206.99	1.25	1.25	0.00
27	2690.00	5.30	227.30	96.00	2689.24	-28.88	28.88	S	17.46	W	33.75	211.15	1.23	1.15	5.52
28	2786.00	5.90	229.40	96.00	2784.78	-35.10	35.10	S	24.47	W	42.79	214.88	0.66	0.63	2.19
29	2882.00	6.50	234.20	96.00	2880.22	-41.49	41.49	S	32.62	W	52.78	218.17	0.83	0.63	5.00
30	2979.00	6.70	233.70	97.00	2976.58	-48.05	48.05	S	41.63	W	63.58	220.91	0.21	0.21	-0.52
31	3075.00	6.70	233.60	96.00	3071.92	-54.69	54.69	S	50.65	W	74.54	222.81	0.01	0.00	-0.10
32	3171.00	6.70	231.10	96.00	3167.27	-61.53	61.53	S	59.52	W	85.61	224.05	0.30	0.00	-2.60
33	3268.00	6.50	228.50	97.00	3263.63	-68.72	68.72	S	68.04	W	96.70	224.71	0.37	-0.21	-2.68
34	3364.00	6.80	232.80	96.00	3358.98	-75.76	75.76	S	76.63	W	107.76	225.33	0.61	0.31	4.48
35	3460.00	6.90	227.20	96.00	3454.30	-83.11	83.11	S	85.39	W	119.16	225.77	0.70	0.10	-5.83



Company: EP Energy
Well: Tomlinson-Berrett 4-7C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')		
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth					
36	3556.00	6.50	236.40	96.00	3549.64	-90.04	90.04	S	94.15	W	130.27	226.28	1.19	-0.42	9.58
37	3651.00	6.20	232.40	95.00	3644.06	-96.14	96.14	S	102.69	W	140.67	226.89	0.56	-0.32	-4.21
38	3747.00	6.20	230.30	96.00	3739.50	-102.62	102.62	S	110.79	W	151.01	227.19	0.24	0.00	-2.19
39	3842.00	6.40	227.90	95.00	3833.93	-109.45	109.45	S	118.66	W	161.43	227.31	0.35	0.21	-2.53
40	3938.00	6.10	225.60	96.00	3929.35	-116.60	116.60	S	126.28	W	171.88	227.28	0.41	-0.31	-2.40
41	4034.00	5.90	233.70	96.00	4024.83	-123.09	123.09	S	133.90	W	181.88	227.41	0.91	-0.21	8.44
42	4130.00	5.50	229.20	96.00	4120.36	-129.02	129.02	S	141.36	W	191.38	227.61	0.62	-0.42	-4.69
43	4226.00	6.00	231.60	96.00	4215.87	-135.14	135.14	S	148.77	W	200.99	227.75	0.58	0.52	2.50
44	4321.00	5.80	230.80	95.00	4310.37	-141.26	141.26	S	156.38	W	210.74	227.91	0.23	-0.21	-0.84
45	4418.00	6.60	231.90	97.00	4406.80	-147.80	147.80	S	164.57	W	221.19	228.07	0.83	0.82	1.13
46	4514.00	6.40	228.50	96.00	4502.18	-154.75	154.75	S	172.92	W	232.05	228.17	0.45	-0.21	-3.54
47	4609.00	6.00	223.60	95.00	4596.63	-161.85	161.85	S	180.31	W	242.29	228.09	0.70	-0.42	-5.16
48	4706.00	6.50	224.20	97.00	4693.05	-169.46	169.46	S	187.63	W	252.83	227.91	0.52	0.52	0.62
49	4802.00	5.90	219.60	96.00	4788.49	-177.15	177.15	S	194.56	W	263.13	227.68	0.81	-0.63	-4.79
50	4898.00	6.30	223.40	96.00	4883.95	-184.78	184.78	S	201.33	W	273.27	227.45	0.59	0.42	3.96
51	4994.00	6.70	223.60	96.00	4979.33	-192.67	192.67	S	208.81	W	284.11	227.30	0.42	0.42	0.21
52	5090.00	6.40	221.00	96.00	5074.70	-200.76	200.76	S	216.18	W	295.02	227.12	0.44	-0.31	-2.71
53	5187.00	6.20	216.80	97.00	5171.12	-209.03	209.03	S	222.86	W	305.56	226.83	0.52	-0.21	-4.33
54	5283.00	6.70	220.90	96.00	5266.51	-217.42	217.42	S	229.64	W	316.23	226.57	0.71	0.52	4.27
55	5379.00	6.30	215.30	96.00	5361.89	-225.95	225.95	S	236.35	W	326.98	226.29	0.78	-0.42	-5.83
56	5475.00	6.50	221.40	96.00	5457.30	-234.32	234.32	S	242.98	W	337.56	226.04	0.74	0.21	6.35
57	5571.00	6.20	217.90	96.00	5552.71	-242.49	242.49	S	249.76	W	348.11	225.85	0.51	-0.31	-3.65
58	5668.00	5.70	225.60	97.00	5649.19	-250.00	250.00	S	256.42	W	358.12	225.73	0.97	-0.52	7.94
59	5763.00	6.10	220.30	95.00	5743.68	-257.15	257.15	S	263.06	W	367.86	225.65	0.71	0.42	-5.58
60	5859.00	7.10	223.60	96.00	5839.05	-265.33	265.33	S	270.45	W	378.87	225.55	1.11	1.04	3.44
61	5955.00	6.80	219.40	96.00	5934.34	-274.02	274.02	S	278.15	W	390.45	225.43	0.61	-0.31	-4.37
62	6052.00	6.60	216.80	97.00	6030.68	-282.92	282.92	S	285.13	W	401.68	225.22	0.37	-0.21	-2.68
63	6148.00	5.90	214.30	96.00	6126.11	-291.42	291.42	S	291.22	W	411.98	224.98	0.78	-0.73	-2.60
64	6244.00	6.20	225.30	96.00	6221.58	-299.14	299.14	S	297.68	W	422.02	224.86	1.25	0.31	11.46
65	6340.00	5.80	224.10	96.00	6317.05	-306.27	306.27	S	304.74	W	432.05	224.86	0.44	-0.42	-1.25
66	6436.00	5.50	223.60	96.00	6412.59	-313.08	313.08	S	311.29	W	441.50	224.84	0.32	-0.31	-0.52
67	6532.00	5.40	223.50	96.00	6508.15	-319.69	319.69	S	317.57	W	450.62	224.81	0.10	-0.10	-0.10
68	6629.00	5.40	224.10	97.00	6604.72	-326.28	326.28	S	323.89	W	459.74	224.79	0.06	0.00	0.62
69	6725.00	5.10	224.80	96.00	6700.32	-332.55	332.55	S	330.04	W	468.53	224.78	0.32	-0.31	0.73
70	6821.00	6.50	227.30	96.00	6795.82	-339.26	339.26	S	337.04	W	478.22	224.81	1.48	1.46	2.60
71	6917.00	6.50	228.90	96.00	6891.21	-346.52	346.52	S	345.13	W	489.07	224.88	0.19	0.00	1.67
72	7012.00	6.10	227.20	95.00	6985.63	-353.49	353.49	S	352.89	W	499.48	224.95	0.46	-0.42	-1.79



Company: EP Energy
Well: Tomlinson-Berrett 4-7C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')		
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth					
73	7108.00	5.90	226.90	96.00	7081.11	-360.32	360.32	S	360.23	W	509.51	224.99	0.21	-0.21	-0.31
74	7203.00	5.50	227.20	95.00	7175.64	-366.75	366.75	S	367.14	W	518.94	225.03	0.42	-0.42	0.32
75	7299.00	5.90	226.40	96.00	7271.16	-373.28	373.28	S	374.08	W	528.47	225.06	0.42	0.42	-0.83
76	7394.00	5.70	225.50	95.00	7365.68	-379.95	379.95	S	380.99	W	538.07	225.08	0.23	-0.21	-0.95
77	7490.00	5.30	224.70	96.00	7461.23	-386.45	386.45	S	387.50	W	547.27	225.08	0.42	-0.42	-0.83
78	7587.00	6.00	227.20	97.00	7557.76	-393.08	393.08	S	394.38	W	556.81	225.09	0.76	0.72	2.58
79	7683.00	5.70	229.40	96.00	7653.26	-399.59	399.59	S	401.68	W	566.58	225.15	0.39	-0.31	2.29
80	7778.00	5.80	223.00	95.00	7747.79	-406.17	406.17	S	408.53	W	576.08	225.17	0.68	0.11	-6.74
81	7875.00	5.40	219.90	97.00	7844.32	-413.25	413.25	S	414.80	W	585.53	225.11	0.52	-0.41	-3.20
82	7970.00	6.00	220.60	95.00	7938.85	-420.45	420.45	S	420.90	W	594.93	225.03	0.64	0.63	0.74
83	8067.00	6.10	222.00	97.00	8035.31	-428.13	428.13	S	427.65	W	605.13	224.97	0.18	0.10	1.44
84	8163.00	5.50	217.40	96.00	8130.82	-435.58	435.58	S	433.86	W	614.78	224.89	0.79	-0.63	-4.79
85	8259.00	6.30	215.40	96.00	8226.31	-443.53	443.53	S	439.70	W	624.54	224.75	0.86	0.83	-2.08
86	8356.00	6.30	215.40	97.00	8322.73	-452.20	452.20	S	445.87	W	635.05	224.60	0.00	0.00	0.00
87	8451.00	6.20	207.40	95.00	8417.16	-461.01	461.01	S	451.25	W	645.10	224.39	0.92	-0.11	-8.42
88	8547.00	5.70	206.80	96.00	8512.65	-469.86	469.86	S	455.78	W	654.61	224.13	0.52	-0.52	-0.62
89	8643.00	4.50	199.70	96.00	8608.26	-477.67	477.67	S	459.20	W	662.60	223.87	1.41	-1.25	-7.40
90	8740.00	2.90	195.20	97.00	8705.06	-483.62	483.62	S	461.13	W	668.23	223.64	1.68	-1.65	-4.64
91	8836.00	1.90	187.40	96.00	8800.97	-487.54	487.54	S	461.97	W	671.65	223.46	1.09	-1.04	-8.12
92	8922.00	1.90	201.50	86.00	8886.93	-490.28	490.28	S	462.68	W	674.12	223.34	0.54	0.00	16.40
93	8975.00	1.90	201.50	53.00	8939.90	-491.91	491.91	S	463.32	W	675.76	223.29	0.00	0.00	0.00
94	8922.00	1.90	201.50	-53.00	8886.93	-490.28	490.28	S	462.68	W	674.12	223.34	0.00	0.00	0.00
95	9000.00	1.95	204.06	78.00	8964.88	-492.69	492.69	S	463.69	W	676.58	223.26	0.13	0.06	3.28
96	9100.00	2.20	192.63	100.00	9064.82	-496.11	496.11	S	464.80	W	679.83	223.13	0.48	0.25	-11.43
97	9200.00	2.25	195.87	100.00	9164.74	-499.87	499.87	S	465.76	W	683.23	222.98	0.14	0.06	3.24
98	9300.00	2.51	200.86	100.00	9264.66	-503.81	503.81	S	467.08	W	687.01	222.83	0.33	0.26	4.99
99	9400.00	2.29	206.94	100.00	9364.57	-507.64	507.64	S	468.76	W	690.96	222.72	0.34	-0.22	6.08
100	9500.00	2.33	200.63	100.00	9464.49	-511.32	511.32	S	470.38	W	694.77	222.61	0.26	0.03	-6.31
101	9600.00	2.24	206.62	100.00	9564.41	-514.96	514.96	S	471.97	W	698.53	222.51	0.25	-0.09	5.99
102	9700.00	2.31	207.59	100.00	9664.33	-518.49	518.49	S	473.78	W	702.35	222.42	0.09	0.08	0.97
103	9800.00	2.53	205.06	100.00	9764.24	-522.28	522.28	S	475.65	W	706.41	222.32	0.24	0.22	-2.53
104	9900.00	2.28	203.47	100.00	9864.15	-526.10	526.10	S	477.37	W	710.40	222.22	0.26	-0.26	-1.59
105	10000.00	2.61	197.24	100.00	9964.06	-530.09	530.09	S	478.84	W	714.34	222.09	0.42	0.33	-6.23
106	10100.00	2.69	197.18	100.00	10063.96	-534.51	534.51	S	480.20	W	718.54	221.94	0.08	0.08	-0.06
107	10200.00	3.00	193.18	100.00	10163.83	-539.29	539.29	S	481.49	W	722.96	221.76	0.37	0.31	-4.01
108	10300.00	3.17	193.52	100.00	10263.69	-544.53	544.53	S	482.74	W	727.70	221.56	0.18	0.18	0.35
109	10400.00	3.60	193.35	100.00	10363.51	-550.27	550.27	S	484.11	W	732.91	221.34	0.42	0.42	-0.17



Company: EP Energy **Job Number:** _____
Well: Tomlinson-Berrett 4-7C4 **Mag Decl.:** _____
Location: Duchesne, UT **Dir Driller:** _____
Rig: Precision 406 **MWD Eng:** _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')		
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth					
110	10500.00	3.45	191.57	100.00	10463.32	-556.27	556.27	S	485.44	W	738.30	221.11	0.18	-0.15	-1.78
111	10600.00	3.42	193.03	100.00	10563.14	-562.12	562.12	S	486.71	W	743.55	220.89	0.09	-0.03	1.46
112	10700.00	3.43	192.21	100.00	10662.97	-567.95	567.95	S	488.02	W	748.82	220.67	0.05	0.01	-0.82
113	10800.00	3.41	194.13	100.00	10762.79	-573.76	573.76	S	489.37	W	754.11	220.46	0.12	-0.02	1.93
114	10900.00	3.25	193.19	100.00	10862.62	-579.40	579.40	S	490.75	W	759.30	220.26	0.17	-0.16	-0.94
115	11000.00	3.61	197.14	100.00	10962.44	-585.17	585.17	S	492.32	W	764.73	220.07	0.43	0.36	3.94
116	11100.00	3.73	192.93	100.00	11062.23	-591.34	591.34	S	493.98	W	770.52	219.87	0.29	0.12	-4.20
117	11200.00	3.60	192.17	100.00	11162.03	-597.58	597.58	S	495.36	W	776.20	219.66	0.14	-0.13	-0.76
118	11300.00	3.49	190.98	100.00	11261.84	-603.63	603.63	S	496.60	W	781.65	219.44	0.13	-0.11	-1.19
119	11400.00	3.43	183.47	100.00	11361.66	-609.59	609.59	S	497.36	W	786.75	219.21	0.46	-0.06	-7.51
120	11500.00	3.48	188.24	100.00	11461.48	-615.58	615.58	S	497.98	W	791.79	218.97	0.29	0.06	4.77
121	11600.00	3.22	189.11	100.00	11561.31	-621.36	621.36	S	498.86	W	796.84	218.76	0.27	-0.26	0.87
122	11700.00	3.36	184.01	100.00	11661.14	-627.06	627.06	S	499.51	W	801.69	218.54	0.33	0.14	-5.11
123	11800.00	2.99	184.46	100.00	11760.99	-632.58	632.58	S	499.92	W	806.28	218.32	0.37	-0.37	0.45
124	11900.00	2.93	186.66	100.00	11860.85	-637.73	637.73	S	500.42	W	810.63	218.12	0.13	-0.06	2.20
125	11939.00	3.10	184.03	39.00	11899.80	-639.77	639.77	S	500.61	W	812.35	218.04	0.56	0.43	-6.75
126	12038.00	3.10	184.03	99.00	11998.65	-645.11	645.11	S	500.98	W	816.80	217.83	0.00	0.00	0.00

CENTRAL DIVISION

ALTAMONT FIELD
TOMLINSON-BERRETT 4-7C4
TOMLINSON-BERRETT 4-7C4
DRILLING LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General**1.1 Customer Information**

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	TOMLINSON-BERRETT 4-7C4		
Project	ALTAMONT FIELD	Site	TOMLINSON-BERRETT 4-7C4
Rig Name/No.	PRECISION DRILLING/406	Event	DRILLING LAND
Start date	6/15/2015	End date	7/9/2015
Spud Date/Time	6/27/2015	UWI	TOMLINSON-BERRETT 4-7C4
Active datum	KB @5,958.4ft (above Mean Sea Level)		
Afe No./Description	161141/54156 / TOMLINSON-BERRETT 4-7C4		

2 Summary**2.1 Operation Summary**

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
6/19/2015	6:00 8:00	2.00	CASCOND	24		P	0.0	SET 57' 20" CONDUCTOR, SET MOUSE HOLE @ 80'. ADDED RKB CORRECTION FOR PD 406.
	8:00 9:00	1.00	CASCOND	24		P	57.0	DRILL 17½" HOLE TO 658'. RAN 15 JTS 13-3/8" 54.5# N-80 ST&C TO 649'. FC @ 604' SHOE 649'. ADDED RKB CORRECTION FOR PD 406.
	9:00 10:00	1.00	CASCOND	25		P	658.0	M&P PUMPED 60 BBLS H2O 40 BBL GEL. 800 SXS (163.8 BBLS) PREMIUM G LEAD CMT @ 15.8 PPG, 1.15 YLD. RELEASED TOP PLUG. DISPLACED WITH 93 BBLS OF H2O @ 7 BPM. BUMPED PLUG @ 13:30HRS 6/17/15 WITH 900 PSI. 0.5 BBL BLED BACK, FLOATS HELD. 65 BBLS CMT TO SURFACE.
	10:00 11:30	1.50	CASSURF	24		P	658.0	DRILL 12¼" HOLE TO 2,263'. RAN 51 JTS 9-5/8" 40# N-80 LT&C TO 2,252'. FC @ 2,204' SHOE 2,252'. ADDED RKB CORRECTION FOR PD 406.
	11:30 14:30	3.00	CASSURF	25		P	2,263.0	M&P PUMPED 135 BBLS H2O. 420 SXS (177 BBLS) EXTENDACEM LEAD CMT @ 12 PPG, 2.37 YLD TAILED WITH 200 SXS (46.3 BBLS) OF HALCEM CMT @ 14.3 PPG, 1.30 YIELD. RELEASED TOP PLUG. DISPLACED WITH 167 BBLS OF H2O @ 6-4 BPM. BUMPED PLUG @ 15:00HRS 6/19/15 WITH 1,100 PSI. 1 BBL BLED BACK, FLOATS HELD. 46 BBLS CMT TO SURFACE.
	14:30 6:00	15.50	CASSURF	25		P	2,263.0	RAN 1" TO 100' TOP OUT WITH 96 SX (19.4 BBLS) PREMIUM G LEAD CMT @ 15.8 PPG, 1.18 YLD. 4 BBLS TO SURFACE. WOC, NO FALL. RIG DOWN & CLEAR LOCATION.
6/26/2015	6:00 6:00	24.00	MIRU	01		P	2,263.0	MOVE IN & RIG UP. 100% MOVED IN 95% RIGGED UP. RELEASED TRUCKS @ 20:00 HRS 6/25/15.
6/27/2015	6:00 15:00	9.00	MIRU	01		P	2,263.0	PU TDU. PREP FLOOR . 100% RIGGED UP. PERFORM RIG INSPECTION. RIG ON RATE @ 15:00 HRS 6/26/15.
	15:00 23:30	8.50	CASSURF	28		P	2,263.0	PJSM. NU 11" 10M BOPE & INSTALL FLOW LINE. TORQUE BOLTS W/ WEATHERFORD.
	23:30 6:00	6.50	CASSURF	19		P	2,263.0	PJSM. RU & TESTED 11" 5M ANNULAR TO 250 / 2,500 PSI AND REMAINING BOPE, FLOOR VALVES, ETC TO 250 / 5,000 PSI. TESTED CHOKE MANIFOLD TO 250 / 10,000 PSI. HELD EACH TEST 10 MINUTES.
6/28/2015	6:00 8:00	2.00	CASSURF	31		P	2,263.0	TESTED CSG TO 2,500 PSI. RD TESTER & INSTALLED WEAR BUSHING.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	8:00 11:30	3.50	CASSURF	14		P	2,263.0	PU 8 3/4" BHA & TIH TO 2,150'.
	11:30 12:30	1.00	CASSURF	17		P	2,263.0	S & C DRILL LINE.
	12:30 13:00	0.50	CASSURF	12		P	2,263.0	SERVICED RIG & TDU.
	13:00 14:00	1.00	CASSURF	32		P	2,263.0	DRILL OUT CMT, FE & 10'.
	14:00 14:30	0.50	DRLINT1	33		P	2,273.0	CBU & PERFORMED FIT TO 15.4 EMW WITH 9.5 PPG MUD @ 700 PSI.
	14:30 22:30	8.00	DRLINT1	07		P	2,273.0	DRILLED 2,273' - 3,414'. SPUD @ 14:15 HRS 6/27/2015.
	22:30 23:00	0.50	DRLINT1	12		P	3,414.0	SERVICED RIG & TDU.
	23:00 6:00	7.00	DRLINT1	07		P	3,414.0	DRILLED 3,414' - 4,279'.
6/29/2015	6:00 12:00	6.00	DRLINT1	07		P	4,279.0	DRILLED 4,279' - 5,047'.
	12:00 12:30	0.50	DRLINT1	12		P	5,047.0	SERVICED RIG & TDU.
	12:30 23:30	11.00	DRLINT1	07		P	5,047.0	DRILLED 5,047' - 6,294'.
	23:30 0:00	0.50	DRLINT1	12		P	6,294.0	SERVICED RIG & TDU.
	0:00 6:00	6.00	DPDCOND	07		P	6,294.0	DRILLED 6,294' - 6,617'.
6/30/2015	6:00 12:30	6.50	DRLINT1	07		P	6,617.0	DRILLED 6,617' - 6,970'.
	12:30 13:00	0.50	DRLINT1	12		P	6,970.0	SERVICED RIG & TDU.
	13:00 23:30	10.50	DRLINT1	07		P	6,970.0	DRILLED 6,970' - 7,540'.
	23:30 0:00	0.50	DRLINT1	12		P	7,540.0	SERVICED RIG & TDU.
	0:00 6:00	6.00	DRLINT1	07		P	7,540.0	DRILLED 7,540' - 7,831'.
7/1/2015	6:00 13:30	7.50	DRLINT1	07		P	7,831.0	DRILLED 7,831' - 8,312'.
	13:30 14:00	0.50	DRLINT1	12		P	8,312.0	SERVICED RIG & TDU.
	14:00 23:00	9.00	DRLINT1	07		P	8,312.0	DRILLED 8,312' - 8,693'.
	23:00 23:30	0.50	DRLINT1	12		P	8,693.0	SERVICED RIG & TDU.
	23:30 4:30	5.00	DRLINT1	07		P	8,693.0	DRILLED 8,693' - 8,975'.
	4:30 5:30	1.00	EVLINT1	15		P	8,975.0	CBU. FLOW CHECK. WELL STATIC.
	5:30 6:00	0.50	EVLINT1	13		P	8,975.0	WIPER TRIP.
7/2/2015	6:00 10:30	4.50	EVLINT1	13		P	8,975.0	POOH. REAMED RESISTANCE 6,161' - 6,090'.
	10:30 12:00	1.50	EVLINT1	14		P	8,975.0	LD DIRECTIONAL BHA & MU RR BIT.
	12:00 15:30	3.50	EVLINT1	13		P	8,975.0	TIH TO 8,975'. HOLE SLICK.
	15:30 19:00	3.50	EVLINT1	15		P	8,975.0	CBU WITH 10.1 PPG MUD. MAX GAS 3,933 UNITS WITH OIL. 1.2 PPG MC, NO GAIN, NO FLARE. LARGE AMOUNT OF HEAVING SHALE OVER SHAKER. FC, WELL STATIC. C&C MUD TO 10.3 PPG. FINAL BG GAS 40 UNITS.
	19:00 1:30	6.50	EVLINT1	14		P	8,975.0	POOH LD 4.5" DP & BHA.
	1:30 2:30	1.00	EVLINT1	42		P	8,975.0	PULL WEAR BUSHING. CLEAN OFF FLOOR. CHANGE OUT BALES.
	2:30 6:00	3.50	EVLINT1	22		P	8,975.0	PJSM. RU HES. RUN STANDARD QUAD COMBO FROM 8,975' TO CSG SHOE @ 2,252'. RUN GR FROM SHOE TO SURFACE.
7/3/2015	6:00 7:00	1.00	EVLINT1	22		P	8,975.0	RD WL.
	7:00 21:30	14.50	CASINT1	24		P	8,975.0	RAN 215 JTS 7" 29# HCP-110 LT&C CSG TO 8,975'. FLOAT COLLAR @ 8,931', MARKER JT @ 7,295 & 4,299'. BREAK CIRC EVERY 1,000', CBU @ SHOE & 5,229'. NO LOSSES.
	21:30 23:30	2.00	CASINT1	15		P	8,975.0	CBU @ 2.5-5 BPM & PUMPED 40 BBLS LCM @ 20 PPB (8 PPB BARO-SEAL, 12 PPB CEDAR FIBER) 50 BBLS H2O. LOST 35 BBLS. MAX GAS 1,577 UNITS, NO GAIN, NO FLARE.
	23:30 3:30	4.00	CASINT1	25		P	8,975.0	RU HES. MIXED & PUMPED 40 BBLS 10 PPG TUNED SPACER. 850 SXS (289 BBLS) EXTENDACEM LEAD CMT @ 12.5 PPG, 1.91 YLD TAILED WITH 280 SXS (82 BBLS) OF EXPANDACHEM CMT @ 13 PPG, 1.64 YIELD. RELEASED TOP PLUG. DISPLACED WITH 331 BBLS OF 9.8 PPG MUD @ 6-3 BPM. BUMPED PLUG @ 02:55 HRS 7/3/15 WITH 2,038 PSI. FINAL CIRC PRESS 1,352 PSI. 2 BBL BLED BACK, FLOATS HELD. RD CEMENTERS. RETURNS SLOWED LAST 130 BBLS DISP, NO LOSS OF RETURNS. TOTAL LOST DURING CMT OPS 174 BBLS. EST TOC 2,364'.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	3:30 4:30	1.00	CASINT1	27		P	8,975.0	LD LANDING JT. INSTALL & TEST PACK-OFF TO 5,000 PSI FOR 15MIN.
	4:30 5:30	1.00	CASINT1	31		P	8,975.0	PJSM WITH WEATHERFORD. TESTED CASING TO 2,500 PSI FOR 30 MINUTES WHILE CO TDU SAVER SUB TO 4" XT-39.
	5:30 6:00	0.50	CASINT1	30		P	8,975.0	TESTING BOPE.
7/4/2015	6:00 10:00	4.00	CASINT1	19		P	8,975.0	TESTED 11" 5M ANNULAR TO 250 / 4,000 PSI, RAMS & REMAINING BOPE, FLOOR VALVES, ETC TO 250 / 10,000 PSI. HOLD EACH TEST 10 MINUTES.
	10:00 20:00	10.00	CASINT1	14		P	8,975.0	MU 6-1/8" BHA & TIH PU 4" DP.
	20:00 21:00	1.00	CASINT1	17		P	8,975.0	S&C DRILL LINE.
	21:00 22:30	1.50	CASINT1	32		P	8,975.0	INSTALL ROT HEAD RUBBER. TAG FC @ 8,931'. DRILL OUT FE, SHOE TRACK & 10'.
	22:30 23:30	1.00	CASINT1	33		P	8,985.0	CBU & PERFORM FIT TO 13.6 EMW WITH 11.5 PPG MUD @ 1,007 PSI.
	23:30 6:00	6.50	DRLPRD	07		P	8,985.0	DRILLED 8,985' - 9,542'.
7/5/2015	6:00 8:00	2.00	DRLPRD	11		P	9,542.0	CBU & RAN SL SURVEY @ 9,507'. (2.38°)
	8:00 14:00	6.00	DRLPRD	07		P	9,542.0	DRILLED 9,542' - 10,190'.
	14:00 14:30	0.50	DRLPRD	12		P	10,190.0	SERVICED RIG & TDU.
	14:30 22:00	7.50	DRLPRD	07		P	10,190.0	DRILLED 10,190' - 10,483'.
	22:00 22:30	0.50	DRLPRD	12		P	10,483.0	SERVICED RIG & TDU.
	22:30 1:00	2.50	DRLPRD	07		P	10,483.0	DRILLED 10,483' - 10,684'.
7/6/2015	1:00 2:00	1.00	DRLPRD	43		N	10,684.0	REPLACE FAN BELT ON TOP DRIVE ENGINE.
	2:00 6:00	4.00	DRLPRD	07		P	10,684.0	DRILLED 10,684' - 10,887'.
	6:00 15:30	9.50	DRLPRD	07		P	10,887.0	DRILLED 10,887' - 11,523'.
	15:30 16:00	0.50	DRLPRD	12		P	11,523.0	SERVICED RIG & TDU.
	16:00 23:00	7.00	DRLPRD	07		P	11,523.0	DRILLED 11,523' - 11,899'.
	23:00 23:30	0.50	DRLPRD	12		P	11,899.0	SERVICED RIG & TDU.
	23:30 1:00	1.50	DRLPRD	07		P	12,038.0	DRILLED 11,899' - 12,038'.
	1:00 2:00	1.00	EVLPRD	15		P	12,038.0	CBU. FLOW CK. WELL FLOWING 1/2 BPM.
	2:00 4:00	2.00	EVLPRD	15		P	12,038.0	CCM TO 12.6 PPG. MAX GAS 2,912 UNITS FOR 3 MINUTES. NO FLARE. NO GAIN. OIL SHOW ACROSS SHAKERS ON BU. FLOW CK. WELL FLOWING 5 GPM.
	4:00 6:00	2.00	EVLPRD	15		P	12,038.0	CCM TO 12.8 PPG.
7/7/2015	6:00 8:30	2.50	EVLPRD	13		P	12,038.0	WT TO SHOE @ 8,975'.
	8:30 11:00	2.50	EVLPRD	15		P	12,038.0	CBU. MAX GAS 2,897 UNITS 10 MIN, NO FLARE , NO GAIN. FC, WELL STATIC.
	11:00 16:30	5.50	EVLPRD	13		P	12,038.0	POOH TO 663'. HOLE TOOK PROPER FILL.
	16:30 17:30	1.00	EVLPRD	14		P	12,038.0	LD 4 3/4" DC.
	17:30 18:00	0.50	EVLPRD	12		P	12,038.0	SREVICE RIG & TDU.
	18:00 0:00	6.00	EVLPRD	22		P	12,038.0	PJSM. RU HES. RUN ULTRA SLIM QUAD COMBO LOG FORM 12,038' TO CSG SHOE. RD WL.
	0:00 4:30	4.50	CASPRD1	24		P	12,038.0	PJSM. RU & RAN 77 JTS 5" 18# P-110HC STL LINER. 2 MARKER JTS. MADE UP VERSAFLEX LINER HANGER ASSEMBLY & SETTING TOOL.
	4:30 5:30	1.00	CASPRD1	15		P	12,038.0	INSTALLED ROTATING ELEMENT. CIRC LINER VOLUME @ 2.5 BPM. RD CSG CREW.
7/8/2015	5:30 6:00	0.50	CASPRD1	13		P	12,038.0	TIH @ 60 FPM WITH 5" LINER ON 4" DP. BREAK CIRC EVERY 1,000'.
	6:00 11:00	5.00	CASPRD1	24		P	12,038.0	TIH W/ 5" LINER ON 4" DP @ 95 FPM TO 8,992'. BREAK CIRC EVERY 1,000'. CBU @ 2.5 BPM. MAX GAS 1,329 UNITS, NO MC, NO FLARE FINAL BG 259 UNITS. NO LOSSES.
	11:00 14:30	3.50	CASPRD1	24		P	12,038.0	TIH @ 80 FPM WITH 5" LINER ON 4" DP. BREAK CIRC EVERY 1,000'. TAG BTM WITH 10K. NO LOSSES. SPACED OUT & RU CMT HEAD.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	14:30 17:30	3.00	CASPRD1	15		P	12,038.0	CIRC 2X BU. 1- 2.5 BPM, MAX GAS 4,179 UNITS. NO FLARE, NO GAIN. FINAL CIRC PRESSURE 450 PSI @ 2.5 BPM. NO LOSSES.
	17:30 20:30	3.00	CASPRD1	25		P	12,038.0	RU HES & TESTED LINES TO 9,500 PSI. PUMPED 20 BBLS 12.5 PPG TUNED SPACER & 350 SKS (94.7 BBLS) 14.2 PPG WITH 1.52 YIELD EXPANDACEM CMT @ 40% EXCESS. WASHED LINES. DROPPED DP DART. PUMPED 70 BBLS H2O WITH 2% KCL 0.1 % BIOCID, 75 BBLS 12.3 PPG MUD. BUMP PLUG @ 20:30 WITH 3,160 PSI. PRESSURE PRIOR TO LAND 2,280 PSI. NO LOSSES. NOTE: WIPER DART DID NOT LEAVE HEAD, ATTEMPTED RELEASE WITH 8 BBLS. REMOVED HEAD AND MANUALLY INSERTED DART INTO DRILL PIPE. AFTER BUMPING PLUG REMOVED HEAD AND DROPPED BALL DOWN DRILL PIPE.
	20:30 21:00	0.50	CASPRD1	25		P	12,038.0	RUPTURE DISC @ 5,455 PSI. PUMPED 37 BBLS, PRESSURED TO 6,150 PSI, EXPANDED HANGER. PULL TESTED LINER WITH 75K OVERPULL. SAT DOWN 90K , RELEASED SETTING TOOL FROM LINER HANGER. LANDED FS @ 12,035', FC @ 11,989', LC @ 11,946'. TOL @ 8,807'. 174 ' OF LAP. TOTAL LINER 3,234'. MARKER JT TOP @ 11,023', 10,022'.
	21:00 22:00	1.00	CASPRD1	15		P	12,038.0	PULLED UP TO TOL. OBSERVED 2 OVERPULL OF 5K THROUGH CLAD SECTION. CIRC 1.5 TIMES ANNULAR VOLUME. 20 BBLS SPACER & 15 BBLS WEIGHTED CEMENT TO SURFACE. FC, WELL STATIC. POSITIVE TEST TOL TO 1,000 PSI FOR 10MIN, GOOD TEST.
	22:00 1:00	3.00	CASPRD1	15		P	12,038.0	DISPLACE HOLE WITH WATER. PUMPED 300 BBLS H2O NO ADDITIVES, 280 BBLS H2O WITH 2% KCL 0.1 % BIOCID. FC . WELL STATIC. RD CEMENT HEAD.
	1:00 6:00	5.00	CASPRD1	14		P	12,038.0	POOH LDDP.
7/9/2015	6:00 10:00	4.00	CASPRD1	14		P	12,038.0	LD DP. TIH DP FROM DERRICK. LD 4" DP & LINER SETTING TOOL. FLUSHED MUD LINES.
	10:00 20:00	10.00	CASPRD1	29		P	12,038.0	CLEANED MUD TANKS WHILE ND BOPE. SEPARATED ALL COMPONENTS TO SEND IN FOR INSPECTION AND RE-CERTIFICATION. TORQUE WRENCH UNABLE TO BREAK DOOR BONNET BOLTS; BROKE WITH HAMMER WRENCH. REMOVED ALL 6 RAM BLOCKS.
	20:00 22:30	2.50	CASPRD1	27		P	12,038.0	NU TBG HEAD & FRAC VALVE. TESTED HEAD TO 5,000 PSI FOR 15 MINUTES. RIG RELEASED @ 22:30 HRS, 07/08/2015.
	22:30 6:00	7.50	RDMO	02		P	12,038.0	RIG DOWN. 50% RIGGED DOWN.

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CENTRAL DIVISION

ALTAMONT FIELD
TOMLINSON-BERRETT 4-7C4
TOMLINSON-BERRETT 4-7C4
COMPLETION LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General

1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	TOMLINSON-BERRETT 4-7C4		
Project	ALTAMONT FIELD	Site	TOMLINSON-BERRETT 4-7C4
Rig Name/No.		Event	COMPLETION LAND
Start date	7/23/2015	End date	
Spud Date/Time	6/27/2015	UWI	TOMLINSON-BERRETT 4-7C4
Active datum	KB @5,958.4ft (above Mean Sea Level)		
Afe No./Description	161141/54156 / TOMLINSON-BERRETT 4-7C4		

2 Summary

2.1 Operation Summary

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
7/23/2015	11:00 11:30	0.50	MIRU	28		P		TGSM & JSA (RU AND PU TBG)
	11:30 18:30	7.00	WOR	40		P		MI SPOT CAT WALK AND PIPE RACKS, OFF LOAD 110 JTS 2 3/8", 290 JTS 2 7/8". RU RIG. NU AND TEST BOP, RU WORK FLOOR AND TBG EQUIPMENT. PUMU & RIH W/ 4 1/8" BIT, BIT SUB, 109 JTS 2 3/8", X/O TO 2 7/8", 160 JTS 2 7/8". SHUT AND LOCK PIPE RAMS, INSTALL & TIW VALVE W/ NIGHT CAP. SHUT CASING VALVES, INSTALL BULL PLUGS IN CASING VALVES.
7/24/2015	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA (POWER SWIVEL OPERATIONS)
	7:30 20:00	12.50	WOR	40		P		CIH W/ 101 JTS, TAG 4' IN JT # 261, @ 11,960'. RU POWER SWIVEL BREAK CIRCULATION, DRILL TO 11,962' PU CIRCULATE CLEAN W/ 420 BBLs. RD SWIVEL, LAY DOWN 261 JTS 2 7/8", X/O TO 2 3/8", BIT SUB, BIT. SHUT AND BLIND PIPE RAMS, SHUT CASING VALVES, INSTALL BULL PLUGS IN CASING VALVES. RIG DOWN WORK FLOOR AND TBG EQUIPMENT. RACK OUT PUMP AND RETURN LINES. CT
7/25/2015	6:00 7:30	1.50	WOR	28		P		CT TGSM & JSA (WIRE LINE OPERATIONS)
	7:30 9:30	2.00	RDMO	02		P		ND BOP, RDMOL W/ RIG, MIRU WIRE LINE
	9:30 14:30	5.00	POST	18		P		RUN CBL/CCL/GAMMA RAY CORRELATED TO HALLIBURTON SPECTRA DENSITY DUAL SPACED NEUTRON ARRAY COMPESATED RESISTIVITY LOG RUN 2 DATED 6/15. LOG FROM PBTD 11,939 TO 2200' (9 5/8" SHOE) TOP OF CEMENT AT 2620'. SWI NU NIGHT CAP. SHUT AND CAP CASING VALVES.
7/31/2015	6:00 7:30	1.50	MIRU	28		P		CT TGSM & JSA (NU AND TESTING PROCEDURES)
	7:30 12:30	5.00	WOR	08		P		NU FRAC STAC, TEST CASING TO 9000 PSIG FOR 30 MINUTES, TEST FLOW BACK LINES TO 4600, PRESSURE TEST TREE TO 9K. SHUT AND LOCK HCR VALVES, SHUT CASING VALVES W/ CAPS.
	12:30 6:00	17.50	MIRU	18		P		PREP FOR FRAC
8/1/2015	6:00 7:30	1.50	STG01	28		P		CT TGSM & JSA (WIRE LINE OPERATIONS)

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
8/2/2015	7:30 12:30	5.00	STG01	21		P		MIRU WIRE LINE UNIT. TEST LUBRICATOR. PERFORATE STAGE 1 11,783' TO 11,482' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 23' NET OVER 17 INTERVALS. HOLDING 1000 PSIG SURFACE PRESSURE, NO CHANGES. SHUT AND LOCK HCR VALVES, AND FRAC VALVE. MAKE SURE ALL VALVES SHUT W/ NIGHT CAPS.
	12:30 6:00	17.50	STG01	18		P		PREP FOR FRAC
	6:00 7:30	1.50	STG01	28		P		CT TGSM & JSA (WATER TRANSFER)
	7:30 12:00	4.50	STG01	18		P		TRANSFER WATER THROUGH BOSQUE
8/3/2015	12:00 6:00	18.00	STG01	18		P		HEAT AND HAUL WATER
	6:00 6:00	24.00	MIRU	01		P		PREP FOR FRAC
8/4/2015	17:00 17:30	0.50	MIRU	28		P		TGSM & JSA (RIG UP)
	17:30 22:30	5.00	MIRU	01		P		RU HALLIBURTON FRAC EQUIPMENT
8/5/2015	6:00 6:30	0.50	STG01	28		P		TGSM & JSA (FRAC OPERATIONS)
	6:30 8:30	2.00	MIRU	01		P		FINISH RIG UP AND PRESSURE TEST LINES AND EQUIPMENT
	8:30 10:00	1.50	STG01	35		P		SIP @ 277 PSIG, BREAK DOWN STAGE 1 PERFS 10.1 BPM @ 4188 PSIG. ESTABLISH RATE TO 44.6 @ 5720. ISDP @ 4200 .79 F.G 5 MIN 4124. 10 MIN 4065. TREAT STAGE 1 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 150,090 THS 30/50 IN .5,1,2,3 PPG FLUSH TO TOP PERF ISDP @ 4583, .83 F.G, AVE RATE 75.1 BPM, MAX RATE 75.5 BPM, AVE PRES 5354, MAX PRES 7688. AVE HORSE POWER 9,858 SWI TOT WIRELINE, STAGE 1 WATER TO RECOVER 3913.
	10:00 11:30	1.50	STG02	21		P		RU WIRE LINE UNIT. TEST LUBRICATOR. RIH AND SET AND TEST CBP @ 11,430' W/ 4400 PSI. PERFORATE STAGE 2 11,415' TO 11,191' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 23' NET OVER 16 INTERVALS. ENDING PRESSURE @ 4100.
	11:30 13:30	2.00	STG02	35		P		SIP @ 3915 PSIG, BREAK DOWN STAGE 2 PERFS 10 BPM @ 8197 PSIG. ESTABLISH RATE TO 44 @ 7465. ISDP @ 4152, .8 F.G 5 MIN 4112. 10 MIN 4095. TREAT STAGE 2 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 150,200 THS 30/50 IN .5,1,2,3 PPG FLUSH TO TOP PERF ISDP @ 4358, .82 F.G, AVE RATE 75.1 BPM, MAX RATE 75.4 BPM, AVE PRES 5377, MAX PRES 8197. AVE HORSE POWER 9,897 SWI TOT WIRELINE, STAGE 2 WATER TO RECOVER 3853.
8/5/2015	13:30 15:00	1.50	STG03	21		P		RU WIRE LINE UNIT. TEST LUBRICATOR. RIH AND SET AND TEST CBP @ 11,108' W/ 4400 PSI. PERFORATE STAGE 3 11,093' TO 10,794' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 23' NET OVER 17 INTERVALS. ENDING PRESSURE @ 4100.
	15:00 17:00	2.00	STG03	35		P		SIP @ 3040 PSIG, BREAK DOWN STAGE 3 PERFS 11.7 BPM @ 8217 PSIG. ESTABLISH RATE TO 43.8 @ 6817. ISDP @ 4328, .83 F.G 5 MIN 4267. 10 MIN 4246. TREAT STAGE 3 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 148,860 THS 30/50 IN .5,1,2,3 PPG FLUSH TO TOP PERF ISDP @ 4547, .85 F.G, AVE RATE 73 BPM, MAX RATE 76.7 BPM, AVE PRES 5895, MAX PRES 8974. AVE HORSE POWER 10,547 SWI TOT WIRELINE, STAGE 3 WATER TO RECOVER 3789.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	17:00 18:30	1.50	STG04	21		P		RU WIRE LINE UNIT. TEST LUBRICATOR. RIH AND SET AND TEST CBP @ 10,741' W/ 4500 PSI. PERFORATE STAGE 4 10,726' TO 10,458' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 23' NET OVER 17 INTERVALS. ENDING PRESSURE @ 3500.
	18:30 20:00	1.50	STG04	35		P		SIP @ 2266 PSIG, BREAK DOWN STAGE 4 PERFS 12.5 BPM @ 7314 PSIG. ESTABLISH RATE TO 44 @ 6539. ISDP @ 4304, .84 F.G 5 MIN 4183. 10 MIN 4122. TREAT STAGE 4 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 150,400 TLC 30/50 IN .5,1,2,3 PPG FLUSH TO TOP PERF ISDP @ 3589, .77 F.G, AVE RATE 75.9 BPM, MAX RATE 79.3 BPM, AVE PRES 5381, MAX PRES 8450. AVE HORSE POWER 10,010 SWI TOT WIRELINE, STAGE 4 WATER TO RECOVER 3873.
	20:00 21:00	1.00	STG05	21		P		RU WIRE LINE UNIT. TEST LUBRICATOR. RIH AND SET AND TEST CBP @ 10,432' W/ 2500 PSI. PERFORATE STAGE 5 10,417' TO 10,184' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 21' NET OVER 17 INTERVALS. ENDING PRESSURE @ 2400. SHUT AND LOCK HCR VALVES, AND FRAC VALVE. MAKE SURE ALL VALVES SHUT W/ NIGHT CAPS.
8/6/2015	6:30 7:00	0.50	STG05	28		P		TGSM & JSA (FRAC OPERATIONS)
	7:00 8:30	1.50	STG05	35		P		SIP @ 2613 PSIG, BREAK DOWN STAGE 5 PERFS 9.8 BPM @ 4680 PSIG. ESTABLISH RATE TO 44 @ 5024. ISDP @ 4039, .83 F.G 5 MIN 3782. 10 MIN 3503. TREAT STAGE 5 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 150,200 TLC 30/50 IN .5,1,2,3 PPG FLUSH TO TOP PERF ISDP @ 4374, .86 F.G, AVE RATE 75.3 BPM, MAX RATE 75.6 BPM, AVE PRES 5186, MAX PRES 7416. AVE HORSE POWER 9,517 SWI TOT WIRELINE, STAGE 5 WATER TO RECOVER 3809.
	8:30 10:00	1.50	STG06	21		P		RU WIRE LINE UNIT. TEST LUBRICATOR. RIH AND SET AND TEST CBP @ 10,165' W/ 4000 PSI. PERFORATE STAGE 6 10,150' TO 9,916' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 23' NET OVER 17 INTERVALS. ENDING PRESSURE @ 3500.
	10:00 11:30	1.50	STG06	35		P		SIP @ 3142 PSIG, BREAK DOWN STAGE 6 PERFS 14.8 BPM @ 7658 PSIG. ESTABLISH RATE TO 44.3 @ 6518. ISDP @ 4068, .84 F.G 5 MIN 3870. 10 MIN 3800. TREAT STAGE 6 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 67,200 TLC 30/50 IN .5,1,2 PPG FLUSH TO TOP PERF ISDP @ 6626, F.G NA, AVE RATE 70.2 BPM, MAX RATE 76.4 BPM, AVE PRES 5565, MAX PRES 8942. AVE HORSE POWER 9,575 SWI TOT WIRELINE, STAGE 6 WATER TO RECOVER 3104. (HAD TO CALL FLUSH EARLY, FLUSHED @ 12.5 BPM @ 8900)
	11:30 13:00	1.50	STG07	21		P		RU WIRE LINE UNIT. TEST LUBRICATOR. RIH AND SET AND TEST CBP @ 9,891' W/ 4500 PSI. PERFORATE STAGE 7 9,876' TO 9,666' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 22' NET OVER 17 INTERVALS. ENDING PRESSURE @ 3350.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	13:00 14:30	1.50	STG07	35		P		SIP @ 3,345 PSIG, BREAK DOWN STAGE 7 PERFS 8.8 BPM @ 5,632 PSIG. ESTABLISH RATE TO 42.3 @ 5148 . ISDP @ 3855, .83 F.G 5 MIN 3752. 10 MIN 3684. TREAT STAGE 7 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 150,000# TLC 30/50 IN .5,1,2 PPG FLUSH TO TOP PERF ISDP @ 4277, F.G .87, AVE RATE 75.6 BPM, MAX RATE 76.5 BPM, AVE PRES 4989, MAX PRES 7132. AVE HORSE POWER 9,244 SWI TOT WIRELINE, STAGE 7 WATER TO RECOVER 3833.
	14:30 16:00	1.50	STG08	21		P		RU WIRE LINE UNIT. TEST LUBRICATOR. RIH AND SET AND TEST CBP @ 9,657' W/ 4200 PSI. PERFORATE STAGE 8, 9,642' TO 9,383' WITH 2-3/4" TAG-RTG GUN W/ 16 GM CHARGES, 3 JSPF & 120° PHASING. ALL PERFORATIONS ARE CORRELATED TO THE CUTTERS RADIAL CBL DATED 7/27/2015. 22' NET OVER 17 INTERVALS. ENDING PRESSURE @ 3350.
	16:00 17:30	1.50	STG08	35		P		SIP @ 3346 PSIG, BREAK DOWN STAGE 8 PERFS 9.8 BPM @ 6907 PSIG. ESTABLISH RATE TO 44 @ 6356. ISDP @ 3565, .81 F.G 5 MIN 3403. 10 MIN 3372. TREAT STAGE 8 PERFS W/ 5000 GAL 15% HCL, 3000# 100 MESH IN 1/2 PPG STAGE AND 44,200 TLC 30/50 IN .5,1,2 PPG FLUSH TO TOP PERF ISDP @ 3626, F.G NA, AVE RATE 64.7 BPM, MAX RATE 75.7 BPM, AVE PRES 6467, MAX PRES 8990. AVE HORSE POWER 8,000 SWI , STAGE 8 WATER TO RECOVER 3006. (HAD TO CALL FLUSH EARLY, FLUSHED @ 10.5 BPM @ 8900 PRESSURE STARTED TO DROP WORKED RATE UP TO 30 BPM THEN HAD TO DROP RATE AT END TO 4.5 BPM)
	17:30 21:30	4.00	RDMO	02		P		RDMOL W/ FRAC EQUIPMENT
8/7/2015	6:00 7:30	1.50	CTU	28		P		CT TGSM & JSA (COIL TBG OPERATIONS)
	7:30 10:00	2.50	MIRU	01		P		MIRU COIL TBG UNIT, MU COIL CONNECTION. PULL AND PRESSURE TEST MU MOTOR AND BIT ASSEMBLY, NU STACK AND PRESSURE TEST.
	10:00 19:00	9.00	CTU	40		P		RIH W/ COIL TBG TAG AND DRILL PLUGS @ 9657, 9891, 10165, 10432, 10741, 11108, 11430 CLEAN OUT TO PBTD 11,980' CTM. CIRCULATE CLEAN, POOH TO LINER TOP STOP AND CIRCULATE , POOH W/ COIL TBG, RDMOL W/ COIL TBG
	19:00 6:00	11.00	FB	23		P		OPEN @ 2900 PSIG ON 12/64 CHOKE FLOW 667 BBLS FLUID TO FLOW BACK TANK CURRENT PRESSURE 2275
8/8/2015	6:00 6:30	0.50	FB	28		P		TGSM & JSA (FLOW BACK OPERATIONS)
	6:30 6:00	23.50	FB	23		P		CURRENT PRESSURE 2225 ON 12/64 24 HOUR FLOW BACK 48 MCF 43 OIL 842 BBLS WATER
8/9/2015	6:00 6:30	0.50	FB	28		P		TGSM & JSA (FLOW BACK OPERATIONS)
	6:30 6:00	23.50	FB	23		P		CURRENT PRESSURE 2300 ON 12/64 24 HOUR FLOW BACK 335 MCF 269 OIL 399 BBLS WATER
8/10/2015	6:00 7:30	1.50	FB	28		P		CT TGSM & JSA (FLOW BACK OPERATIONS)
	7:30 6:00	22.50	FB	23		P		CURRENT PRESSURE 2300 ON 12/64 24 HOUR FLOW BACK 427 MCF 311 OIL 323 BBLS WATER
8/11/2015	6:00 7:30	1.50	WLWORK	28		P		CT TGSM & JSA (WIRE LINE OPERATIONS)

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	7:30 13:00	5.50	WLWORK	20		P		MIRU WIRE LINE, TEST LUBE TO 4K, RIH W/ 5" ARROW SET PACKER W/ PUMP OUT PLUG, SET AT 8878'. RDMOL W/ WIRE LINE, BWD ND STACK TO FRAC VALVE. NU AND TEST BOP BLIND AND PIPE RAMS. RU WORK FLOOR AND TBG EQUIPMENT.
	13:00 18:30	5.50	INSTUB	25		P		SET CAT WALK AND PIPE RACKS, PUMU & RIH W/ ON/OFF SKIRT, 5 JTS 2 3/8", X/O TO 2 7/8", 260 JTS 2 7/8" 8RD EUE TBG. EOT 8651. SHUT AND LOCK PIPE RAMS, INSTALL & TIW VALVE W/ NIGHT CAP. SHUT CASING VALVES, INSTALL BULL PLUGS IN CASING VALVES.
8/12/2015	6:00 7:30	1.50	INSTUB	28		P		CT TGSM & JSA (PUMP OPERATIONS)
	7:30 12:00	4.50	INSTUB	25		P		CIH W/ 8 JTS 2 7/8" 8RD EUE LATCH ON PACKER SPACE OUT, LAY DOWN 2 JTS, PU 10',6',4' 2 7/8" SUBS 1 JT, CIRCULATE PACKER FLUID. MU BREECH LOCK HANGER, LATCH ON PACKER, RE LAND IN 12K TENSION. INSTALL BPV, ND BOP, NU, TEST TREE AND FLOW LINES. PUMP OFF PLUG, RDMOL,
	12:00 6:00	18.00	FB	23		P		OPEN @ 1750 PSIG ON 12/64 CHOKE 239 MCF 289 OIL 217 WATER
8/29/2015	6:00 6:30	0.50	MIRU	28		P		TGSM & JSA (WIRE LINE OPERATIONS)
	6:30 7:00	0.50	MIRU	01		P		MIRU WIRE LINE UNIT
	7:00 8:30	1.50	WLWORK	32		P		RIH W/ SINKER BARS TAG @ 11,937'
	8:30 17:00	8.50	WLWORK	22		P		RIH W/ LOGGING TOOLS MAKE PASSES 40 fpm Down 9100 - 11850 40 fpm Up 11850 - 9100 70 fpm Down 9100 - 11850 70 fpm Up 11850 - 9100 100 fpm Down 9100 - 11850 100 fpm Up 11850 - 9100 130 fpm Down 9100 - 11850 2 min Stations Coming up 11850, 11450, 11100, 10750, 10440, 10170, 9900, 9650, 9100.
	17:00 18:00	1.00	RDMO	02		P		RDMOL W/ WIRE LINE

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